

VA ENTERPRISE DESIGN PATTERNS CLOUD COMPUTING ENTERPRISE CLOUD SERVICE MANAGEMENT



Office of Technology Strategies (TS)
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EXECUTIVE SUMMARY

Scope

This Enterprise Design Pattern (EDP) focuses on the cloud management program required to provide a cloud-based hosting environment for applications. It will define the Enterprise Cloud Service Management (ECSM) program for project teams to leverage cloud services and outlines the standards and capabilities for ECSM to act as a liaison between the Department of Veterans Affairs (VA) (Cloud Consumer) and Cloud Providers. This EDP will conduct current cloud initiative within VA and associated challenges including at gaps in the current Enterprise Cloud Service Broker (ECSB); define VA's ECSM Program addressing Service Aggregation, Arbitrage, and Intermediation; define how ECSM integrates with Veteran-Focused Integration Process (VIP), EDPs, and Enterprise Shared Service (ESS) in support of enterprise strategy; define how ECSM assists project teams to create solutions compliant with VA, Federal Risk Authorization and Management Program (FedRAMP), and National Institute of Standards and Technology (NIST) policies; and provide use cases demonstrating how ECSM enables project managers (PMs) to move to the cloud with less effort.

Business Need

ECSM supports all Lines of Business (LOBs) and the Office of Information and Technology (OI&T) in establishing a shared vision for managing the integration of FedRAMP accredited Cloud Service Providers (CSPs) for project-specific business needs. Projects need a "one-stop shop" in conjunction with Enterprise Project Management Office (EPMO), to discover, access, and integrate CSPs via collaboration with OI&T. ECSM fosters collaboration among both business

and IT stakeholders, and supports standardized solutions including approved enterprise resources hosted outside of VA regional data centers.

Approach

VA is establishing a long-term initiative for incorporating external CSPs to achieve objectives established by the Office of Management and Budget (OMB) “Cloud First” strategy and VA Directive 6517. VA’s cloud computing initiative, outlined in “A Strategy for VA Cloud Adoption,” stems from direction by OI&T senior leadership to evaluate criteria for adopting CSPs or migrating existing IT infrastructure to CSPs. The initiative accounts for lessons learned from previous implementations in the Federal Government and the private sector. VA’s cloud computing initiative supports VA’s goal to achieve cost efficiencies while handling increased customer demands for enterprise services. Incorporating CSPs into the EA hinges on establishing and using ECSM to provide governance and monitor cloud adoption among diverse service consumers across VA.

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.