EXECUTIVE SUMMARY

Scope

A Cloud Security Model sets standards for what systems or information can be handled in a cloud environment, the type of cloud model required based on the sensitivity level and the baseline requirements to ensure VA auditing, security monitoring, privacy/record management, data ownership, and all compliance requirements are met. This Enterprise Design Pattern (EDP) will define an enterprise cloud security model that starts with the use of Federal Risk and Authorization Management Program (FedRAMP) approved providers and addresses the additional requirements beyond FedRAMP. This model will help stakeholders to meet VA requirements when reviewing cloud options for their solution or service.

Business Need

VA mandates using cloud first. A number of projects are lined up for migration to the cloud. Existing cloud projects may be at risk due to architecture designs, hosting FISMA High systems within a boundary that do not meet FedRAMP High or CSP instability. While the ECSB is being established and policy created, VA stakeholders need guidance now to minimize risk.

Approach

This Enterprise Design Pattern (EDP) provides a vendor-agnostic approach to cloud security by reviewing the highest risk areas first, as explained in Appendix A. Comprehensive monitoring through the TIC Gateways, managed encryption of sensitive data, auditing of activity in the cloud, and proper architecture design can reduce the risk of inadequate controls or incidents.
within a fully compliant boundary. As stakeholders begin the process of cloud adoption, they can use this document to guide decisions around compliance and critical controls.

*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.