

**Subject:** FedRAMP Applicability Attestation: Samsung Zero Touch Mobility

## **Overview**

Kratos, an A2LA accredited FedRAMP 3PAO, has reviewed the Samsung Zero Touch Mobility (ZTM) software package at the request of Samsung SDS America, Inc. to determine the applicability of Federal Risk and Authorization Management Program requirements and standards to the ZTM package.

Kratos examined documentation of the ZTM software design, installation, and configuration in comparison to the FedRAMP CSP (Cloud Service Provider) Authorization Playbook, National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 *Security and Privacy Controls for Information Systems and Organizations*, and the NIST SP 800-145 *The Definition of Cloud Computing*.

## **Definition of Cloud Computing**

The FedRAMP CSP Authorization Playbook states that NIST SP 800-145 is used to establish definitions for cloud deployment and service models.

The NIST SP 800-145 defines cloud computing as, “a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.”

NIST identifies five essential characteristics of cloud computing (on-demand self-service, broad network access, resource pooling, rapid elasticity, measured service), three service models (Software as a Service, Platform as a Service, and Infrastructure as a Service), and four deployment models (private, community, public, and hybrid Clouds). Each of these items are defined in terms of the computing infrastructure that provides the resources on which a Cloud Service Offering (CSO) runs.

## **Samsung Zero Touch Mobility Technical Analysis**

Technical analysis of the ZTM documentation defining the software design, installation, and configuration determined Samsung ZTM to consist of a set of plugins for the ServiceNow application that provide integration of a customer’s ServiceNow instance with third-party offerings relating to mobile devices, such as Enterprise Enrollment Platforms, Enterprise Mobility Management, and mobile carriers. The software is purchased through the ServiceNow store, and the plugins must be installed into a customer-hosted instance of ServiceNow to operate.

The ZTM analysis determined the product to be a software package only, with no common infrastructure or shared pool of configurable computing. The infrastructure was determined to be completely dependent upon the customer instance of ServiceNow into which the software is installed.

Based on the five essential characteristics of cloud computing, as defined by NIST SP 800-145 and enforced by FedRAMP CSP Authorization Playbook, the ZTM package does not meet the qualifications of three essential characteristics, including:

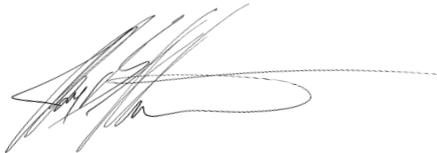
1. *On-demand self service.* ZTM does not provide users a way to automatically provision computing capabilities such as server time or network storage.
2. *Resource Pooling.* Computing resources are not pooled in a multi-tenant structure, with resources assigned according to demand.
3. *Rapid Elasticity.* ZTM relies on the underlying infrastructure of the ServiceNow installation and does not control scalability of resource usage.

## Conclusion

Samsung ZTM does not meet three of the five essential elements of cloud computing as defined by NIST SP 800-145. Samsung ZTM does not match the defined cloud service models, and the deployment model is entirely dependent upon the ServiceNow instance in which it is installed. Samsung is not directly involved in provisioning or managing the infrastructure in which the ZTM software is installed, and is not responsible for the implementation of security controls for that environment.

Based on this analysis, Kratos attests that the FedRAMP standardized, reusable approach to security assessment and authorization for cloud computing products and services that process unclassified information used by the Federal Government is not applicable to Samsung ZTM

Sincerely,



Jeff Johnston

Assessor, Cybersecurity Services

