# **VirtuCrypt – Card and Mobile Issuing**



# Cloud payment HSM

# Why VirtuCrypt – UAT and Development?

- Streamlined integration and billing via multiple methods, including signup through the Amazon Web Services (AWS) Marketplace.
- Full redundancy and high availability across worldwide data centers, with service-level agreement (SLA)-backed uptime of up to 99.999%.
- Secure communication directly from an AWS virtual private cloud (VPC) to VirtuCrypt, with no direct internet routing.
- Accessible from multiple AWS regions as well as from applications managed onpremises or in other clouds.
- On-demand provisioning and clustering of cloud payment HSMs.

#### **Product overview**

VirtuCrypt, Futurex's cloud hardware security module (HSM) platform, is an outstanding provider of enterprise class cloud security services. It uses Futurex's Federal Information Processing Standards (FIPS) 140-2 Level 3 and PCI HSM validated technology. VirtuCrypt cloud payment HSMs can perform cryptographic operations required for card and mobile issuing. This includes functions related to PIN and offset generation; online and mobile PIN management; and Europay, Mastercard, and Visa (EMV) key generation and derivation. Additional validation points are mobile payment token issuing and all related key management functions.

#### **Product features**

## **Hybrid deployment**

Hybrid deployment with on-premises payment application and Futurex HSMs as well as VirtuCrypt cloud payment HSMs

# Full industry compliance

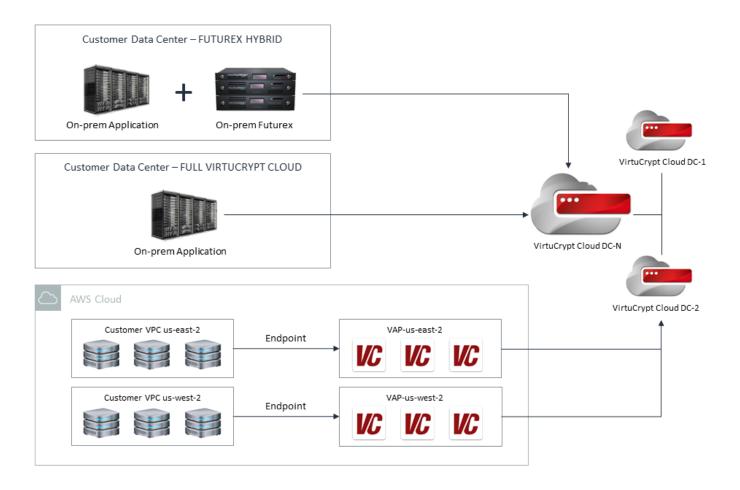
VirtuCrypt's cloud payment HSM service exclusively uses Futurex's FIPS 140-2 Level 3 and PCI HSM validated HSMs. The service ecosystem has received payment card industry data security standard (PCI DSS), payment card personal identification numbers (PCI PIN), P2PE, and VISA PIN/technical report (TR-39) certifications.

# **Fully-hosted cloud option**

VirtuCrypt offers payment applications hosted in multiple AWS regions, connecting through VirtuCrypt Access Points (VAP) to VirtuCrypt cloud payment HSMs. Enables full redundancy, high availability, and expansion over time.

#### How it works

Organizations can connect to VirtuCrypt's cloud payment HSM service in a number of different ways. The most important initial decision for organizations is to determine where they wish to host their payment applications and HSM infrastructure. VirtuCrypt supports a range of different methods outlined in the diagram below. It also offers solutions architects available to advise organizations on the architecture that best fits their needs and goals.



#### **Differentiators**

- Payment card industry hardware service module (PCI HSM) and Federal Information Processing Standards (FIPS) 140-2 Level 3 validated financial cloud HSM.
- Software as a service (SaaS) validated through payment card industry data security standard (PCI-DSS), payment card personal identification numbers (PCI-PIN), and PCI-point-to-point encryption (P2PE) audits.
- Rapidly deploy compliant cloud payment HSMs for enterprise use cases.

### **Data Points**

99.999%
SLA-backed uptime

\$266.4B

Public cloud services market for 2020

# **Additional Resources**

- Cloud Payment HMS solutions page
- Case studies
- Schedule a demo