



Mobile Digital Identity, Authentication and Authorization

**Stronger with V-OS** 

#### Virtual Secure Element

Building on the industry-leading patented V-OS Virtual Secure Element, V-Key has developed a highly secure framework that integrates with mobile apps to secure them against advanced persistent threats, trojans, and rootkits.

#### **Protection with Threat Intelligence**

V-OS secures sensitive processing and data, ensuring app integrity when deployed, and safeguarding user privacy even if the device is lost or compromised.

- Device integrity checks for malware
- File system integrity checks to detect backdoors and rootkits
- ◆ App integrity checks against tampering
- ♦ Network integrity checks against MITM attacks on Data-in-Transit
- ◆ Secure Cryptographic functions for both Data-at-Rest and Data-in-Use
- Secure Anti-Keylogger keyboard
- SMS hijacking protection
- Overlay and screen mirroring protection

#### **Threat Intelligence Security Management**

Designed as the Mobile Threat Command and Control system, enterprises can configure security policies to manage attack response and control.

- ◆ Collect Real-time App Threats
- ◆ Remote locking of V-OS from server
- ◆ Improved emulator & malware detection mechanism
- ◆ Extensive RESTful web services
- ◆ Integrate easily with MDMs, SIEMs, and other Threat Analytic Engines for seamless management







Mobile Identity



V-OS App Protection



V-OS Smart Token



V-OS Messaging



V-OS Face Biometrics V-OS eKYC



V-OS Cloud Solutions

#### BENEFITS



## **Multi-layered Security**

Binary Code Morphing, Anti-reverse engineering, trojan detection mechanisms, Tamper response mechanisms.



# **Threat Response Policies**

Set policies on how apps should react to threats



## **Application Controls**

Limit users on How, When, and Where they use your applications, including Geo-fencing or enforcing time limits



## Android and iOS Support

Small footprint on mobile platforms.

## V-OS APP PROTECTION FEATURES AND SPECIFICATIONS

Robust App Protection solution secured by the anti-fraud, anti-malware

#### **V-OS Virtual Secure Element**



V-OS App Protection server provides a number of policy controls that administrators can use.

- ◆ Trusted TLS servers for data-in-transit protection
- Mutual TLS authentication for server APIs
- Customize how the application will respond to mobile threats
- Real-time information on App Threats detected by mobile applications
- Threat forensics for which mobile apps are being attacked from where, when, and which attack vectors
- ◆ Issue individualized V-OS cryptographic modules for identity and authentication

# Platforms

**Client OS:** Android 4.4 to 10 & iOS 7 to 13

**Server OS:** Red Hat Enterprise Linux (RHEL), CentOS

Server: JBoss EAP, WebLogic

Database: MySQL, MariaDB, Oracle,

Microsoft SQL Server







V-Key implements secure keyboards against keylogging in order to provide defense-in-depth against this common attack on mobile applications. For additional threat protection and intelligence, the solution also scans for keylogging techniques using a combination of heuristic checks and signatures.











V-Key is a global leader in software-based digital security, and is the inventor of V-OS, the world's first virtual secure element. Contact us today to schedule an appointment and