

# V-OS App Protection

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

**STRONGER  
WITH V-OS**



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.

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