



FAMOC MOBILE SECURITY MANAGEMENT FOR GOVERNMENT

Meet Android for Work!

What is FAMOC?

ABOUT FANCYFON

Developer of industry leading mobile device management and security software solutions for enterprises and institutions

VALUE PROPOSITION

Enable organizations to easily control, manage and secure the use of mobile devices (BYOD or corporate), applications and documents within their organizations

KEY DIFFERENTIATORS

Broadest mobile platform support, seamless integration with 3rd party IT/security management systems, flexible deployment/configuration, out-of-the-box IT compliance

FLEXIBLE DEPLOYMENT

SaaS, private cloud and on-premise deployment options available

CUSTOMERS

More than 280,000 devices managed and secured across more than 700 enterprise customers

STRATEGIC TECH PARTNERSHIPS

In 2013 FancyFon achieved a Gold Samsung Partner status. In 2015 and 2017 FancyFon was highlighted at Mobile World Congress in Barcelona. Other partnerships include: Huawei, Sony, Lenovo and others.



COMPANY TIMELINE

2006

FancyFon Start

2012

- OEM partnership with HEAT Software



2013

Expansion of mobile operator focused GTM



2016

FAMOC for Government



2017

FAMOC

Mobile Security Management for Government



Gartner

2010

Gartner recognizes FAMOC in MDM Magic Quadrant

SAMSUNG

2013

FancyFon awarded Gold status of Samsung partnership



2015

MS4B - distribution for South America
Sovaton - distributor in Africa



MS4B Secure Mobility Solutions for Business International
Connecting People Industries and Services to People

2017

SMC - distributor for Central Asia

2008

FAMOC platform generally available; first enterprise customer deployment in Europe



EXAMPLES OF CYBERWARFARE



GERMANY

In March 2013, BND president Gerhard Schindler announced that his agency had observed up to five attacks a day on government authorities, thought mainly to originate in China.



UK

In May 2017, A ransomware virus has reportedly targeted organisations in more than 70 countries, including the National Health Service in the UK. The NHS said 16 organisations had been affected by the attack.



USA

In June 2015, the United States Office of Personnel Management announced that it had been the target of a data breach targeting the records of as many as four million people. The Washington Post has reported that the attack originated in China, citing unnamed government officials



KAZAKHSTAN

In July 2017, the Kazakhstan was hacked. There is no possibility to take smartphone and tablet to government office.



SOUTH KOREA

In July 2011, the South Korean was hacked, resulting in the theft of the personal details of up to 35 million people.



INDIA

In July 2016, Cymmetria researchers discovered and revealed the cyber attack dubbed 'Patchwork', which compromised an estimated 2500 corporate and government agencies



UKRAINE

a cyberattack on Ukraine's powergrid that left more than 200,000 people temporarily without power.

FAMOC BUILT-IN SECURITY CAPABILITIES

Comprehensive device, operating system and app security coupled with native integration with Samsung Knox Workspace and Webroot security frameworks



DEVICE SECURITY

Device Restrictions

Policy Enforcement

Remote Wipe/Lock

Monitoring/Reporting



OS SECURITY

VPN Configuration

Data Encryption

Containerization (Android for Work & Samsung KNOX)

Connectivity Restrictions
(GPS, WiFi, Bluetooth)

Apple Supervised Mode Support



APP SECURITY

Corporate App Store

App Blacklist

App Whitelist

App Reputation
Verification

Secure Browser

Enterprise Wipe

FAMOC KEY FEATURES



CROSS-PLATFORM SUPPORT

Define and enforce universal policies across mobile platforms and also leverage each platform's unique management capabilities within the same unified console



MOBILE APPLICATION MANAGEMENT

Real-time view of all applications and information on their reputation and usage; ensures communication, configuration and data protection for all business apps



ADVANCED CONFIGURATIONS

Industry's most comprehensive Samsung Knox support, including advanced configurations for email, VPN, OTA app distribution/update/removal



SECURE MESSAGING/CONTENT

Enables secure email, content management and messaging, as well as continuous backup of mobile data with cross-platform data migration



REMOTE SUPPORT

Permission-based sessions provide OTA access to device, files and apps; automated diagnostics and troubleshooting



LOCATION MONITORING

Creation of geofencing rules and device policies based on location; scheduled or on-demand device location searches



IDENTITY/ACCESS MANAGEMENT

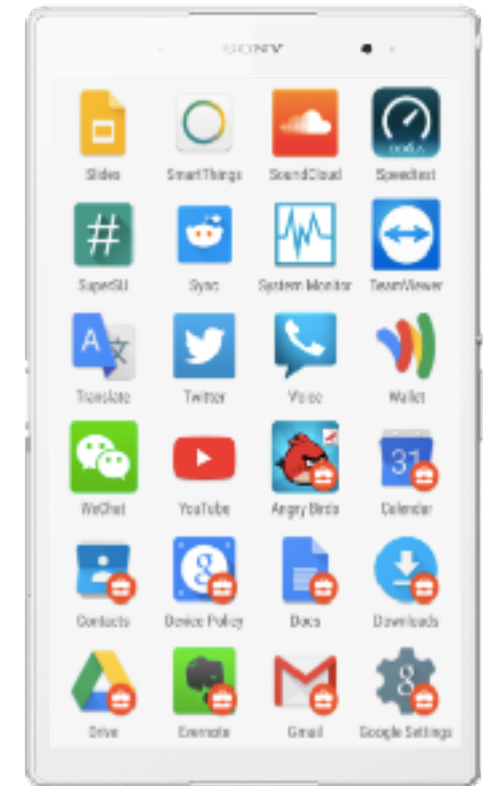
Advanced integration with enterprise identity management and network access control systems; support for certificate management; API-level integration



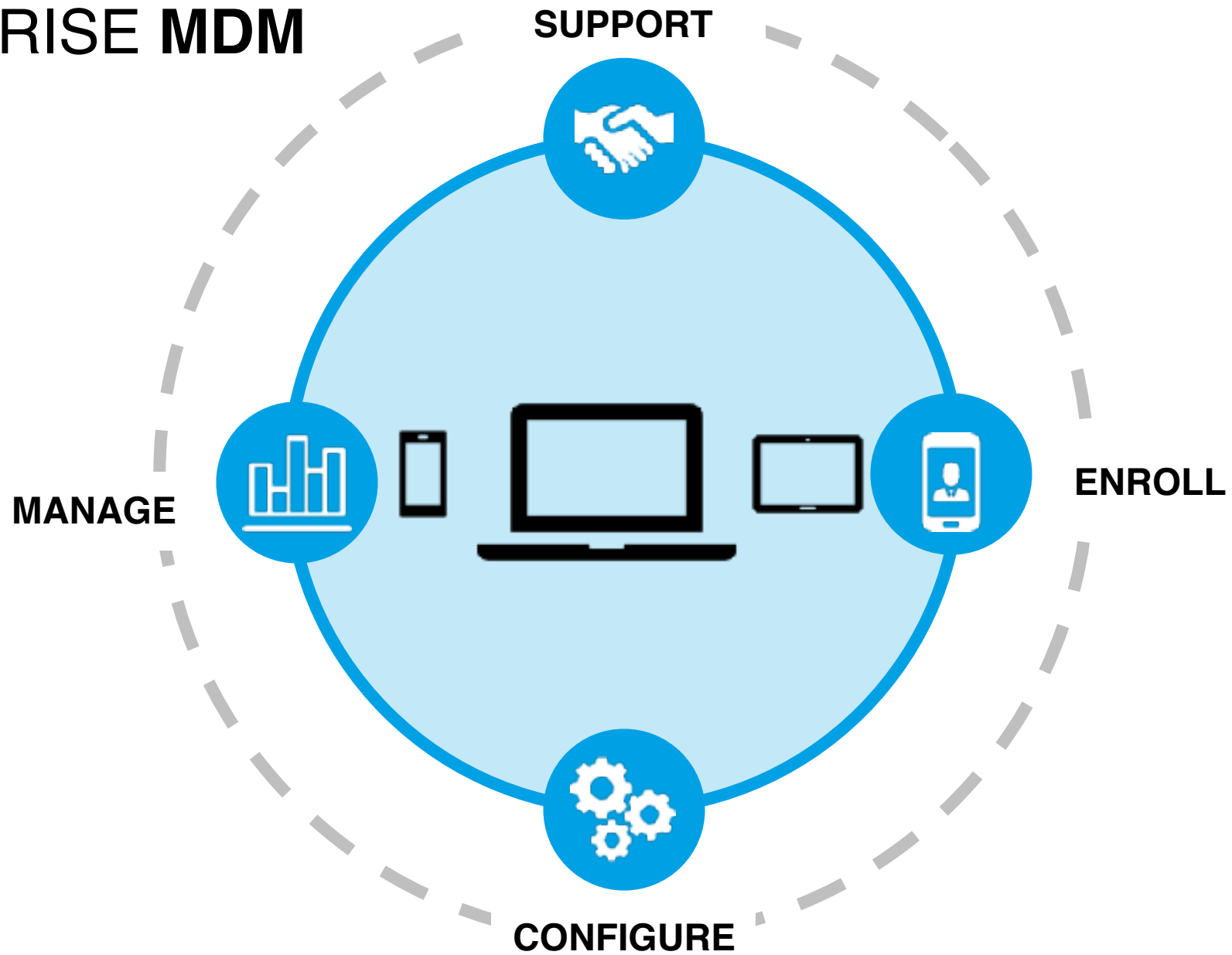
NETWORK PROXY

Proxy server optimized to control/protect mobile access to corporate data; identifies the device prior to granting access and filters devices via whitelisting and blacklisting features

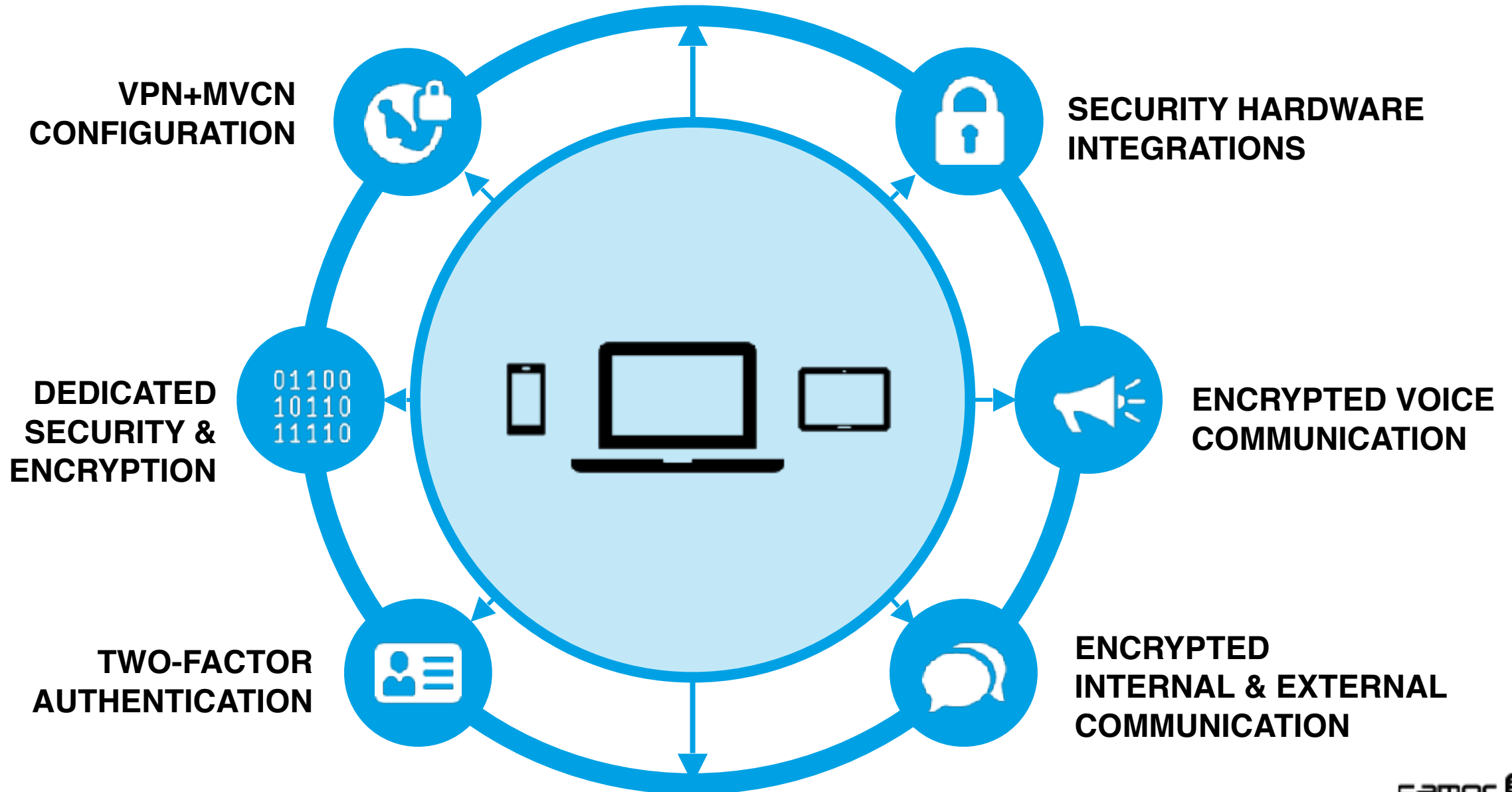
NATIVE SOLUTIONS INTEGRATIONS



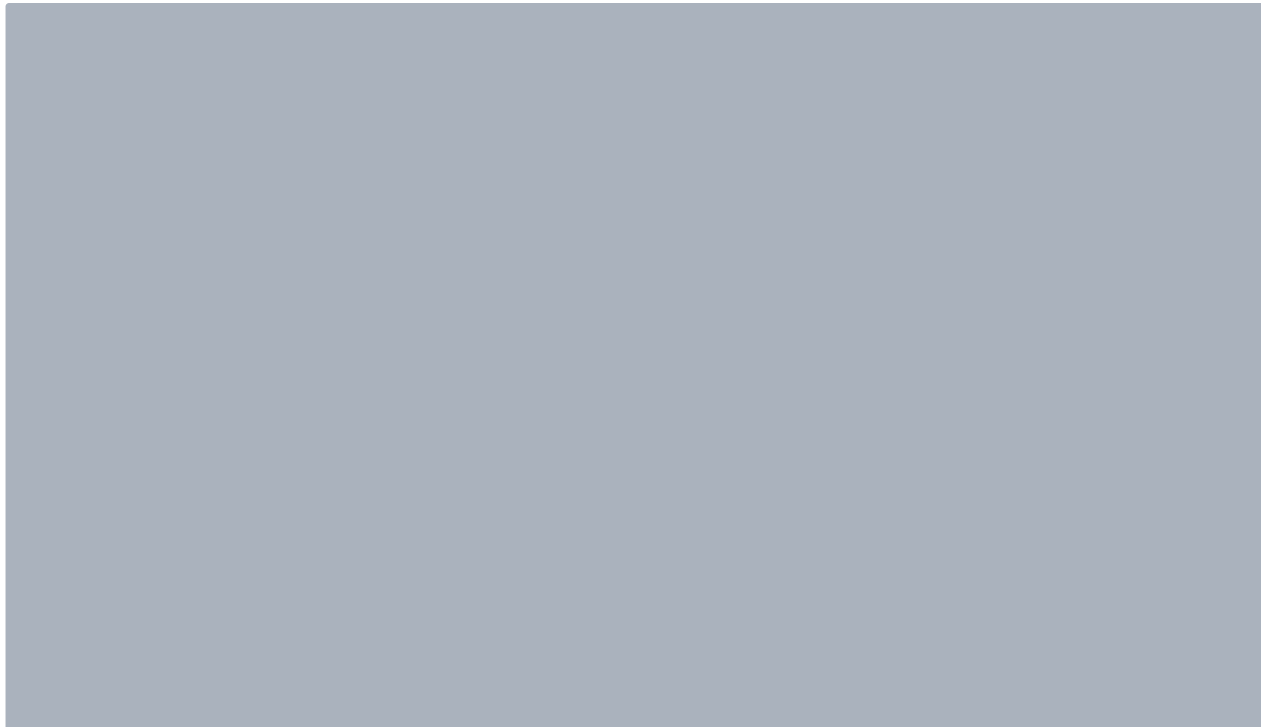
ENTERPRISE MDM



GOVERNMENT SECURITY MANAGEMENT



FAMOC FOR GOVERNMENT PLATFORM HIGHLIGHTS



**BUILT FOR THE
CUSTOMER**



**SOURCE
CODE**

MANAGEMENT – cross-platform mobile device lifecycle management; usage policy creation, monitoring and enforcement based on device, OS, application, role and contextual factors

SECURITY – protection of sensitive corporate data at the user, application, device and network levels to ensure containerization, data loss prevention; automated responses to security incidents/violations

GOVERNMENT-GRADE SECURITY

Security is critical to maintaining data integrity and trust. FancyFon has focused on providing government-grade security required to manage data and provide a shield against today's cyber threats.

Common Criteria Mode for Samsung KNOX Workspace

FAMOC is recommended as a tactical solution to support advanced functionalities of Samsung Android devices

Separate environment

Secure on-site deployment with regular updates of the on-site solution

VPN and dual APN support

For advanced security and granular control over devices

AES, 3 DES and 128 bit encryption

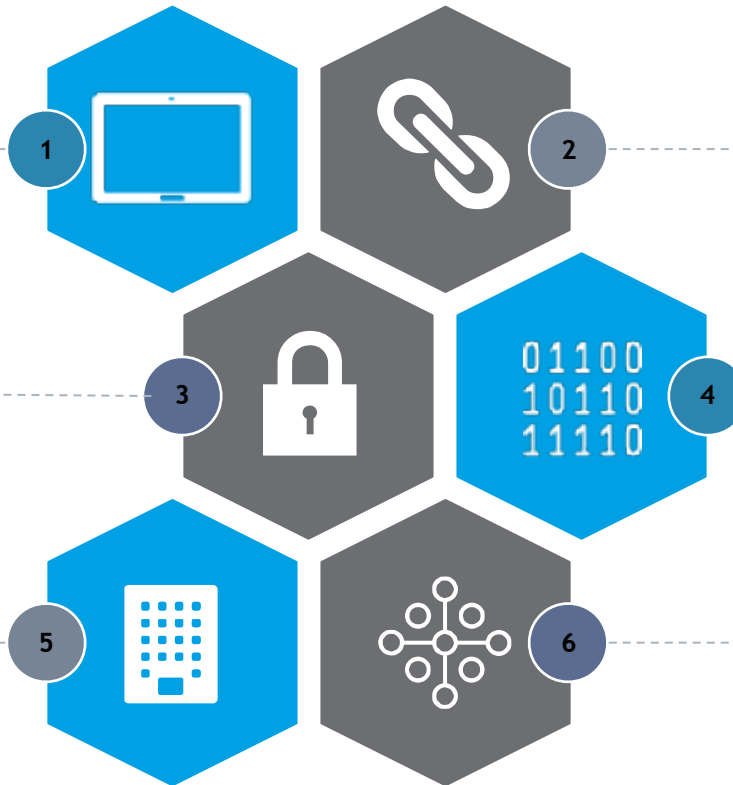
Vast customization options to meet country-specific requirements of government customers

ISO-verified

Assessed and certified as meeting the requirements of ISO/IES 27001:2013

Continuous verification

Ongoing penetration testing on a regular basis



FAMOC MOBILE OFFLINE SECURITY MANAGEMENT



FAMOC SECURITY AGENT AVAILABLE OFFLINE RESTRICTIONS

- WIPE or Corporate WIPE on
 - SIM change
 - x numbers of wrong passwords
 - USB data cable
 - low temperature *
 - SD card change *
 - no FAMOC server contact longer than X hours
- Other action on lack of connection to FAMOC server
 - after time Y - stop BT/NFC/WiFi, block USB
 - after time Z - try to send SMS to FAMOC SMS gateway with location and status
 - after time Z - change password to longer and re-encrypt data

FAMOC SECURITY AGENT AVAILABLE OFFLINE RESTRICTIONS

- Report of new SIM card to FAMOC direct or via SMS gateway
- Report of location on SIM card change
- Report of new SD card to FAMOC SMS gateway



SECURITY INTEGRATIONS



Android for Work

WEBROOT
SecureAnywhere®



SAMSUNG Knox

SECURITY INTEGRATIONS



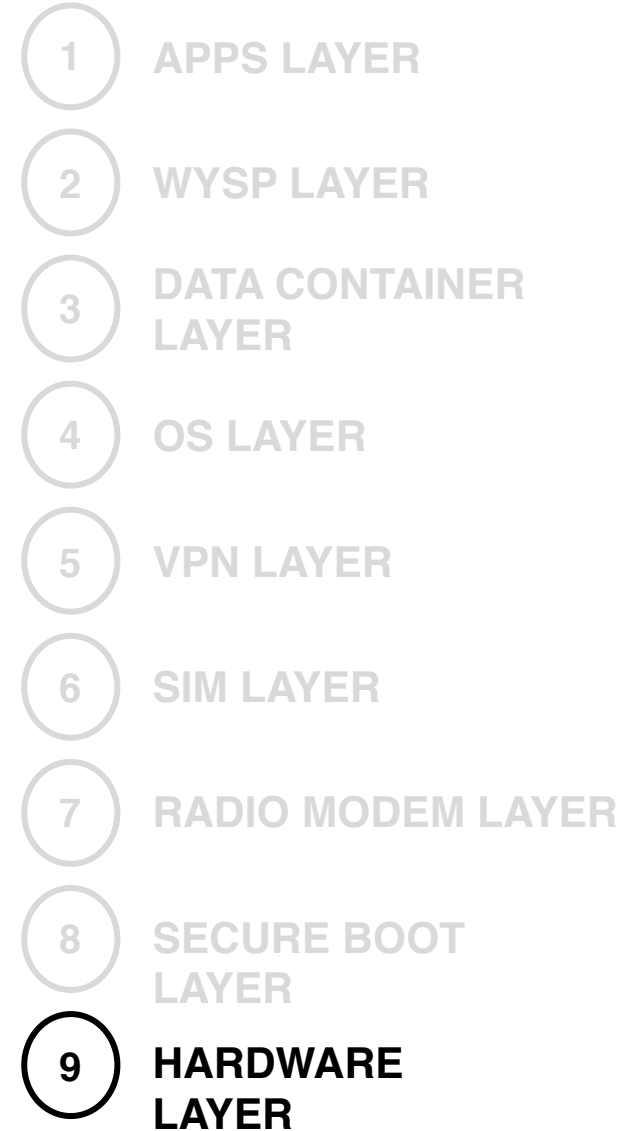
OTHER POSSIBLE INTEGRATIONS

FAMOC FOR GOVERNMENT

HARDWARE LAYER

PORT'S SECURITY AND RESTRICTIONS

- Control USB - OFF/ON/Always ON/Always OFF
- USB only for power charge
- Wipe on USB data force?
- GPS - ON/OFF/always ON
- Headset port *
- Wireless power *
- Accelerator sensor *
- Temperature sensor*
- Memory SD card - data encryption, only with certificate* only with secure element*



FAMOC FOR GOVERNMENT

SECURE BOOT LAYER

SAMSUNG BOOT RESTRICTIONS

- KME - connection to Samsung or not started
- FAMOC always on
- Device belongs to owner
- Reboot will not change device setup and FAMOC management

ANDROID BOOT RESTRICTION for Oreo

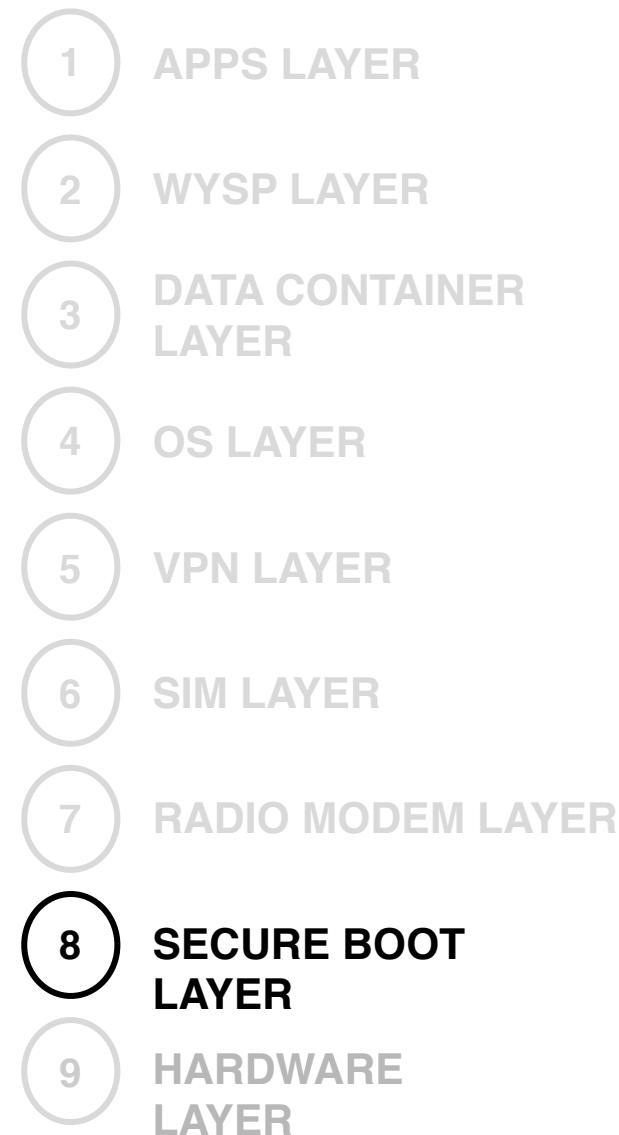
- Reboot Support for Android Zero Touch simplifies bulk corporate device rollouts

ANDROID PRODUCER ver. lower than Oreo - BOOT RESTRICTIONS POSSIBLE WITH COOPERATION WITH PRODUCER (LG, LENOVO..)

- Boot restrictions possible with cooperation with producer but limited functions
- Reboot will not change device setup and FAMOC management

APPLE IOS

- Apple Supervise mode
- FAMOC always on
- Device belongs to owner
- Reboot will not change device setup and FAMOC management



FAMOC FOR GOVERNMENT

RADIO MODEM LAYER

BLUETOOTH SECURITY AND RESTRICTIONS

- Control BT - Off/On/always on/always off
- For define MAC address list only
- Store all MAC addresses of connected device in history

(no possibility to connect to BT device based on certificate, no such devices on the market today)

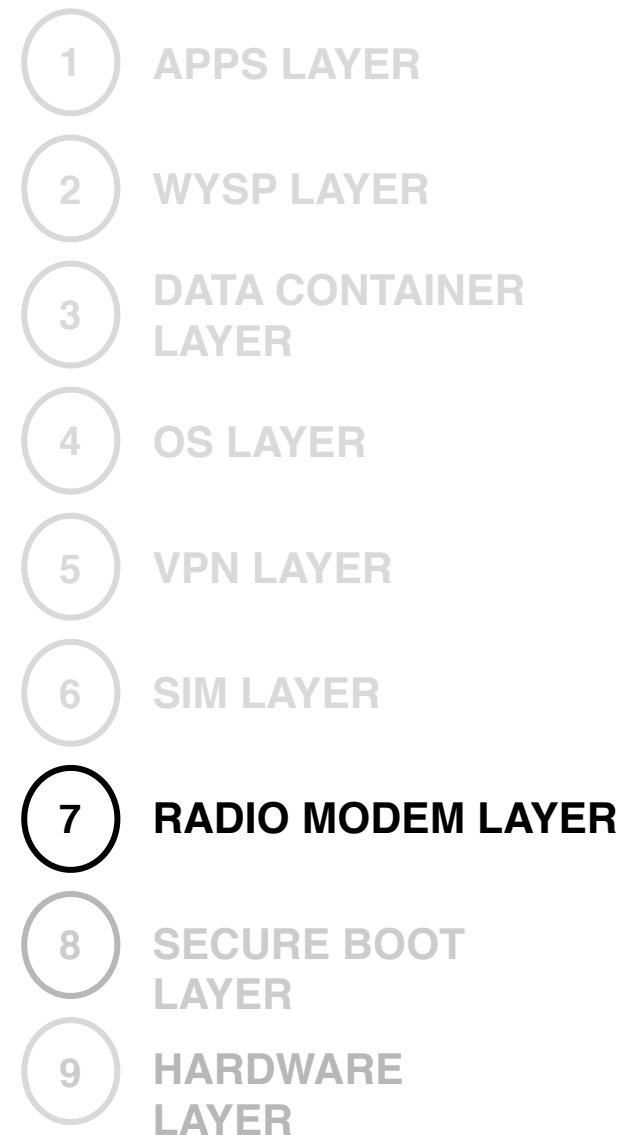
WIFI SECURITY AND RESTRICTIONS

- Control WiFi - Off/On/always on/always off
- For define MAC address list only
- WiFi with certificate only
- Only for listed WiFi and APN's
- Store all MAC addresses of connected WiFi in history
- integration with CISCO & other Radius systems

NFC SECURITY AND RESTRICTIONS

- Control NFC- Off/On/always on/always off
- NFC with certificate only
- NFC with hardware certificate (YubiKey)

All setup can automatically change based on geolocation and time.



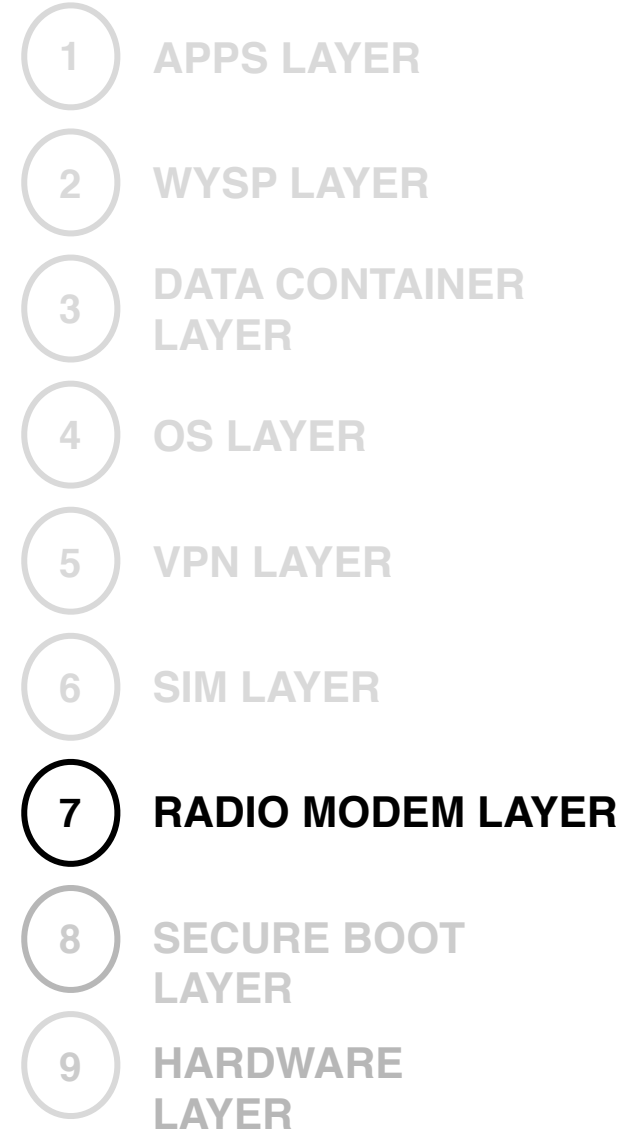
FAMOC FOR GOVERNMENT

RADIO MODEM LAYER

GSM SECURITY AND RESTRICTIONS

- GSM voice - on/off
- GSM data - on/off, only on selected APN
- GSM SMS - on/off
- GSM MMS - on/off
- GSM APN operator service - one or two selected APN dedicated for customer
- Voice log - in and out
- SMS & MMS log in and out
- IP address log
- IP connections log

All setup can change based on geolocation, time and event.

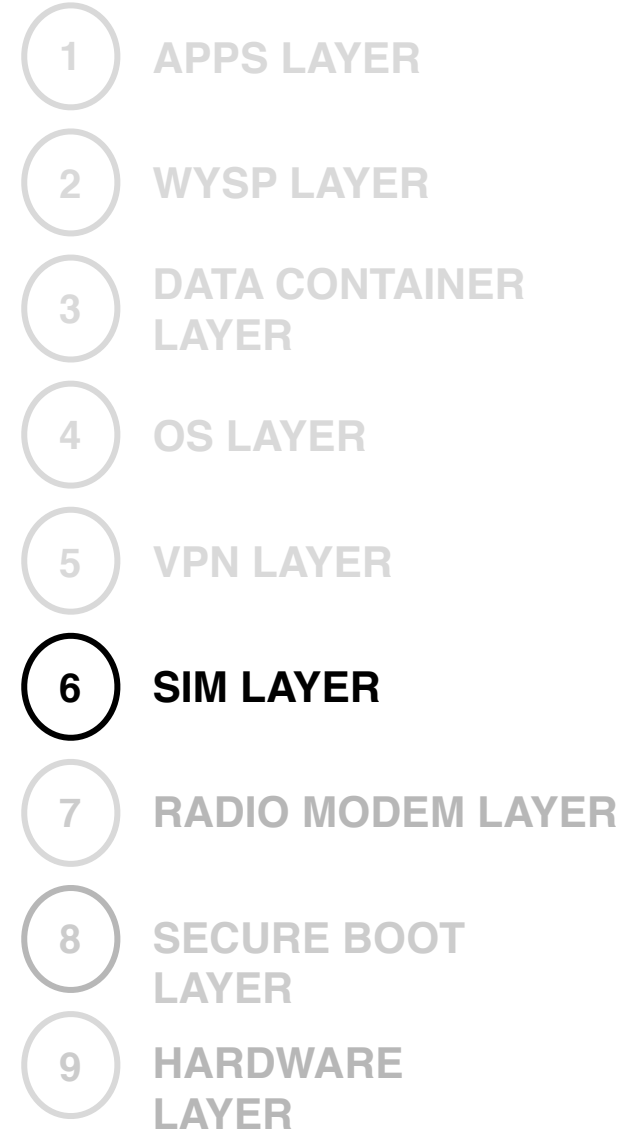


FAMOC FOR GOVERNMENT

SIM LAYER

SIM CARD SECURITY AND RESTRICTIONS

- Wipe on SIM card change
- SIM card with special customer APN only
- SIM card random PIN force by FAMOC
 - SIM dedicated to one device only
 - no possibility to use SIM in other device



FAMOC FOR GOVERNMENT

VPN / MVCN LAYER

FAMOC VPN is a fully on-premise solution available for public & government customers

STRONG ENCRYPTION

VPN - AES 128/192/256

IPsec/IKEv2

MODP2048/3017/4096 for IKE

STRONG AUTHENTICATION

Two-factor authentication using biometry combined with NFC card or other tokens as the 2nd factor

CERTIFICATION-READY

Source code analysis as an option for government customers



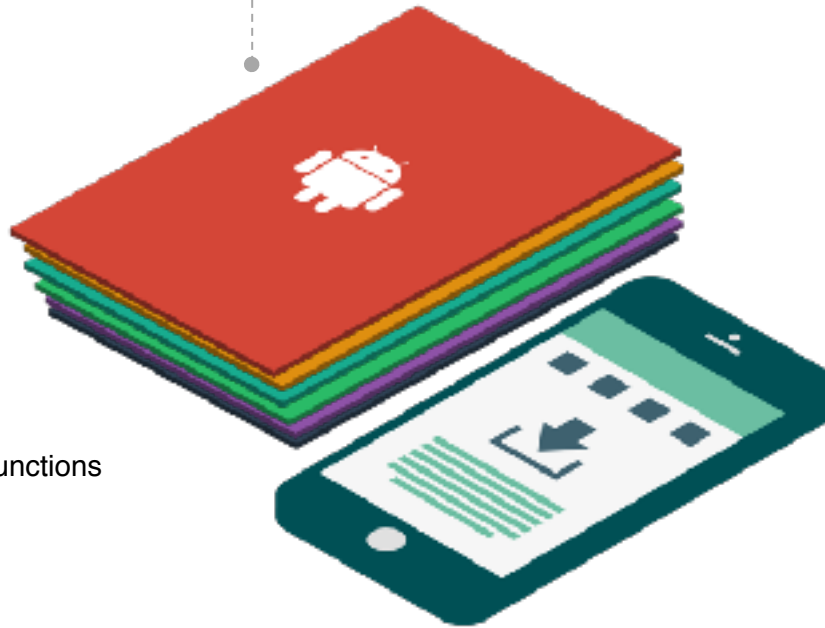
- 1 APPS LAYER
- 2 WYSP LAYER
- 3 DATA CONTAINER LAYER
- 4 OS LAYER
- 5 VPN LAYER**
- 6 SIM LAYER
- 7 RADIO MODEM LAYER
- 8 SECURE BOOT LAYER
- 9 HARDWARE LAYER

FAMOC FOR GOVERNMENT

OS LAYER

MOBILE OS SECURITY

- VPN or MVCN
- Data encryption on Phone memory
- Data encryption on SD card
- Data encryption on SIM*
- Secure certificate
- IPS mobile - process/task control*
- OS version control - eFOTA, iOS Supervised
- OS producer communication restrictions
 - Push
 - Services
- Hardware producer communication
 - Samsung KCC / KME
 - Apple iOS Supervise mode
 - Android Zero Touch
 - Other with cooperation with producer possible some functions



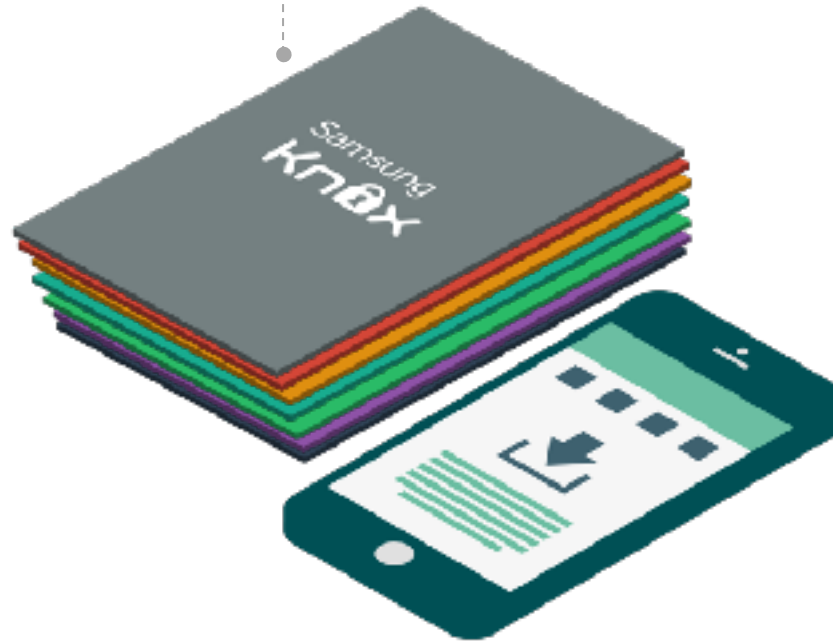
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FAMOC FOR GOVERNMENT

DATA CONTAINER LAYER

DATA CONTAINER

- Data containers
 - KNOX Workspace
 - Google Workspace
 - Apple iOS in Supervised Mode
- Two factor authentication to device
- Two factor authentication to container
- External hardware based certificate (YubiKey)
- Encrypted internal & external data communication
- Encrypted voice communication
- Encrypted messaging COMMUNICATION
- Hardware producer communication
 - Samsung KME
 - Android Zero Touch
 - Others



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FAMOC FOR GOVERNMENT

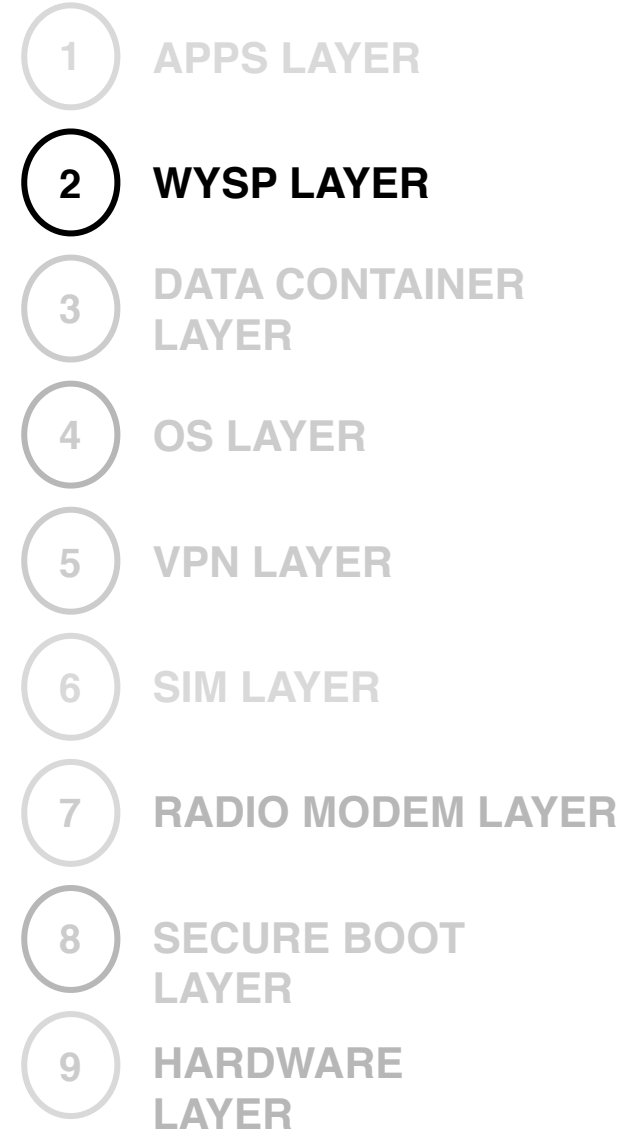
NAVAYO/WYSP LAYER

WHAT IS NAVAYO?

Navayo deliver encrypted data and voice communication based on patented key exchange mechanism and encryption to all those who need discretion on the digital frontlines of the 21st century

NAVAYO BENEFITS

- Complete, secure ecosystem
- Certified hardware based encryption (BSI Common Criteria EAL5+)
- Worldwide patents of the MVCN Technology
- Certification – HW: BSI CC 5+ (done), SW: BSI CC 4+ (in progress)
- Third party symmetric algorithm implementation
- The first hardware encrypted security and privacy system for Android and iOS
- The first independent hardware encrypted security and privacy system for BlackBerry



FAMOC FOR GOVERNMENT

APPS LAYER

APPLICATION SECURITY

- Corporate App Store
- App Blacklist
- App Whitelist
- Application ,always on' list
- Kiosk mode
- App Reputation Verification
- Secure Browser
- Enterprise Wipe
- Application Process verification (IPS)*



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KNOX MOBILE ENROLLMENT



Enrolling new devices into your enterprise is a time-consuming process but with **KNOX Mobile Enrollment** IT admins can quickly enroll hundreds of devices into their enterprise MDM at once.



With KNOX Mobile Enrollment you can get devices into your MDM by uploading a spreadsheet or scanning the packaging with the mobile enrollment app



Then just hand the enrolled devices to users, turn them ON, connect to WiFi and mobile enrollment will push all the software to the devices to be installed and configured

FAMOC VPN GATEWAY

Samsung Knox

VPN CONNETION

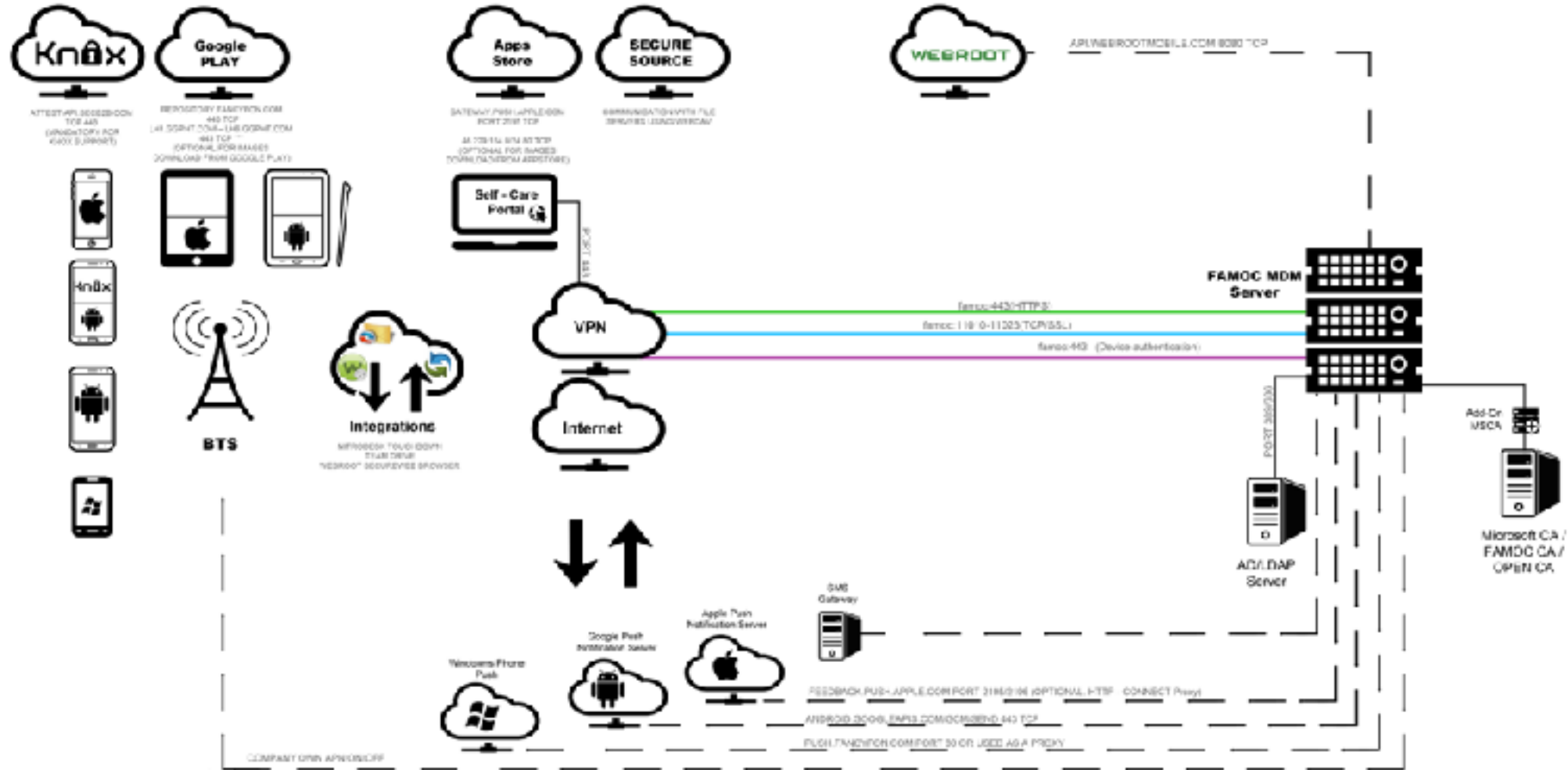
FIREWALL

ENTERPRISE
SERVERS



PRODUCT ARCHITECTURE

FAMOC ON SITE ARCHITECTURE



GOVERNMENT CUSTOMERS



LOCAL AUTHORITIES AND STATE FINANCIAL INSTITUTIONS



red.es



Ajuntament de Terrassa

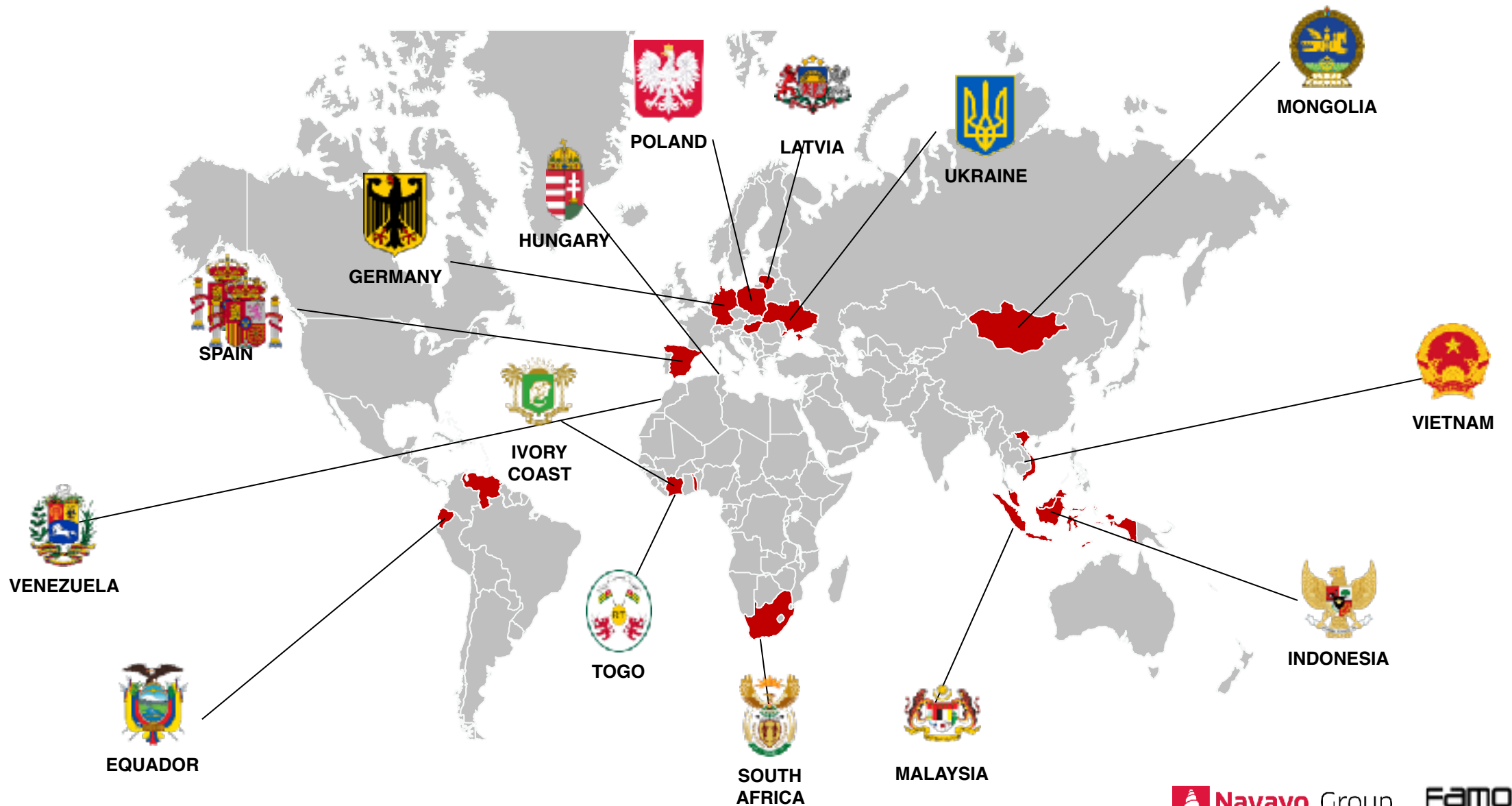


ALILAGUNA



SAMORZĄD
WOJEWÓDZTWA POMORSKIEGO

NAVAYO & FAMOC REFERENCES BY COUNTRY



FANCYFON'S UNIQUE DIFFERENTIATIONS

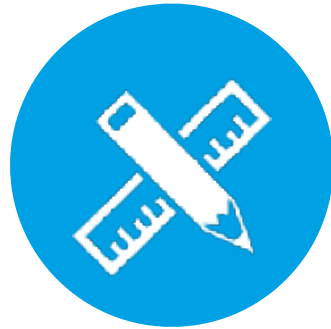
Purchase your own authentication server and create a closed communication system.



**INDEPENDENT
SOLUTION**



**OPEN FOR OWN
DEVELOPMENT**



**SELF-PLANNED
SECURITY
ARCHITECTURE**



**MOBILE +
DESKTOP
MANAGEMENT**



**VPN
+
MVCN**