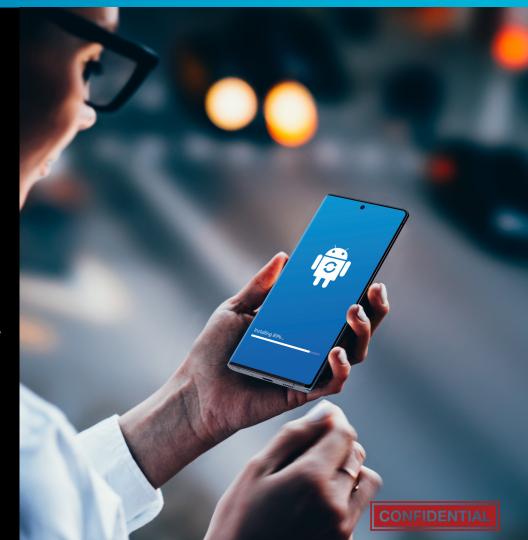
Samsung Knox E-FOTA

Firmware updates simplified

Knox E-FOTA Product Overview & Update March 2020



What pain are our customers experiencing?











Our Solution: Knox E-FOTA

Remotely control OS version on devices without end-user interaction, enabling seamless and timely updates



Mandatory Firmware Updates

- Silent firmware update without end-user interaction
- Standardization of OS version
- Dashboard for status monitoring





Stable OS Deployment for Business Apps/Services

- Test firmware before deployment
- Validate app compatibility
- Select qualified OS versions to deploy





Powerful Time and Network Control

- Schedule deploy date and time
- Fine-tune network mode and data use



Who are our target E-FOTA customers?

All customers that need **OS version control** are potential customers for Samsung Knox E-FOTA

Customer Attributes

- ✓ They block consumer FOTA or have FOTA restrictions
- ✓ They are concerned with SMR deployments
- ✓ They have considered early testing of OS/maintenance releases
- ✓ They worry about management of OS/maintenance versions during QA testing or after device deployment
- ✓ They have custom applications that need to be tested with new OS versions before deployment



Why Knox E-FOTA?

With just an MDM VS		. With Knox E-FOTA	
User approval / interaction is required		User interaction is not required	
Users may update to new OS prior to QA test	Incompatibility between in-house apps and new OS	Version 8.5 (Version 9.1) Version 9.1	
Users may delay updates	Security vulnerability	Forced updates	
	Business downtime during update	Time control	

Knox E-FOTA ROI

	3 OS Versions	2 OS Versions	1 OS Version
OS Supported	O • P	• P	P
Total Cost	\$4.6M	\$3.1M	<>> \$1.6M
Cost of Help Desk	\$1.3M	\$0.9M	\$0.4M
Cost of Business Interruption	\$2.2M	\$1.5M	\$0.8M
Cost of QA Testing	\$1.1M	\$0.7M	\$0.4M

Android OS Version			
	v.6 Marshmallow		
	v.8 Oreo		
P	v.9 Pie		

^{*}Assumptions: # of Employees = 10K, # of incidents per month = 0.5, # of in-house apps = 20

What's New?

Introducing: Knox E-FOTA One

Knox E-FOTA One (KE One) is Samsung's newest evolution of firmware management

- KE One is a new product that lives inside samsungknox.com
- It includes all the capabilities of previous E-FOTA products as well as new features KE One was built to address customer feedback:



- Updated console to match Knox product look and feel
- Agent installation out-of-thebox (via KME)
- Easy upload of device info (from KDP)
- Quick access to start guide



Capabilities

- Update multiple device models per campaign
- Automatic sequential updates within a campaign
- Support for holding multiple E-FOTA licenses



Comprehensive Support

- Samsung Knox portfolio customer support process
- Consistent response and turnaround

Feature Comparison: MDM vs Advanced vs One

✓ Full Support				
	Feature	E-FOTA on MDM (KE on MDM)	E-FOTA Advanced (KE Advanced)	Knox E-FOTA One (KE One)
On Boarding	Out-of-box-installation with KME	X	X	<
	Upload device info from KDP	X	X	<
	Sync device & org info from EMM	⊗	×	<
Campaign	Multi device model update per campaign	X	X	⊗
	Sequential updates per campaign	⊗	×	<
	Push & polling	(Push Only)	(Polling Only)	<
	Additional options ¹	X	✓	< ✓
	Campaign operation status ²	X	✓	✓
Management	Multi-license support	X	X	✓
	Dashboard	×	(Device Campaign)	+ (License, Firmware, OS Status)
	Console	EMM	Stand-alone	Stand-alone & EMM
Price (MSRP/dev	vice/yr)	\$12	\$18	\$24

¹⁾ Additional options include: Download/Start Time, Wi-Fi Only, Network Load, Start Time, Roaming, Plugged in Only, Critical/Silent Update etc.

²⁾ Campaign Operation Status: Campaign download → Firmware download → Update progress → Completion status (update or fail, etc.)

Knox E-FOTA One Pricing & Availability



KE One launches in March 2020

- SKUs are being added
- Training and sales enablement materials is coming



Pricing will follow E-FOTA Advanced

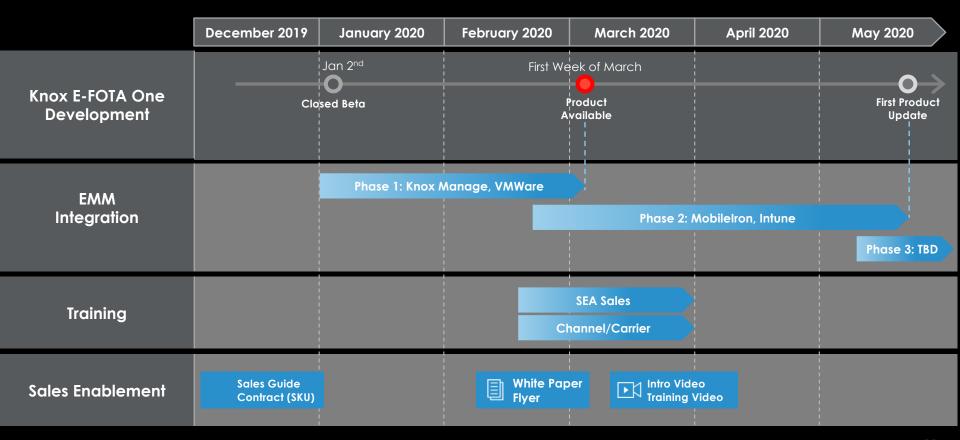
- \$18 / device / year MSRP
- 1 and 2 year SKUs



Carrier support will have a phased roll out

- T-Mobile and Sprint binaries will be supported at launch
- AT&T and Verizon binary support (with waiver) will be available by summer 2020

Knox E-FOTA One Upcoming Milestones



Knox E-FOTA One Pricing & Availability



B2B team should focus E-FOTA sales efforts on KE One SKUs

- New customers should purchase KE outside of extenuating circumstances
- License migration (and credit) is available for existing customers
- Previous E-FOTA products can still be sold if necessary



Knox E-FOTA One will be a key component of upcoming offerings

- Enterprise Edition devices
- Knox Suite bundle



Demo/trial process

 Will follow the typical Samsungknox.com model

Launch Guidance

Q: When can customers place orders?

A: The Product Management and Knox teams are working to make the product available for purchase after general availability (March 2020).

Q: Can customers participate in a new product trial?

A: Yes, general availability (March 2020) customers can sign up for a trial.

Q: What is our training plan?

A: The Product Management and Knox Sales teams will train channel teams. The training materials will be shared via Mosaic and Box.

Q: When/How will the marketing material of Knox E-FOTA One be distributed?

A: The sales guide is available on Box and Mosaic. A technical white paper and flyer will become available in February. Additional materials such as videos, battlecards, and training materials would be distributed via Mosaic and Knox in the coming weeks.

Q: Can we share the materials with channels and customers before the product GA?

A: Yes.

Sales Guidance

Q: What is the new pricing of Knox E-FOTA One?

A: The price will be MSRP \$24/device/yr (MSRP).

Q: Will there be any launch promotions?

A: There are no launch promotions at this time. The sales teams will be alerted of any new promotions.

Q: Can we still sell E-FOTA Advanced or E-FOTA on MDM?

A: Yes, previous E-FOTA products will still be available for sale.

Q: How can we migrate existing customers to E-FOTA One?

A: Customers who currently hold valid licenses and want to switch to Knox E-FOTA One can apply remaining credit towards equivalent Knox E-FOTA One licenses without any additional charges. (This can only be done for E-FOTA on MDM/Advanced licenses bought before March 2020.)

Q: Are there any changes to the E-FOTA product included in Enterprise Edition?

A: Currently, no changes are expected. Sales teams will be notified of any changes in advance.

Appendix

Technical Guidance

Q: Which Android OS versions does Knox E-FOTA One support?

A: Android N and above will be supported at launch. The support matrix will be updated on an on-going basis.

Q: Are there any changes to the amount of historical firmware made available in Knox E-FOTA One?

A: No, there are no changes. The policy is to provide a one-year back catalog of firmware for a given enrolled device's model.

Q: Can the E-FOTA agent be installed through KME after the device has gone through factory reset?

A: Yes, it is possible to install the E-FOTA agent from scratch through KME.

Q: How does E-FOTA One EMM sync work?

A: Once EMM sync is established, devices and their organizational info are pushed to Knox E-FOTA One every 6 hours (this interval is not currently customizable but on-demand manual sync can be requested).

Q: When will EMM vendors support EMM sync?

A: Knox Manage and VMware will support EMM sync at launch. Others will be integrated per the E-FOTA roadmap.

Q: Can an admin or user edit the E-FOTA One Dashboard?

A: No, not at this time.

Q: Where is the Knox E-FOTA One server located?

A: It is located in Ireland.

Knox E-FOTA [in general] vs Competitors

(as of Sep 2019)

Full Support

▲ Partial Support × No Support

Feature of Service		Knox E-FOTA	Competitor	Competitor (Supervised Mode)
Forced Update	Silent Update (Update in One-Go)	⋖	*	*_
	Critical Update (Pop up)	⋖	×	×
OS Version Selec	ction	⋖	×	×
Update Date Scheduling		⋖	×	×
Grouping Target Devices		⋖	⋖	✓
Server Resource Control		⋖	×	×
Network Resource Control (Over Wi-Fi/Bandwidth Control)		⋖	✓	✓

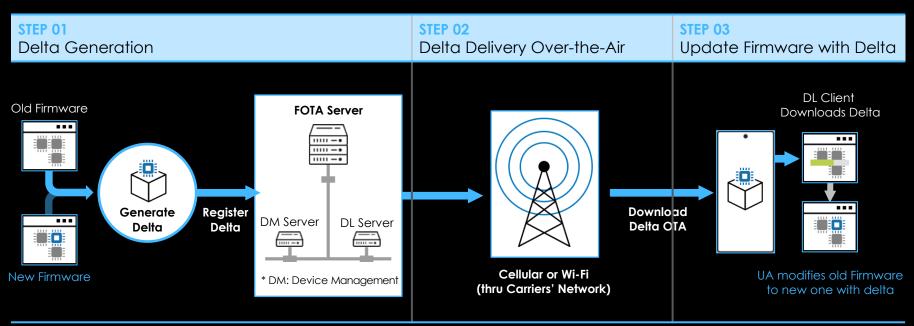
^{*} Supports silent update but to the latest version only

How It Works

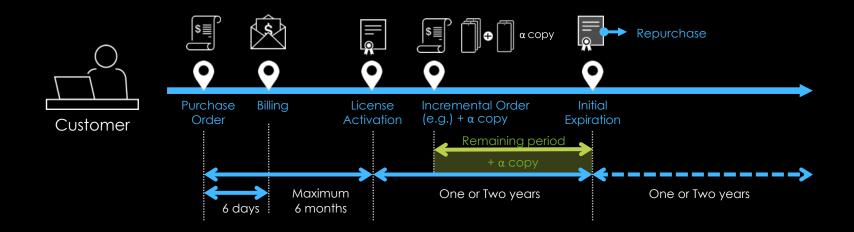
Firmware Over-the-Air Explained

FOTA is the service for updating mobile devices' firmware over-the-air

FOTA service consists of three key steps



E-FOTA License Policy



Order/Activation/Billing

- License order is neither exchangeable, refundable nor revocable after invoice is issued
- License can be ordered through SLM and activated on E-FOTA server only on or after the designated activation date, within six months from license order date
- Invoice is issued six days after license order is placed and license billing term starts from the license activation date

Expiration/Repurchase

- License term can be extended for one or two year(s) by placing an extension order
- Extended period will have same end date
- Expired license can be reused by placing an extension order within a year from last expiration date

Customer Support Work Flow

