

SAMSUNG



Samsung Knox

Product Introductions

June 2021

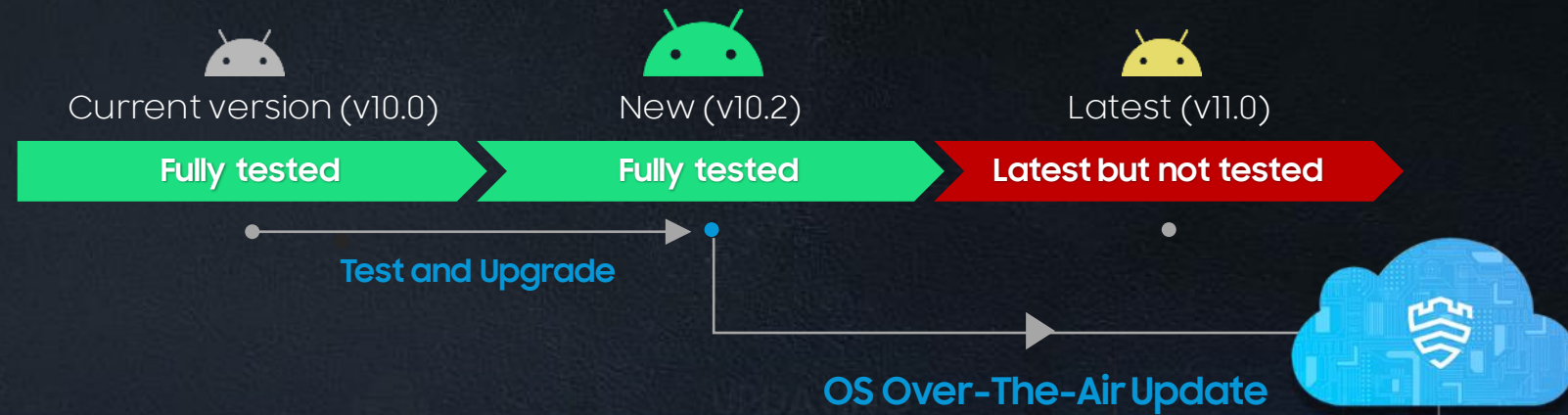
Samsung Electronics



Knox E-FOTA

Advanced Software Update Management

Remotely control or enforce which OS version is present on corporate-owned devices



Mandatory Firmware Update

- Silently update without user interaction



Stable OS Deployments for Business Apps/Services

- Select the qualified OS version to update after complete QA testing



Flexible OS Update Options

- Schedule update date and time
 - Network options, minimum battery level, server location
 (e.g. only when connected to Wi-Fi and battery is above 60%)

Why Knox E-FOTA

Remotely control the OS version on devices without end user interaction, enabling seamless updates to the fully tested version on time



OS Version Fully Under Control

Ensure every device operates on the OS version best suited to your business



Ensure Total Compliance

Trigger mandatory firmware updates for every device, no matter what state they are in



Work on Your Schedule and System

Schedule device updates at the times that work best for your workforce

Key Benefits

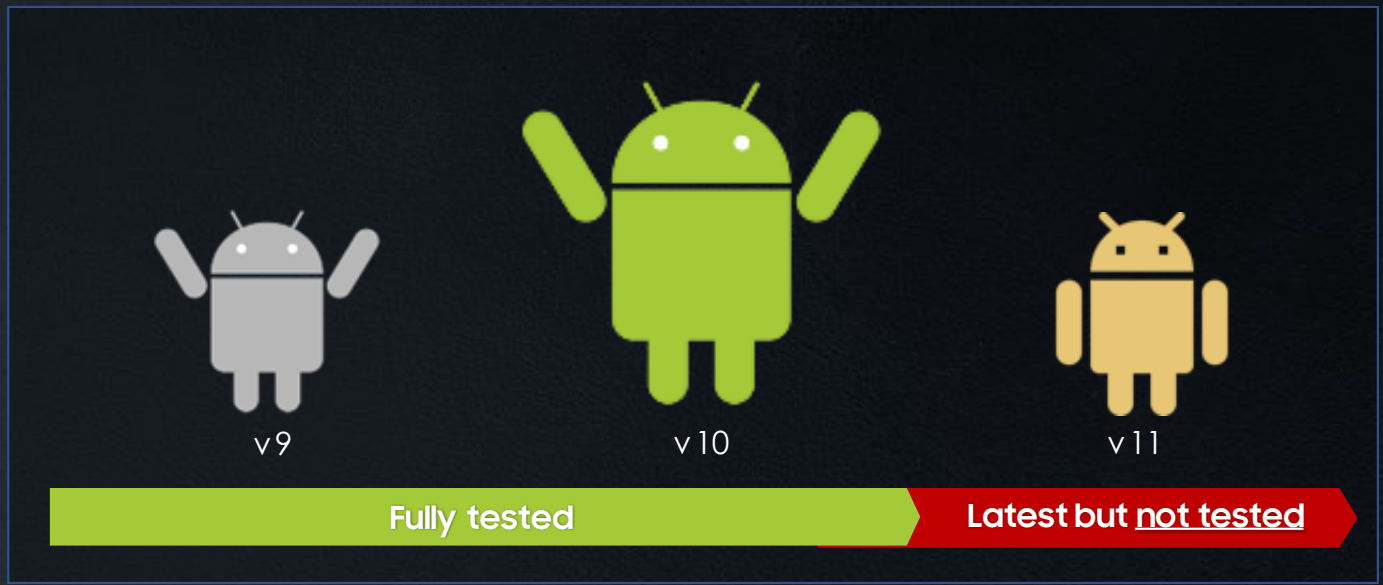
1. OS Version Fully Under Control

2. Ensure Total Compliance

3. Work on Your Schedule and System

"New" Doesn't Always Mean "Better"

Prevent devices doing unwanted, automatic OS version updates for any amount of time



Stable mobile platform

Devices run the fully tested and qualified OS version while QA tests of the latest version are still on-going

 Do NOT allow OS update

Choose the OS Version You Trust

Ensure compatibility with your business apps and device models by opting for the non-latest versions



Samsung FOTA server
*Firmware Over-The-Air



Android 9

Where your devices might be

Not all users will have updated,
remaining vulnerable



Android 10

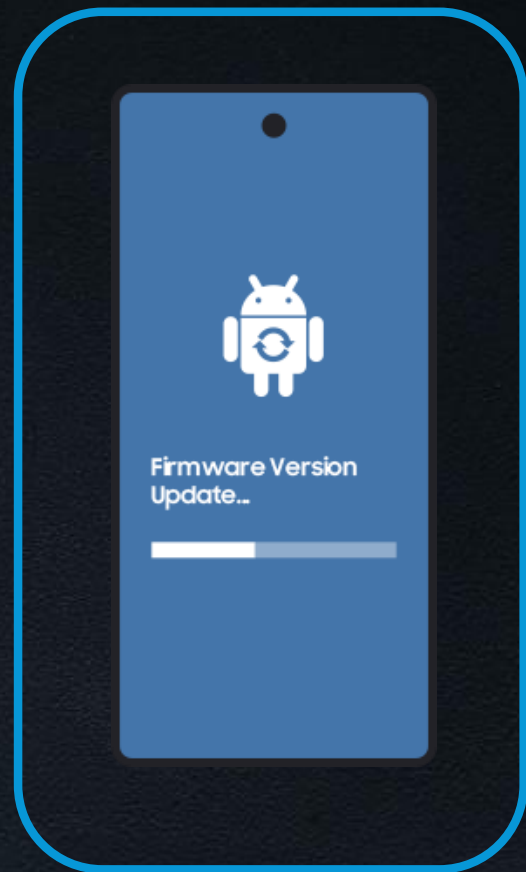
Where you want
your devices to be



Android 11

Just released

Not qualified for your environment

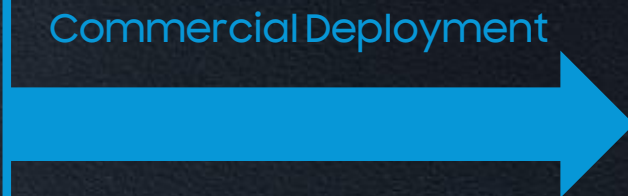
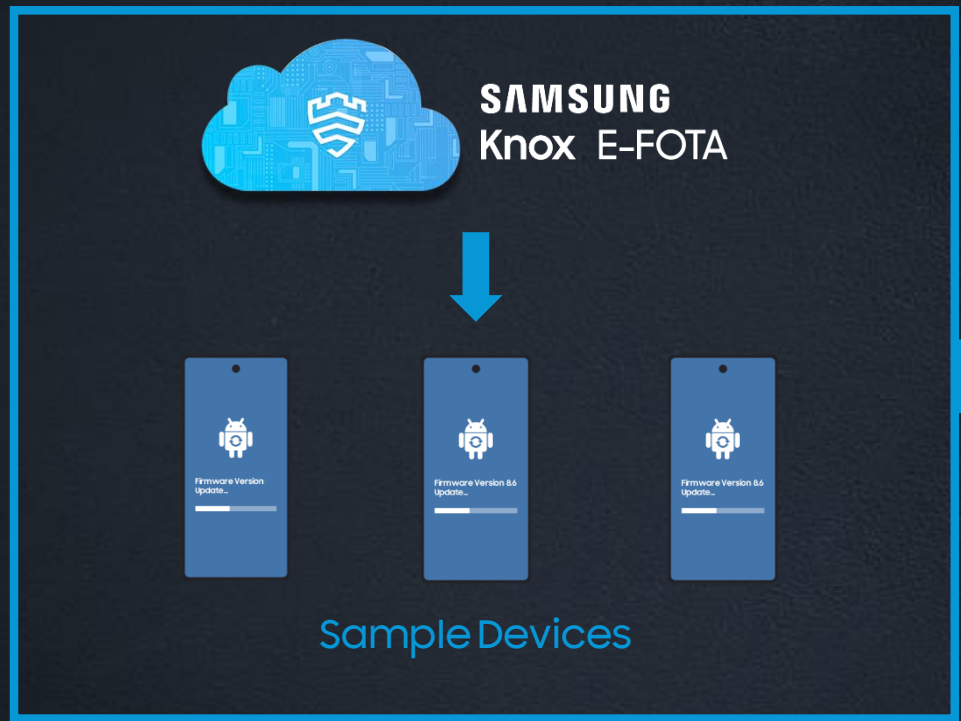


Test Before Deployment

Employ beta-testing on sample devices first then deploy the fully qualified OS version to your fleet with no unwanted surprises

Test Bed

End Users



- ✓ Test in-house app compatibility
- ✓ Fully tested and qualified OS
- ✓ Completely QA tested



Create a test campaign and apply it to sample devices before deployment

Key Benefits

1. OS Version Fully Under Control

2. Ensure Total Compliance

3. Work on Your Schedule and System

Update Without User Interaction

Enforce system software updates without end user interaction for seamless control of device update schedules.

IT Admin



SAMSUNG
Knox E-FOTA



**Without any
end user
interaction**



Security

Deploy the latest security patches to all devices according to a schedule



Bug Fixes

Instantly deploy hotfixes to business devices in order to maintain work stability



OS Updates

Enforce OS updates to ensure all business devices consistently run the same OS version

The OS Version of Your Device Fleet at a Glance

Ensure total oversight by monitoring a cloud-based dashboard concerning your update status

The **Device Update Status** widget shows a high-level view of the OS update status of the organization

The **Licenses** widget lists up to 3 licenses by expiration date

The **OS Trend Graph** shows a breakdown of the different OS versions of all enrolled devices. The chart includes a device count for each OS version

SAMSUNG Knox E-FOTA

Customer portal | CS

Welcome back

Your last login was on 30 Jun 2020
Updated: 08:40:17 PM UTC

DEVICE UPDATE STATUS 23 Devices [View all](#)

5% Complete rate	1 Completed	0 In-progress	13 Attention	1 Error	8 Not started
<ul style="list-style-type: none"> 0 Updated 1 Locked Firmware (Downloading) 0 Higher Firmware 	<ul style="list-style-type: none"> 0 Awaiting to download 0 In-progress (Downloading) 0 Awaiting for install 0 In-progress (Installing) 0 Reverting 	<ul style="list-style-type: none"> 13 Invalid License 0 Campaign sync expected 	<ul style="list-style-type: none"> 0 Failed to download 0 Failed to install 0 Campaign error 0 Invalid firmware 	<ul style="list-style-type: none"> 0 Client enrolled but campaign not started 8 Client not enrolled 	

LICENSES [View all](#)

7% Seat assigned
Remaining seats: 28

LICENSE NAME	TYPE	STATUS	OPERATION RATE	LICENSE END DATE
1075197357Trial73...	Trial	Active	7% (2/30)	30 Aug 2021

OS TREND GRAPH

21 Devices

- Android 10: 7 device(s)
- Android 11: 1 device(s)
- Android 8.1.0: 1 device(s)
- Android 9: 12 device(s)

BULK ACTIONS

*Screen image simulated

Key Benefits

1. OS Version Fully Under Control

2. Ensure Total Compliance

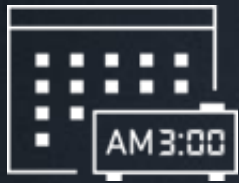
3. Work on Your Schedule and System

Run Updates in the Most Optimal Environments

Maximize business continuity and flexibility with a wide range of update options

Allow firmware downloads and installations with **various options**

Cloud-Based or On-Premises



Schedule

- Set download and installation date and time

e.g. Firmware will be installed between 2 a.m. and 6 a.m. only



Network

- Wi-Fi only or 3G/4G/5G
- Download speed limitation

e.g. Download firmware up to 100 MB in 10 min



Power Condition

- Only when connected to a charging dock
- Battery level check

e.g. Only when battery level is above 20%



Cloud

Samsung FOTA server & Knox E-FOTA server are on the **cloud**



On-Premises

Firmware and Knox E-FOTA software are on your **local network**

Why Not Opt to Postpone Updates a Couple of Times

Allow optional postponing for end users if your workers are in the midst of important tasks

Postpone installation
Set and customize postpone policy for end users. If you don't select this option, installation will be forced.

1 Times allowed to postpone
 Select

2 Postpone duration
 08 hours

3 Auto-install timer
 05 minutes

- 1. End users can postpone updates up to 3 times
- 2. Postponing duration can be set at 1 hour to up to 24 hours
- 3. Auto-install timer can be set between 5 and 60 minutes



If postponing is allowed

Firmware ready to be installed

Install Firmware 20210610. See more details about this version in the app.
You can install now or be reminded in 30 minutes.

Installation will automatically start in 30 seconds.

Later | Install (30)

After last chance to postpone, show final install pop-up

Firmware ready to be installed

Install Firmware 20210610. See more details about this version in the app.

Installation will automatically start in 30 seconds.

Install (30)

*Screen images simulated

Save Time with Streamlined Device Registration

Import and sync device information from your EMM

New Devices

Automatically register your purchased devices to the Knox E-FOTA console via KDP*

Already Registered Devices

Import registered devices and device groups from your EMM



SAMSUNG Knox E-FOTA Customer portal

Devices

UPLOADS(2) ALL DEVICES(10)

Search [] ACTIONS [v]

<input type="checkbox"/>	DEVICE ID	MODEL	CAMPAIGN	SOURCE ↑↓	MODIFIED ↑↓
<input type="checkbox"/>	35719010001111	Engineering Model	-	Reseller Upload	28 Nov 2019

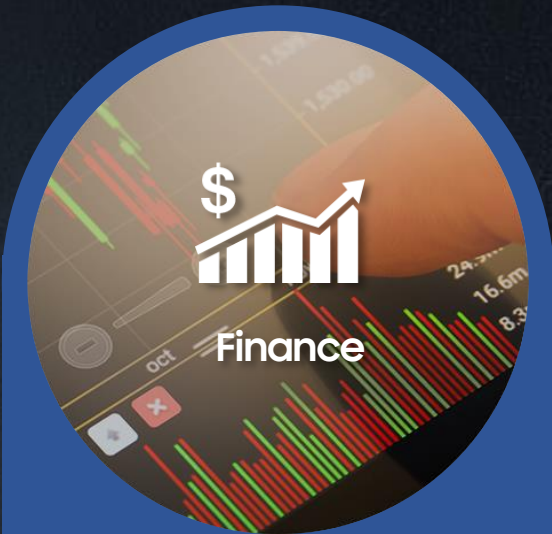
*KDP: Knox Deployment Program

Appendix

Use Case Scenario



We are highly sensitive to security. We want to deal with emergency security issues, including cyberattacks by malware or ransomware, etc., as soon as possible.



We want to prevent any downtime or waste of resources during operating hours. OS updates are necessary but it might cause incompatibility between the in-house apps and the new OS.




Carrying a cluster of unmanned devices usually results in outdated OS unless IT specialists process the updates at each store or location.



Enterprises whose employees are dispatched on-site for housekeeping need the centralized management of certain workforce systems, such as scheduling, booking, recording medication information, etc., as well as customer entertainment.

 **Pain Points**

 **How to Solve the Issue**

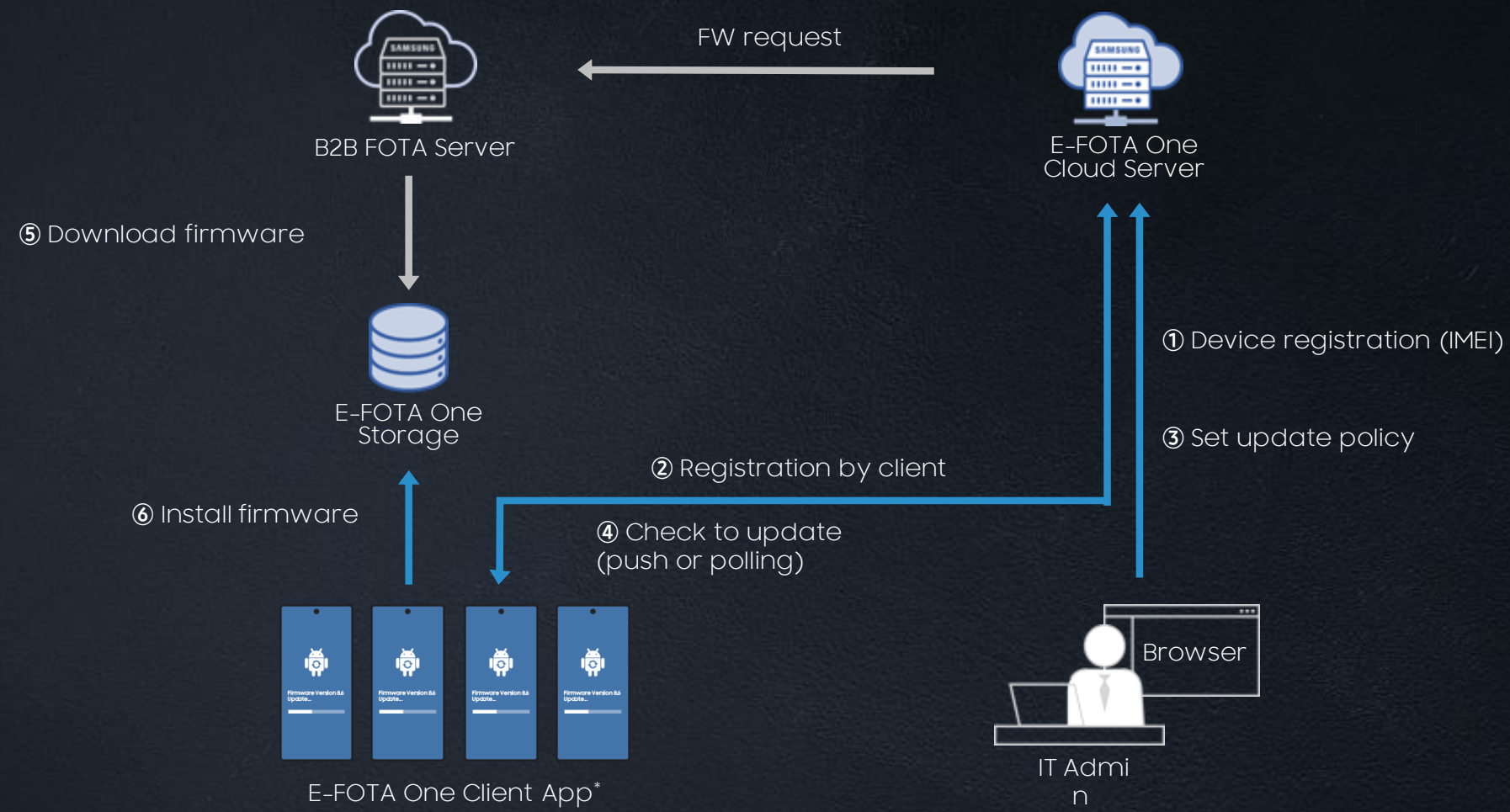
The latest security patches can be instantly deployed to every device in an emergency situation via Forced Update.

IT Admin can update the OS in sequence step-by-step when enough resources are ready per region/organization, to ensure operational continuity and stability. Ensure compatibility, as well as updating during non-work hours.

IT Admin can remotely install the new OS on all devices in each store and at each location using the silent option, which requires no end user interaction.

Samsung Knox E-FOTA enables them to remotely control business devices, both in the field or in-house, to run the qualified OS version without business interruption.

Knox E-FOTA - Service Structure



*Downloadable client

Knox E-FOTA Cloud vs. On-Premises

✓ : Full support, **Partial**: Partial support, - : No support

Key Features		Knox E-FOTA Cloud	Knox E-FOTA On-Premises
Architecture/Server	Private network	-	✓
	Separate server, HW, SW purchase	Cloud-based, not required	Required
	Local on-site installation service purchase	Cloud-based, not required	Required
Onboarding	Upload device info from KDP	✓	-
	Sync device & org. info from EMM	✓	-
Campaign	Automated sequential updates	✓	✓
	Multi-model updates per campaign	✓	✓
	Push & polling	✓	Partial (no push, polling only)
	Additional options: (Scheduled update, Wi-Fi only, battery level)	✓	✓
Management	Dashboard	✓	✓
	Multiple licenses	✓	-
	Firmware & license staging/upload	Automatic	Manual