Swiss railway deploys 30,000 devices with Knox Configure from Samsung.

When the largest transportation company in Switzerland wanted to find new ways to engage with customers and employees, it decided to give every employee a company-owned mobile device—including railroad employees who had never used smartphones. For Swiss Federal Railways (SBB), the move was essential to a digital transformation initiative.

“We met with other enterprises here and in Germany,” said Adrian Allenbach, SBB Head of Mobile Workplace & Communications, “but did not find anyone deploying as many devices and apps as we needed.”

The railway manages 3,000 kilometers of track throughout the country with more than 30,000 employees working in more than 140 different job functions.

SBB faced multiple difficulties. “Initial setup and re-enrollment of a devices was one of the biggest challenges.” Said Davis Kohler, Mobile Solution Engineer at SBB. “Keeping internal apps updated was also difficult.”

The Samsung-SBB story

Business challenges
Mobilizing a workforce of 30,000 with company-owned mobile devices required considerable effort:

• Device setup process was manual, time-consuming, and error-prone.
• Password issues made maintenance and support complex.
• SBB relied on employees to update apps.

Solution
• Samsung Knox Configure
• Samsung Galaxy devices, including S8

Results
• Automating the setup process cut staging time in half.
• Simplified device maintenance.
• Faster support.
• Theft deterrence.
SBB wanted faster staging, more consistent deployment, and more effective remote support.

Challenges

Device setup was manual, time-consuming, and error-prone. The mobile team spent 40 minutes per phone to deploy in-house applications based on job function, and configure device settings and app shortcuts. Especially complicated was the process of configuring devices for apps that used SBB’s secure GSM-R APN network. SBB, like other European railways, uses the Global System for Mobile Communications-Railway (GSM-R) wireless communications standard.

“Each device might take 40 minutes to stage and configure, since there was a lot of manual work required. Fifteen of us had to work all day on setup—including opening the boxes and downloading the apps,” said Kohler.

Maintenance was equally painful. For several reasons, the IT team found themselves re-configuring devices they had already set up.

- When a device needed repair, for example, the SBB team needed to repeat the setup process.
- When a user left the company, SBB was unable to unlock devices without the user’s personal Google credentials. This prevented the phone from being reused, or required a time-consuming firmware reinstall.
- When a user incorrectly entered a device password five times, a corporate security policy mandated a factory reset that required the SBB team to set up the device yet again.

Adding complexity was the number of app updates—at least one each week—which required employee education and frequent reminders.

Solution

SBB wanted faster staging, more consistent deployment, and more effective remote support. SBB also wanted to keep the user experience uncomplicated. The company chose Knox Configure, a cloud-based service that allows businesses to remotely configure a large number of Samsung devices and tailor them to specific business needs out of the box. The dynamic push-update feature also enables organizations to keep corporate apps and settings up-to-date once devices are configured and in use.

To get started, SBB set up a test profile. A profile consists of a menu of settings, backgrounds, and media files. SBB could see how the tool would speed staging. Once the Samsung Switzerland office learned that SBB wanted the ability to configure widgets, Samsung provided that capability in the next release.

Transportation challenges.

Railway companies and others are spread out geographically and typically include numerous job functions requiring different apps and settings. Deploying and supporting the devices requires a solution that can:

- Remotely configure a large number of devices.
- Tailor devices to specific business needs, including on-device branding.
- Push updates for apps and settings.

“With Knox Configure, all our staging can now be done automatically, within one console and one configuration.”

– Davis Kohler
Mobile Solution Engineer, SBB
Benefits

**Faster, less costly IT staging.** Automated device configuration reduced manual effort and errors and cut device staging time in half, from 40 minutes to 20. Using Knox Configure, the team assigned settings and apps to profiles. They then click through Knox Configure console to find what they need based on the user role and apply the configuration profile, which includes a customized home screen with SBB logo, security policies, APN network settings, apps, background, and ring tones.

The first-time user experience is also fast. When an SBB employee boots up a mobile device, and connects to Wi-Fi for the first time, the Knox Configure server automatically authenticates the device and the device downloads the required configurations.

**Simplified device maintenance.** With Knox Configure, the IT team can skip the Google setup process and disable Android Factory Reset Protection (FRP), even if it’s been enabled by end users. Android FRP is useful for end users but creates a hurdle for IT maintenance, since it requires the IT team to know the user’s personal Google password if repurposing a device. Disabling Android FRP was a big win. In addition to skipping setup and disabling Android FRP, Knox also helps the IT team automatically prepare a device for re-enrollment and can remotely update policies for app and device settings in bulk, which reduces device maintenance overhead.

**Faster support.** The IT service desk supports more than 30,000 employees, including several thousand mobile-only users. “Support is easier when every device looks the same,” said Kohler. “We tell the caller, ‘Go to the second home screen, top right, and launch the TeamViewer app.’”

Knox Configure also helps SBB comply with corporate security policy without compromising productivity. No longer do users need to mail devices to IT for restaging after they input too many incorrect passwords. No longer does IT need to save contacts, download applications, and configure APN network settings all over again. Users now reset devices by themselves as needed, and their devices are automatically reconfigured after a reset.

**Theft deterrence.** Knox Configure supports on-device branding that makes it more difficult for stolen or lost devices to be resold on a secondary market, even after a factory reset. SBB devices are clearly identified as SBB owned with background wallpaper and logo. A factory reset automatically reapplies the SBB configuration, which minimizes resale value for stolen devices. When SBB retires devices, the IT team can maximize resale value by permanently removing the SBB configuration.

**Digital transformation initiative increases SBB productivity, engagement.**

Today, SBB workers use devices to report issues that could otherwise cause delays and update passengers on SBB news and train details. Conductors use the devices to give the all-clear signal to the engineers. Cleaning crews use customized checklists. Field workers have access to manuals. SBB now boasts more than 80 internal apps, and SBB teams continue to create new apps. For many, the SBB device is like an office in their pocket, offering access to email and the latest SBB news.

**About SBB**

Swiss Federal Railways (Schweizerische Bundesbahnen, or SBB), is the national railway company of Switzerland. Headquartered in Bern, the company serves 1.25 million passengers a day across Switzerland. SBB is transforming railway stations and areas into attractive mobility hubs and spaces. As the backbone of the Swiss public transport system, SBB wants to shape the mobility of the future to be simple, personal, connected.
About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.