

INTECH CASE STUDY

Smartphone fleet renewal. Wi-Fi Calling on Nokia 4.2 and Nokia 5.1 Plus improves connectivity at in-tech



Monthly security updates from HMD Global, the home of Nokia phones, deliver secure Wi-Fi calling for automotive specialist, in-tech, improving connectivity of 1.000+ fleet of devices.

- Regular and fast security patches deliver high level mobile security
- Zero-touch roll out of more than 1,000 Nokia 4.2 and Nokia 5.1 Plus devices
- Better connectivity of fleet thanks to secure Wi-Fi call implementation
- Expert support from both smartphone vendor and network operator

As a player in the fast-paced automotive market, in-tech GmbH considers the permanent availability of its employees to be an absolute must - even in difficult environments such as customers' production units, where thick walls as well as reinforced concrete ceilings can interfere cellular network reception. Wi-Fi calling— i.e., making phone calls via wireless local area networks - overcomes these tricky circumstances and enables employees to be available all the time. This was an essential feature for in-tech, when renewing their smartphone fleet. Moreover, fast and regular security patches as well as excellent price-performance ratio for hardware and mobile phone contracts were equally important. Monthly security patches are an important tool to keep Android users safe and protect their devices. A detailed evaluation of the market finally led in-tech to a Deutsche Telekom offer with Nokia 4.2 and Nokia 5.1 Plus smartphones as hardware. Improved connections as well as fast roll out of over 1,000 smartphones with Android zero touch registration into the Mobile

Device Management system provided high satisfaction for both the IT team and end users.



Project overview

Objective

in-tech wanted to leverage the necessary renewal of its smartphone fleet to improve the accessibility of its employees with Wi-Fi calling in the future. Monthly security patches over a period of three years and the procurement of inexpensive yet powerful smartphones were other important points on the list of requirements. To meet all these needs, in-tech put the entire mobile phone package to the test to find the best possible overall package.

Solution

A package of Deutsche Telekom's services and Nokia smartphones met all the requirements. With Nokia 4.2 and Nokia 5.1 Plus smartphones and Wi-Fi calling from Deutsche Telekom, in-tech GmbH employees are always connected to colleagues and customers. Thanks to the Android zero touch registration into Mobile Device

Management, more than 1,000 devices could be rolled out quickly and conveniently within a very short time.

Advantages

- Wi-Fi calling improves connectivity
- High level of security thanks to monthly security patches for three years*
- Operating system without bloatware
- Low investment costs thanks to affordable yet powerful smartphones Nokia 4.2 and Nokia 5.1 Plus

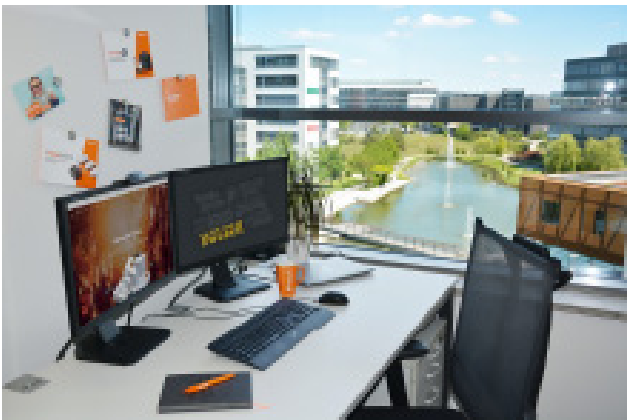
- Fast Android zero-touch registration
- Direct line to the manufacturer's technical support

Employees at in-tech are well acquainted with modern and future-oriented mobility. In-tech teams design future scenarios, create new mobility services, and advise car manufacturers on how to implement them. Therefore, in-tech employees are often out and about in factories. Inside of buildings, the mobile phone reception is often extremely limited because these premises are predominantly built using steel construction. They are often packed with robots too, which produce vehicles or parts made of metal. This combination negatively impacts the mobile connectivity of employees' smartphones, which is particularly important for in-tech.

Michael Sturm, CTO and Head of Digital Solutions at in-tech, had a clear idea of how the problem could be solved, and was just waiting for the right moment to put the project into action: „We have

been considering improving the accessibility of our employees via Wi-Fi calling for quite some time now, as most of the production areas are equipped with Wi-Fi,” Sturm said.

With Wi-Fi calling, many smartphones can make calls via mobile networks as well as private and public Wi-Fi’s – without the need for an additional app. All calls and short messages are billed as if they were made via the mobile network.



No compromises on security

With the imminent end of supply of security patches to the existing smartphone fleet, the time had finally come for Sturm to act. „We can’t compromise on security. We cannot run the risk of a vulnerability arising from one of our smartphones no longer being up-to-date with the latest software, as we develop intelligent solutions for automotive and smart mobility with devices being in usage in critical production processes „, said the CTO.

So, Sturm and his team developed a project plan that was supposed to meet at least three important requirements: First, the new smartphones to be purchased must receive security patches for at least three years, so that known security gaps are quickly resolved. Secondly, in future, employees should experience a better net-work availability due to Wi-Fi calling. Thirdly, with a volume of more than 1,000 devices,

the budget demanded low-cost smartphones providing great performance for users.

„With these specifications in mind, we surveyed the market in order to find the best overall solution, which would also work with our newly introduced Mobile Device Management,” Sturm said. „After extensive testing, we finally concluded that only Nokia smartphones being offered by Deutsche Telekom meet our requirements.”

„We decided to provide our employees with Nokia 4.2 and Nokia 5.1 Plus smartphones,” Sturm reported. He continued: „In addition to Nokia 4.2 and Nokia 5.1 Plus being part of the Android One pro-gram and the manufacturer’s security patch promise linked to it, excellent price/performance ratio, and the very good Wi-Fi calling performance in Deutsche Telekom’s network convinced us.”

Three-year security commitment

HMD Global, the home of Nokia smartphones, ensures that all its devices, which are part of Google’s Android One program, receive monthly security patches for three years*. During this period, the devices will also receive two major upgrades of the Android operating system. Nokia 4.2 and Nokia 5.1 Plus are two of many smartphones in Nokia’s portfolio being part in both Android One and Android Enterprise Recommended program offering an experience that keeps getting better over time.

The Nokia 4.2 and Nokia 5.1 Plus smartphones used by in-tech have another ace up their sleeve in terms of security. As a pure version of the Google operating system, Nokia smartphones being part of Android One program do not include bloat-ware. This means that Android One smartphones such as the Nokia 4.2 and Nokia 5.1 Plus do not have any

unnecessary apps preinstalled, which could compromise security.

The security specialists at Kaspersky have found out that the absence of bloatware makes a significant contribution to the security of smartphones. According to a survey** some devices can be compromised before they are purchased by preinstalled adware (software that displays unwanted advertising) installed by the manufacturer.

Zero touch = zero effort

The roll out of Nokia smartphones went smooth for in-tech. „Thanks to the automatic Android zero touch implementation of devices into our Mobile Device Management solution, IT was hardly involved into operational activities during roll out,” in-tech CTO Sturm explained.

Thanks to Deutsche Telekom’s pre-configuration, users need do no more than to insert the supplied SIM card into their new

smartphone and then enter their company login data after switching on the smartphone for the first time. Thereafter, Nokia smartphone automatically registers with Mobile Device Management app, which in turn loads only approved software including all security policies onto the device. „Today, the entire device activation process is completed in less than 10 minutes,” reported Sturm. He is pleased about the noticeable reduction in workload for his colleagues.

Technical support as value added service

Another strength of the new mobile phone solution only came to light due to a temporary technical problem. „After a software update, we were no longer able to manage smartphone cameras via our Mobile Device Management,” said Sturm. „However, this is an important feature for us because

we always set the camera function according to the security policy of our customers.” The smartphones of in-tech employees working in customers’ secure areas must have the camera switched off, but other colleagues need the camera on for the documentation of tests. Deutsche Telekom, the contract partner for in-tech, immediately contacted HMD Global technical enterprise support.

Sturm said: “The way the technical enterprise support from HMD Global solved the problem by taking a holistic view on interaction of smartphone and mobile device management solution in close cooperation with us was a positive experience. We are working with extraordinarily complex systems ourselves and therefore know that unforeseen incidents can always occur. We then expect our concerns to be taken seriously and that we will find a quick solution together – just as HMD Global has done,” He continued: „The Deutsche

Telekom plus HMD Global package works excellent.”

Since users are also happy, the manager in charge of technical topics at in-tech is convinced that Nokia smartphones will be purchased again if the company continues to expand. „The new mobile phone solution is a clear step forward for us on the way to achieving comprehensive digitalisation,” Sturm concluded.

* From the time of the market launch of the respective Nokia smartphone

** Kaspersky analysis „Pig in a Poke:” <https://securelist.com/pig-in-a-poke-smartphone-adware/97607>



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About HMD Global

Headquartered in Espoo, Finland, HMD Global Oy (“HMD”) is the home of Nokia phones and HMD Services. HMD designs and markets a range of smartphones and feature phones and an expanding portfolio of innovative service offerings. With an ongoing commitment to security, durability, reliability, and quality across its range, HMD is the proud exclusive licensee of the Nokia brand for phones, tablets and accessories. Nokia is a registered trademark of Nokia Corporation. For further information, see www.hmdglobal.com

About in-tech GmbH

German in-tech GmbH is shaping the mobility of the future: the technology company develops innovative solutions for automotive, Smart City and Smart Factory. The goal: to make everyday life intelligent, simple, sustainable, and safe with innovative products and services. The developers and engineers at in-tech work on topics such as autonomous driving, electric mobility, multimodal mobility, or smart industrial production.

Founded in 2002, the company currently employs around 1,500 people at locations in Germany, Austria, USA, China, UK, Czech Republic, and Romania. The owner-run, medium-sized company stands out as an excellent employer with an outstanding corporate culture: the company has already received several awards for its good working atmosphere, internal team spirit and very good work-life balance. For further information, see www.in-tech.com/en

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