SOTI



SOTI Simplifies Device Management Deep Underground

K+S is an international resources company headquartered in Kassel, Germany. The company employs over 14,000 workers in production, logistics and administration at sites across Europe, North and South America, as well as Asia and Africa. In the 125+ years since it was founded, K+S has grown to become the world's largest salt producer, and Europe's largest supplier of potash and other mineral fertilizers. The nature of the company's business, deep underground mining, creates a laser-focus on safety and sustainability. As such, K+S is a signatory of the Global Compact of the United Nations, and Germany's Diversity Charter. K+S is dedicated to the growth of its nutrient and mineral business and its impact on growth and life.

The Business Challenge

K+S has used rugged Zebra mobile computers for logistic activities, above and below ground since 2006. Because their end-of-support (EOS) date is approaching, K+S is replacing their Windows CE and Windows Embedded devices with Google Android based devices. Another 250 Zebra mobile computers and Advantech-DLoG in-vehicle terminals were introduced following the Morton Salt acquisition in 2009. The company has almost 1,500 mobile devices in their production environment that are running Google Android or various Microsoft Windows versions (XP, Win7, CE, Mobile, and Embedded). K+S has developed several custom applications for their mobile devices. Apps for the management and tracking of explosive detonators, as well as logistics and material management. In addition, plant maintenance personnel use a mobile SAP client on rugged Panasonic tablets to manage work orders on their mobile devices.

K+S operates production sites, surface and underground mineral mines at over 35 sites around the world. These facilities are often remote, and can extend more than several square kilometers underground. Obviously, network connectivity is a challenge and the working environment, vibration and airborne dust from mining activities, is hostile to electronic equipment. K+S has deployed WiFi networks into tunnels and chambers at many of the mining sites. But, the remoteness of the locations makes device staging and remote support slow and expensive. K+S needed a mobility management tool that would simplify device deployment as well making it easy to remotely troubleshoot and fix mobile device and application problems.

Vertical: Mining

Region: Europe (Germany)

Device: Zebra MC9090/MC9190/ MC92N0, Advantech DLoG MTC6/ DLT-V72/DLT-V83, Panasonic Toughpad Tablets

Platform: Microsoft Windows & Google Android

Mobility Management Challenges

- Managing many different mobile devices and operating systems.
- Time consuming and costly to troubleshoot and fix problems with remote devices.

Mobility Management Benefits

- Over-the-air device staging significantly reduces time and cost.
- Remote support features make it fast and easy to diagnose and fix problems in the field.

"SOTI MobiControl is a business critical mobility solution for K+S. It saves us time and money when deploying devices at the company's mining sites, over and underground. SOTI MobiControl's scalability and features are indispensable in our every day operations and will be a key element as we continue to grow our business."

Michael Wagner

Mobile Technology Consultant









The Solution

K+S has been a SOTI MobiControl customer since 2010, when they selected SOTI to manage the company's Zebra mobile computers and DLoG forklift terminals. It enabled K+S to replace their manual, on-site device provisioning and staging process with a remote process.

SOTI MobiControl delivers powerful remote provisioning and staging capabilities, such as:

- Profiles A set of device configurations (payloads) pushed down to a device or group of devices based on device role or geographic location
- Packages Packages are containers that enable IT admins to manage applications, content and scripts on a device.
- Kiosk Mode Kiosk mode restricts a mobile device to a single application (iOS & Windows) or a customized suite of applications (Android).

K+S depends on SOTI MobiControl remote support capabilities for the same reason. IT Staff rely on SOTI's remote control, file-sync and 2-way chat to troubleshoot and fix remote device and application problems. K+S uses kiosk mode to lockdown their rugged devices to custom apps, such as T+T Explosives (TTE) or T+T Logistics (TTL). Kiosk mode optimizes user productivity and prevents them from adjusting critical devices settings.

The Results

SOTI MobiControl saves K+S time and money. A single mobility management solution supports all of the company's mobile devices and operating systems in their production environment. Before SOTI's solution was in place, K+S IT staff configured and provisioned new devices via a USB cradle. For the rollout of new devices or to fix device issues, the staff had to drive to the mining site, descend up to 1,400m underground to be able to reach the device and verify functionality. This activity could take hours, and there was no way to test the device until it was on site. SOTI MobiControl has significantly streamlined the provisioning and deployment of new devices. New mobile devices are shipped directly to the mining site, where over-the-air (OTA) enrollment and provisioning gets them properly setup in minutes, not hours.

SOTI MobiControl's amazing remote support features have made diagnosis and fixing remote device problems faster and easier. Remote control makes it easy for IT staff to diagnose and fix remote device or application problems from the company HQ. SOTI is acknowledged as the industry leader for remote support of Google Android and legacy Microsoft Windows devices. Going forward, K+S is depending on SOTI to deliver OTA device staging and remote support for all of the company's new devices; Google Android and Microsoft Windows 10 IoT (Enterprise and Mobile Enterprise).





