

InnoPath ActiveCare

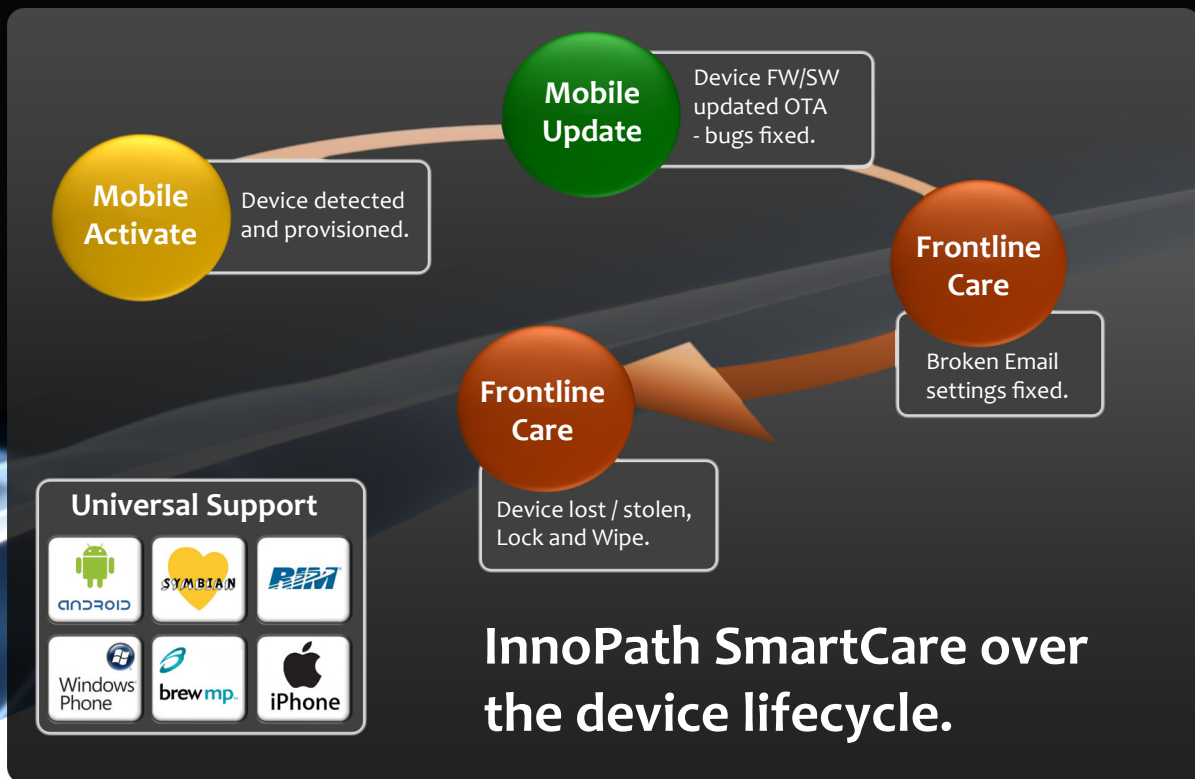


You are faced with a dilemma... the latest smartphones win (and keep) high value customers and provide cover for falling voice revenue, but support costs are ballooning. In fact, global operator frontline care exposure is over \$25 billion annually. A single 45 minute call can destroy any profitability that a customer brings to the table for a year or more. You need change... you need a new, more efficient approach to customer care. InnoPath's ActiveCare is this new approach, creating an over-the-air channel between the subscriber's phone and the customer care representative that increases First Call Resolution (FCR).

SmartCare, InnoPath's industry-leading mobile care suite, supports the smartphones and featurephones entering your network. It spans initial detection and provisioning, updates and frontline care through the eventual retirement of the device, including security concerns such as locking and/or wiping lost or stolen devices. We focus on complete solutions, as opposed to point features. Facilitating successful deployments of Over-The Air (OTA) customer care systems, InnoPath provides you with a tested, proven end-to-end solution that helps you reduce costs while driving subscriber satisfaction, the on-device experience, as well as both discovery and revenue assurance for new services.

Quickly delivering on your up-front investment through demonstrated ROI, the ActiveCare service is immediately deployable, and is proven at Tier 1 operators globally. Starting with OMA-DM and other industry standards as a base, we provide a deployable, supportable solution that meets pressing business requirements, extending and enhancing standards where customer requirements and technical capabilities outpace existing standards. We call this 'Standards+', an approach which allows InnoPath to meet the interoperability desires of our Tier 1 customers while delivering on functionality requirements.

ActiveCare ensures that the phone is kept in top operating condition, and if any problems do arise, they are easily identified and corrected, efficiently and painlessly over-the-air. It includes checking the phone for vitals such as battery, signal level, or even the model number, checking and correcting application settings such as email and browser, controlling the phone's hardware, such as Bluetooth and WiFi interfaces, and locking and/or wiping the phone if it is lost or stolen. Frontline Care reduces operational expenses by increasing call efficiency through a consistent frontline care experience, while reducing average hold time (AHT). Increased first time call resolution (FCR) grows customer satisfaction while decreasing churn.



The InnoPath SmartCare Portfolio includes the following components and services:

- The InnoPath SmartCare Server, with proven scalability and reliability, manages the ActiveCare Client as well as standards-based 3rd party clients using the OMA-DM and CP protocols. The server is deployed in conjunction with the CSR Portal, a simplified, easy to use, task-based care interface for frontline CSRs.
- The InnoPath ActiveCare Client is based on OMA-DM standards, while extending them for additional functionality. The client can be pushed to smartphones by the operator, or pre-loaded onto featurephones by the OEM, providing an on-device framework for over-the-air customer care. Client certification for an operator leverages InnoPath's Device Capability Management Program (DCMP) for ActiveCare.
- The InnoPath Embedded Client provides firmware and software update capabilities for both featurephones and smartphones.
- The SmartCare Server and Client together support ActiveCare frontline care. The server, deployed in conjunction with the Embedded Client or a 3rd party client, supports Mobile Update, and when deployed in conjunction with any CP or DM-capable client, supports Mobile Activate.

The ActiveCare service is one of three mission-critical device services offered by InnoPath. The other two include:

- Mobile Activate detects and then properly provisions new handsets on the network. It leverages InnoPath DCMP for GSM, a unique subscription-based program with a focus on rigorous testing and documentation of open market phone DM capabilities. It ensures plug and play DM manageability of devices entering an operator's network. Mobile Activate also leverages the InnoPath Mobile Detect module for SS7 integration, as well as the CSR Portal, Mobile Activate Edition. It permits operators to take control of the total activation flow, ensuring subscriber data services are provisioned and working for the initial 'golden hour' of device use.
- Mobile Update ensures devices are updated, running current firmware and providing the best possible end-user experience. It communicates with the device management client and Device Update Agent (DUA) on the phone, enabling firmware updates over-the-air (FOTA). The client on the phone may be either the leading InnoPath Embedded Client, or a 3rd party client. In fact, during 2009, North American operators pushed over 4 million successful updates to phones in their networks. Mobile Update addresses key operator requirements including scalability, performance, and reliability. Technical challenges solved include large update packages, universal OS support, complex file systems and multiple processors, and large campaign sizes with full support for throttling, groups, whitelists and blacklists.