



The device configuration challenge when consolidating two major operators

How Indosat succeeded in getting over 30 million subscribers correctly configured and using mobile services after one of the largest mergers in Asian telecom history.

Background

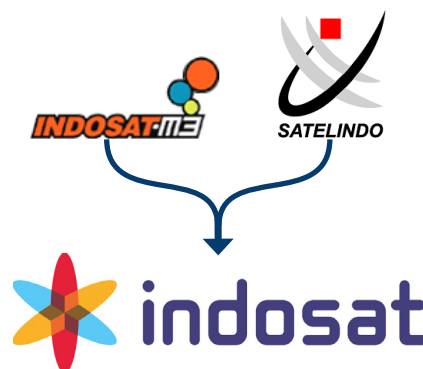
In 2003, Indosat and Satelindo merged to create the second largest mobile operator in the highly competitive Indonesian market. Today they have grown to over 36 million subscribers.

New branding meant a new APN

Indosat defined new APN settings (Access Point Name – required for GPRS/MMS services) after the merger. Many subscribers, however, still had their old configuration settings and even more alarming some handset vendors were still supplying new phones with the old settings.

Incorrect settings = no service access

Data service access failures grew alarmingly high after the merger. In the East Java province 81% of access attempts failed with 70% the result of incorrect APN settings. Content download failures ballooned to 69% in the East Java province. It was estimated that Indosat lost over 400,000 US dollars of potential revenue every month as a result of incorrect APN settings. Indosat prioritized correcting the handset



settings in the merged network to reverse the failures and to prepare for their future services including Streaming, Mobile TV and Instant Messaging.

Three steps to success

Indosat acted quickly to assist their subscribers to correct their APN settings. However, their first partner had a limited repository of terminal data. This meant that many subscribers' handsets could not be configured. They then turned to

SmartTrust for a device management system. SmartProvisioning™ was deployed on the SmartTrust DP™ already present at Indosat as their SIM OTA (Over-The-Air) platform.

Step 1 - Manual OTA settings

Manual OTA handset settings download was implemented using text SMS, Web based self-care and customer care interfaces. The extensive terminal data in the SmartTrust Terminal Capabilities Repository (TCR) ensured that configuring the handsets was not a problem any longer. However, not all subscribers knew what handset model they were using.

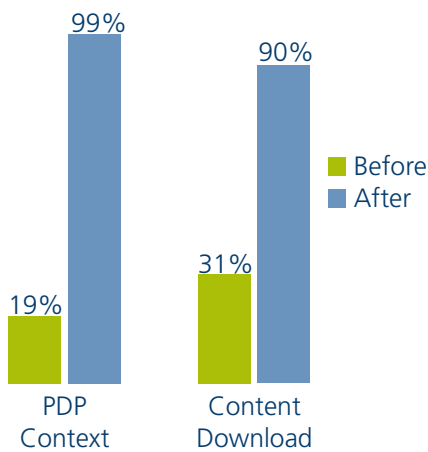
Step 2 - Automatic Device Detection

SmartTrust Automatic Device Detection enabled Indosat to perform intelligent Automatic Device Configuration. This solution has two primary benefits:

1. It requires no subscriber initiation
2. The regularly updated TCR ensures automatic handset identification

Step 3 - Proactive settings correction

Indosat implemented a new trigger event in the third phase of the project. Error logs are used to trigger proactive settings correction. The SmartProvisioning system receives SGSN (Serving GPRS Support Node) error log files. SmartProvisioning evaluates the log files to identify those subscribers with incorrect settings and sends a notification SMS to them. The subscribers are informed that Indosat has discovered that their handset settings are incorrect and that the next message will correct their settings.



Immediate gains - ready for the future

Indosat has seen a remarkable increase of subscriber access to data services after implementing their SmartTrust device management system. Access success soared from 19% pre-implementation to 99% post implementation. Content downloads grew dramatically growing by 300% and data volume by 250%.

“We experienced a 600% increase in GPRS traffic and a 300% improvement in content downloads with SmartProvisioning”

Mr Sumantri Joko Yuwono, Product Management, Indosat

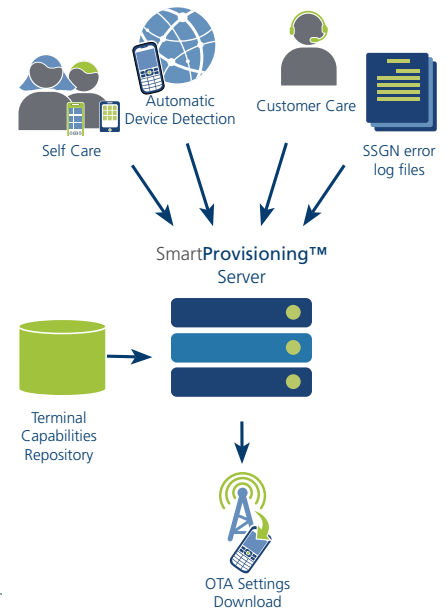
Indosat is well positioned now for continued growth. Subscribers can now easily use new services like mobile VoIP and Instant Messaging. Businesses can reach Indosat subscribers with advertising and are even offered the possibility for deploying mobile commerce solutions.

SmartProvisioning implements OMA and legacy provisioning protocols. It is supported by the market leading SmartTrust TCR that has been continuously updated since 2003. SmartProvisioning runs on the carrier grade SmartTrust DP SIM OTA platform.

Why SmartProvisioning

Find - Identify - Configure - Use

Successful usage of mobile services requires correctly configured devices. Well functioning services that are easily accessible encourages use by subscribers. Making sure a device and its applications are correctly configured requires automatic device detection, a regularly updated repository of terminal capabilities information and software that supports all provisioning protocol standards.



“In our extremely competitive market, subscribers must be served successfully the first time”

Mr Sumantri Joko Yuwono, Product Management, Indosat