SIMcontrol: Migration Guide

Moving existing Vodacom SIMs from 10-digit Prepaid to the 14-Digit Business Flexi tariff

Background

Most telephone numbers you remembered were 10 digits long. Phoning a Johannesburg fixed line (011 xxx xxxx) or a Vodacom mobile (082 xxx xxxx) were based on a specific numbering range.

In South Africa, the regulator ICASA originally designated around 230 Million numbers across all mobile operators ranging from 060 xxx xxxx to 084 xxx xxxx for normal mobile services.

These number ranges have become a scarce resource over the years, and due to the prolific growth in M2M devices ICASA introduced specific 14 digit number ranges for "machine related services".

Existing 10 digit SIMs can be migrated to the 14 digit number ranges (i.e. 096 xxx xxxx xxxx), which roughly allows for 3 Billion M2M related mobile numbers:

During the past year, Vodacom specifically started locking Prepaid numbers (which are 10 digit consumer numbers) that they identified as being used in M2M or IoT devices. This is done by looking at the device type and comparing this to data available in the market identifying normal consumer devices, such as handsets, tablets & routers.

Solution

As a major supplier of SIM management services to a range of businesses, Flickswitch engaged with Vodacom to come up with a solution to address the locking of 10 digits Prepaid SIM cards in IoT/M2M devices and find a suitable alternative for our Vodacom customers.

The solution we are implementing is to migrate existing legacy prepaid SIMs to the new "Business Flexi" contract tariff type. This will not require any physical SIM swap-outs and will have negligible downtime on most devices (and typically no device changes are required). There is no cost impact, as we are offering this tariff at the same SIMcontrol rates as prepaid SIMs.

As part of this migration process, Flickswitch takes over all contract ownership liability in order to control the SIM lifecycle end to end and get access to advanced SIM management tooling.

This SIM tariff works just like a normal prepaid SIM, but has some key benefits:

- No SIM expiry due to non-use. As long as it is active on SIMcontrol it will be active on the network.
- SIM has a 14-digit number (MSISDN) which makes it compliant with M2M & IoT industry regulations. The SIMs allow for normal data, voice and SMS services.
- No long-term contracts. SIMs can be suspended at any time.
- We can offer much better technical support, including SIM session information.

Please see this Prepaid vs. Business Flexi Comparison Sheet for a quick summary.

Cost

All fees are included in the standard SIMcontrol pricing. Data bundle costs are the same as prepaid SIMs. Out-of-bundle data costs are different - please see comparison sheet for details. SIMs should maintain their airtime, SMS & data bundle balances after the migration process.

SIM Lifecycle

Should you wish to take ownership of your SIM contracts at any stage after the migration, we will support you to move the SIMs to the contract of your choice (14 digit MSISDNs are not supported as pure Prepaid, so you can not migrate back to Prepaid).

Actions Required

It is up to you if you want to keep your Prepaid SIMs and in some cases, depending on the device used, it would not be required to move your 10 digit Prepaid SIMs to the 14 digit SIM.

Keep in mind that if you choose not to move your Prepaid SIMs, Flickswitch will have no leverage with Vodacom in case SIMs get locked, recycled or locked. We will also not have access to more advanced technical support tooling.

- New orders We will be supplying this SIM type on new SIM orders, unless customers specifically request standard Prepaid SIMs.
- Existing SIMs Our Customer Success team will be reaching out to you before any
 migrations on your SIMs are implemented, to ensure that you understand the timing,
 process and to answer any questions you might have. You also need to consider any
 system changes required to accommodate the MSISDN change.

Technical Migration Process

Step 1: Prepaid to Enterprise migration

- 1. Identify SIM base to be migrated from Prepaid to Enterprise (typically rule based)
- 2. Submit batch of Prepaid numbers to Vodacom (Vodacom has 24 hours SLA to complete the migration to Enterprise)
- 3. Once migration is completed, monitor SIMs for a few days.

Step 2: 10 digit to 14 digit MSISDN migration for IoT/M2M devices

- 1. Request 10 to 14 digit SIM mapping from Vodacom for specific batch of SIMs
- 2. Upload the new 14 digit MSISDN as secondary MSISDN to the existing 10 digit MSISDN on SIMcontrol
- 3. Trigger migration process with Vodacom by submitting the list of MSISDNs to be migrated
- 4. SIMcontrol monitors the availability of the 14 digit MSISDN on the network (every 5 minutes)
- 5. When the 14 digit MSISDN is detected by SIMcontrol on the Vodacom network, SIMcontrol automatically swaps the old 10 digit MSISDN with the new 14 digit MSISDN

- For Managed APN SIMs, SIMcontrol swaps the 10 digit MSISDN with the 14 digit MSISDN on the RADIUS and charging server and restart the specific SIM service
- 7. Once migration is completed, monitor SIMs for a few days

In Summary

- Flickswitch and Vodacom have entered into a formal agreement to migrate Prepaid SIMs to this 14 digit SIM option.
- This solution is purpose built to support IoT/M2M applications.
- We have a clear understanding and sign-off from Vodacom on the process to migrate your IoT/M2M Prepaid SIMs to the 14 digit tariff.
- Flickswitch has deep integration into the Vodacom network to support the rollout and ongoing support of this solution. A formal support structure is in place between Vodacom and Flickswitch.
- We will work with your teams to firstly test the migration steps and then agree on the timelines / tasks required to drive this to completion.
- There are no additional fees associated with this migration. The only difference is OOB rates (should you use airtime for data consumption)

(For similar Business Flexi options on MTN, please contact our customer success team.)