

26 SMS Receiver

- 26.1 Introduction
- 26.2 SMS Receiver

26.1 Introduction

SMS receiver is a service responsible for command execution that were received via text message. The service is available on WCC Lite with modem. To use this service a working SIM card is also required. This chapter will describe command types, configuration for WCC Lite as well as an example of said configuration.

26.2 SMS Receiver

There are two types of command signals used in SMS Receiver:

1. System:
 - `reboot wcc/reboot modem` - when sending a message with text `reboot`, the device starts rebooting and after a successful reload sends back a message to the sender with text `REBOOT OK`.
 - `switch sim` - after sending a message with text `switch-sim`, the device should switch sim and send an SMS from the new sim card with the interface name and IP address.
 - `show ip` - the sender can request the IP address of the receiving device.
2. Signal:
 - `publish` - executes `publish` to a certain tag after sending a text message, which will be indicated in the configuration field `tag_job_todo`. For example, if `tag_job_todo` is `led=%f`, after sending a text message `led=1`, a publish will happen to a tag that's linked with this signal.

Configuration

Devices sheet:

Parameter	Type	Description	Required	Default Value (when not specified)	Range	
					Min	Max
name	string	User-friendly name for a device	Yes			
description	string	Description of a device	No			
device_alias	string	Alphanumeric string to identify a device	Yes			
enable	boolean	Enabling/disabling of a device	No	1	0	1
protocol	string	Protocol to be used	Yes		sms receiver	
host	string	Telephone number from which to receive SMS	Yes		[all, +37061111111] (case-sensitive, separated by command or space)	

When the host is set to all, only the `job_todo=signal` type is allowed.

Signals sheet:

Parameter	Type	Description	Required	Default Value (when not specified)	Range	
					Min	Max
signal_name	string	User-friendly signal name	Yes			
device_alias	string	Alphanumeric string to identify a device	Yes			
signal_alias	string	Unique alphanumeric name of the signal to be used	Yes			

enable	boolean	Enabling/disabling of an individual signal	No	1	0	1
job_todo	string	Choose command type	Yes			[SIGNAL, SYSTEM] (case-insensitive)
tag_job_todo	string	which command to execute (if signal, then configure the SMS)				[REBOOT WCC, REBOOT MODEM, SWITCH SIM, SHOW IP, <CUSTOM>%F] (case-insensitive)

When configuring the publish signal, the command that will be received needs to be specified. Instead of %f a number will be sent to the receiver as a text message. For example, if the configuration specifies that tag_job_todo is led=%f, then after sending a message to a device led=50, the signal will publish a number 50 to an indicated tag.

Configuration example

The following example will show how to create a configuration for WCC Lite which would allow rebooting a device or modem, changing the active SIM card, showing the IP address, and turning on the red status LED, using SMS receiver and internal data. For this 2 working SIM cards and WCC Lite with modem will be needed.

The devices sheet should look like this:

name	description	device_alias	enable	protocol	scan_rate_ms	host
SMS receiver	SMS receiver	sms1	1	sms receiver		
Internal data	Internal data	wcc1	1	internal data	5000	
SMS receiver admin	SMS receiver admin	sms-admin	1	sms receiver		

For the device *SMS receiver admin* host should be changed to a phone number from which commands will be received, because for this device signals will be system type. For the device SMS receiver host can be either all or the same phone number.

Signals sheet:

signal_name	device_alias	signal_alias	source_device_alias	source_signal_alias	enable	log	job_todo	tag_job_todo
LED red fault	wcc1	led-red	sms1	sms-led	1	1	led	red-fault
SMS led	sms1	sms-led			1	1	signal	led=%f
SMS reboot	sms-admin	Sms-reboot-wcc			1	1	system	reboot-wcc
SMS reboot modem	sms-admin	Sms-reboot-modem			1	1	system	reboot-modem
SMS switch sim	sms-admin	Sms-switch-sim			1	1	system	switch-sim
SMS switch sim	sms-admin	Sms-show-ip			1	1	system	Show-ip

Signal LED red fault is linked with signal sms-led as a source. This means that after sending an SMS message to a device with text led=1, red status led will turn on. The rest of the signals are system type so after sending an SMS message a certain event will happen. For example, after sending a message with the text reboot-wcc, the device should start rebooting and after the process is done it will send back a message "REBOOT WCC-LITE OK". The same thing would happen after rebooting the modem. With system signals it is also possible to switch between SIM cards or request IP address via text message.

Configuration --> Download

 Note: SMS Receiver can only accept messages that contain less than 160 characters.