How to send SMS via OpenScape FM / MAR (Mobile Alarm Reaction System)

Since HiPath FM V3.0 Rel. ?, the Java COMM-API is not required anymore to send SMS. The mechanism used by MAR to send SMS via a connected mobile phone or GSM modem relies solely on the facilities provided by the underlying operating system. The supported operating systems are Linux and Windows. The requirements for each OS to use the SMS sending feature are described in the following sections.

Linux

On Linux, mobile phones or GSM modems connected via USB can be used to send SMS. Requirement is that the device and the Linux kernel support the *USB Control Device Class Abstract Control Model - CDC ACM*. On the Linux-side, this support is provided by the kernel module `cdc_acm`. Typically, this module is automatically initialized if the device is connected to an USB port. If the device was recognized successfully, the module creates a device file like `/dev/ttyACM0`. This device file is used to access the mobile phone or GSM modem and must be configured in the MAR GUI.

If the mobile phone was recognized, the system logfile `/var/log/messages` should contain output like the following:

```
Dec 23 10:23:12 onyxia kernel: usb 3-4.3: new full speed USB device using
ehci_hcd and address 6
Dec 23 10:23:12 onyxia kernel: usb 3-4.3: configuration #1 chosen from 1
choice
Dec 23 10:23:12 onyxia kernel: usb 3-4.3: New USB device found,
idVendor=0421, idProduct=04f9
Dec 23 10:23:12 onyxia kernel: usb 3-4.3: New USB device strings: Mfr=1,
Product=2, SerialNumber=0
Dec 23 10:23:12 onyxia kernel: usb 3-4.3: Product: Nokia 6300
Dec 23 10:23:12 onyxia kernel: usb 3-4.3: Manufacturer: Nokia
Dec 23 10:23:13 onyxia kernel: drivers/usb/class/cdc-acm.c: Ignoring extra
header, type -3, length 4
Dec 23 10:23:13 onyxia kernel: cdc_acm 3-4.3:1.1: ttyACM0: USB ACM device
Dec 23 10:23:13 onyxia kernel: usbcore: registered new interface driver
cdc_acm
Dec 23 10:23:13 onyxia kernel: drivers/usb/class/cdc-acm.c: v0.25:USB
Abstract Control Model driver for USB modems and ISDN adapters
```

After plugging the phone into a USB port, the device file `/dev/ACM0` should exist and can be used in OSFM as target device for the SMS reaction.

The output of `lsmod` should contain a line like:

```
usbcore                 104672  5 cdc_acm,usbserial,uhci_hcd
```

The module `cdc_acm` is included in the standard kernel of SLES9, SLES10 and OpenSuse 11.0 and was tested successfully with a Nokia 6300.
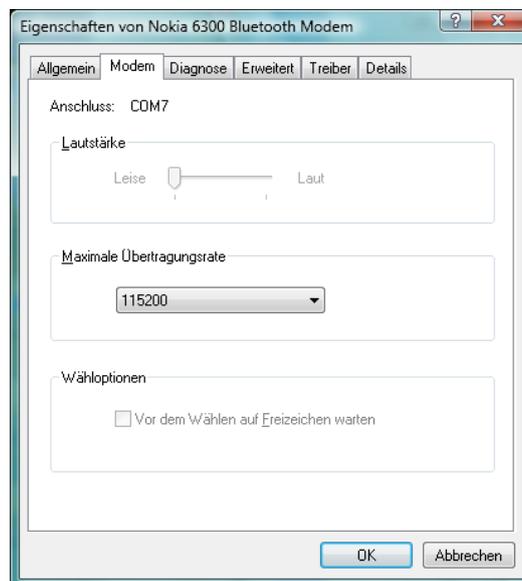
Windows

On Windows systems, a COM-port is used by MAR to communicate with the mobile phone or GSM device. How the COM-port is integrated into the operating system is vendor-specific. Many mobile phone vendors offer software packages to integrate their devices into windows.

After successful installation of the mobile phone software, the phone should appear as modem in the windows device manager:
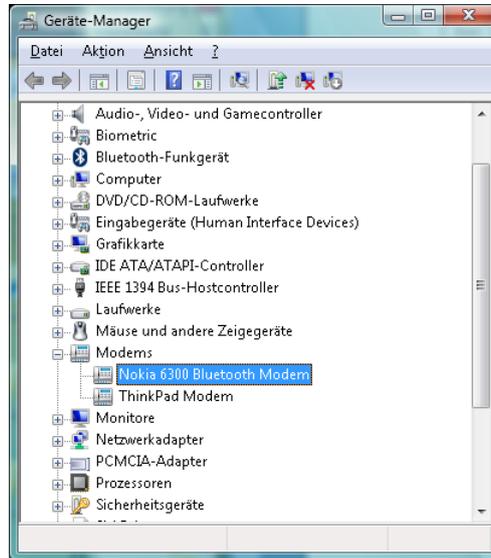
The assigned COM port can be displayed by selecting *properties* from the popup menu in the device manager. This COM port (COM7 in this example) has to be configured for the SMS reaction in the MAR.

(Tested on SLES9, SLES10, OpenSuse 11.0 and Windows Vista with a Nokia 6300)