

INSYS Smart Device Monitoring App

Switching an output
via SMS

Introduction

Copyright © 2024 INSYS icom GmbH

Any duplication of this publication is prohibited. All rights on this publication and the devices are with INSYS icom GmbH Regensburg.

Trademarks

The use of a trademark not shown below is not an indication that it is freely available for use.

MNP is a registered trademark of Microcom Inc.

IBM PC, AT, XT are registered trademarks of International Business Machine Corporation.

Windows™ is a registered trademark of Microsoft Corporation.

Linux is a registered trademark of Linus Torvalds.

INSYS® is a registered trademark of INSYS icom GmbH.

Debian is a registered trademark of Software in the Public Interest, Inc.

The principles of this publication may be transferred to similar combinations. INSYS icom GmbH does not assume liability or provide support in this case. Moreover, it cannot be excluded that other effects or results than described here are produced, if other, similar components are combined and used.

INSYS icom GmbH is not liable for possible damages.

Publisher

INSYS icom GmbH
Hermann-Köhl-Str. 22
D-93049 Regensburg
Germany

Phone +49 941 58692 0
Fax +49 941 58692 45
E-mail info@insys-icom.com
URL <http://www.insys-icom.com>

Print 24. Jan. 2024
Item No. -
Version 1.2
Language EN

1 Introduction

General

The present publication refers to a combination of selected hardware and software components of INSYS icom GmbH as well as other manufacturers. All components have been combined with the target to realize certain results and effects for certain applications in the field of professional data transfer.

The exact descriptions of all used components, to which this publication refers, are described in the tables *Hardware*, *Accessories* and *Software* at the end of this publication.

The symbols and formatings used in this publication are explained in the correspondent section of the device manual.

Some configurations or preparations, which are precondition in this publication, are described in other publications. Therefore, always refer to the related device manuals. INSYS Smart Devices with web interface provide you with helpful information about the configuration possibilities, if you click on "display help text" in the header.

Target of this Publication

An exemplary configuration for a typical fault monitor application is presented here. If your application has similar requirements, you may modify the configuration on the basis of this Configuration Guide.

An output of an IMON is to be switched by an SMS from an operator. This allows to enable or disable a heating unit in a vehicle remotely by the driver for example. The heating unit will be enabled by closing an output and disabled by opening the output again for this. The driver can close or open the output by sending a specific SMS to the IMON.

The following describes how to configure the Monitoring App of an INSYS IMON fault monitor such that it fulfils above described task. It is prerequisite here that the fault monitor is ready for operation, i.e. a SIM card is inserted and it is configured accordingly.



Figure 1: Switching an output via SMS – overview

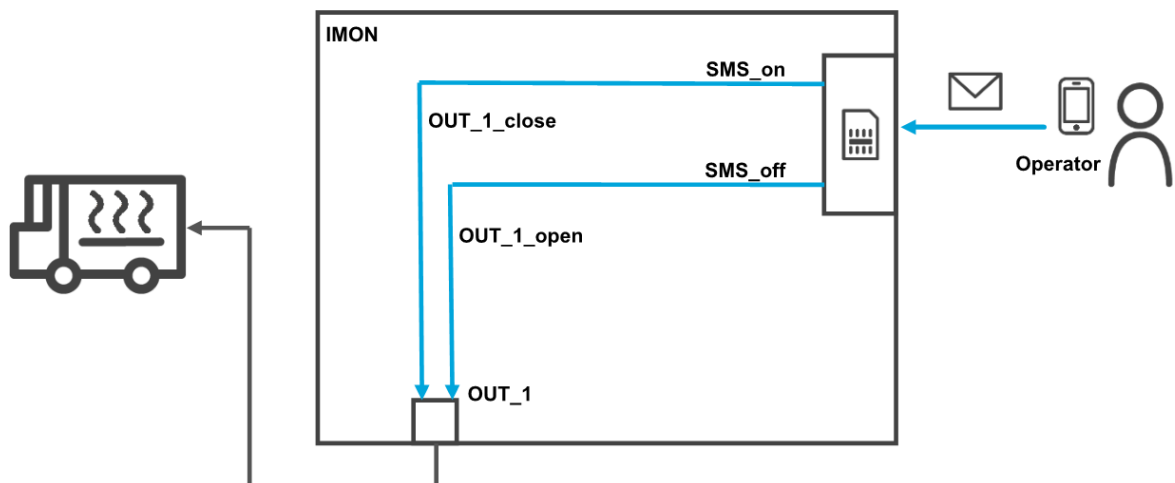


Figure 2: Switching an output via SMS – simplified diagram

2 Summary

Fault monitor configuration for switching an output via SMS

How to configure an INSYS fault monitor for switching an output via SMS. You will find detailed step by step instructions in the following section.

- **Add device "IMON" with the type I/O**
- **Add element "OUT_1" as output 1 of the IMON**
- **Add recipient "Operator" with mobile phone number**
- **Add monitoring "SMS_on" (receipt of an activation SMS)**
- **Add monitoring "SMS_off" (receipt of a deactivation SMS)**
- **Add action "OUT_1_close" as closing of output 1**
- **Add action "OUT_1_open" as opening of output 1**
- **Add assignment "SMS_on" to "OUT_1_close"**
- **Add assignment "SMS_off" to "OUT_1_open"**

3 Configuration

Provisions

It is recommended to commission the router as suggested in the Quick Installation Guide. Different settings of the router may result in necessary adjustments of the settings described in the following. Please prepare the following items before starting the configuration of the application:

- **Connection to the router**

- You have access to the Monitoring App of the router via your web browser.

- **Configurations in the router**

- The router is logged in to the cellular network (configuration via startup wizard or in "GSM / GPRS" or "UMTS" menu).

- The router can receive SMS (the Service Center Number is specified and SMS reception is activated in the "Messages" menu on the "Configuration" page).

Monitoring App Configuration

A functional Monitoring App requires to add the individual devices, elements, logic operations, recipients, monitorings and actions as well as the assignment of actions to monitorings.

Perform the following steps for this:

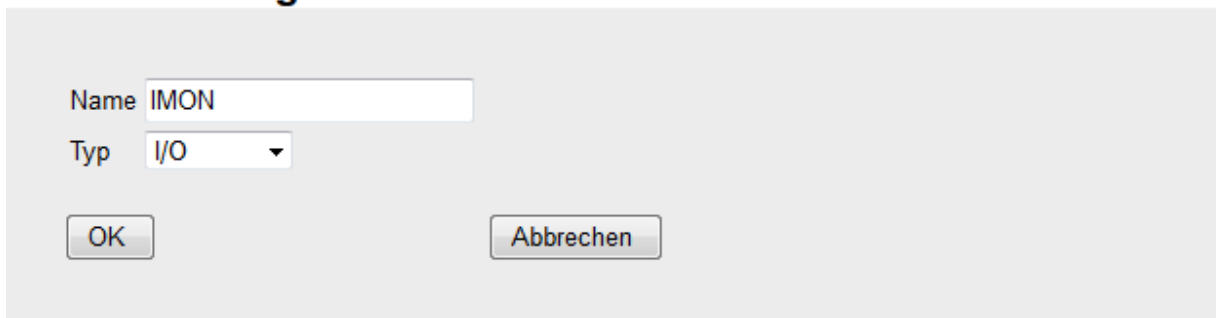
- Adding devices
- Adding elements
- Adding recipients
- Adding monitorings
- Adding actions
- Adding assignments

■ Adding devices

How to add the necessary devices for the Monitoring App. It is necessary to add the inputs and outputs of the fault monitor as a device for this application.

1. Select in the menu the page → Setup application → Devices
2. Select the Add device button
 - ✓ The "Add device" page appears.
3. Enter "IMON" as name and select the type "I/O"

Gerät hinzufügen



The screenshot shows a dialog box titled "Gerät hinzufügen". It has two input fields: "Name" with the value "IMON" and "Typ" with a dropdown menu showing "I/O". Below the fields are two buttons: "OK" and "Abbrechen".

4. Click on OK
 - ✓ You have added the devices that are necessary for the application with this.

Configuration

■ Adding elements

How to add the necessary elements for the Monitoring App. It is necessary to add output 1 for this application.

1. Select in the menu the page → Setup application → Elements
2. Select the **Add Element** button
 - ✓ The "Add element" page appears.
3. Enter "OUT_1" as name and select "IO", "IMON" and "Output" under Device
4. Enter "1" as number for output 1 of the fault monitor

Element hinzufügen



Name

Gerät

Nummer

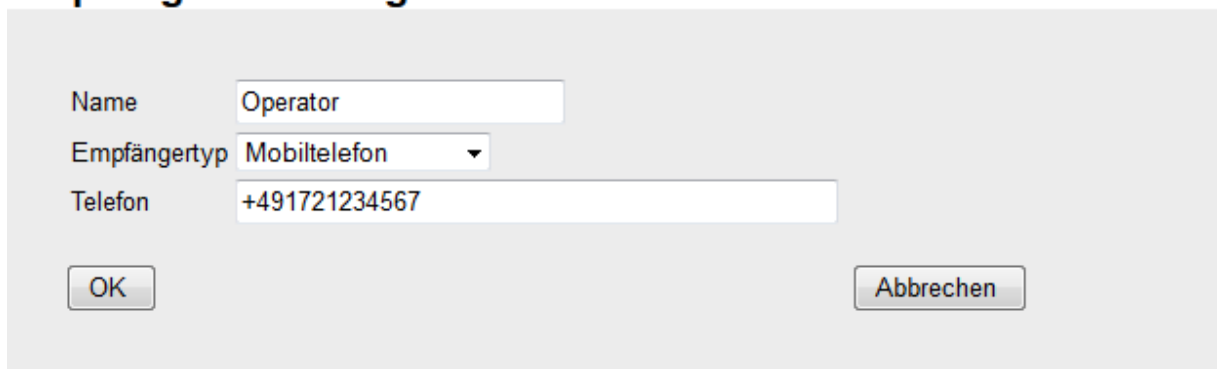
5. Click on **OK**
 - ✓ You have added the elements that are necessary for the application with this.

■ Adding recipients

How to add the necessary recipients for the Monitoring App. It is necessary to add the mobile phone number of an operator to transmit the switching SMS for this application.

1. Select in the menu the page → Setup application → Recipients
2. Select the **Add recipient** button
 - ✓ The "Add recipient" page appears.
3. Enter "Operator" as name
4. Select the recipient type "Mobile phone"
5. Enter the mobile phone number

Empfänger hinzufügen



Name

Empfängertyp

Telefon

6. Click on **OK**
 - ✓ You have added the recipients that are necessary for the application with this.

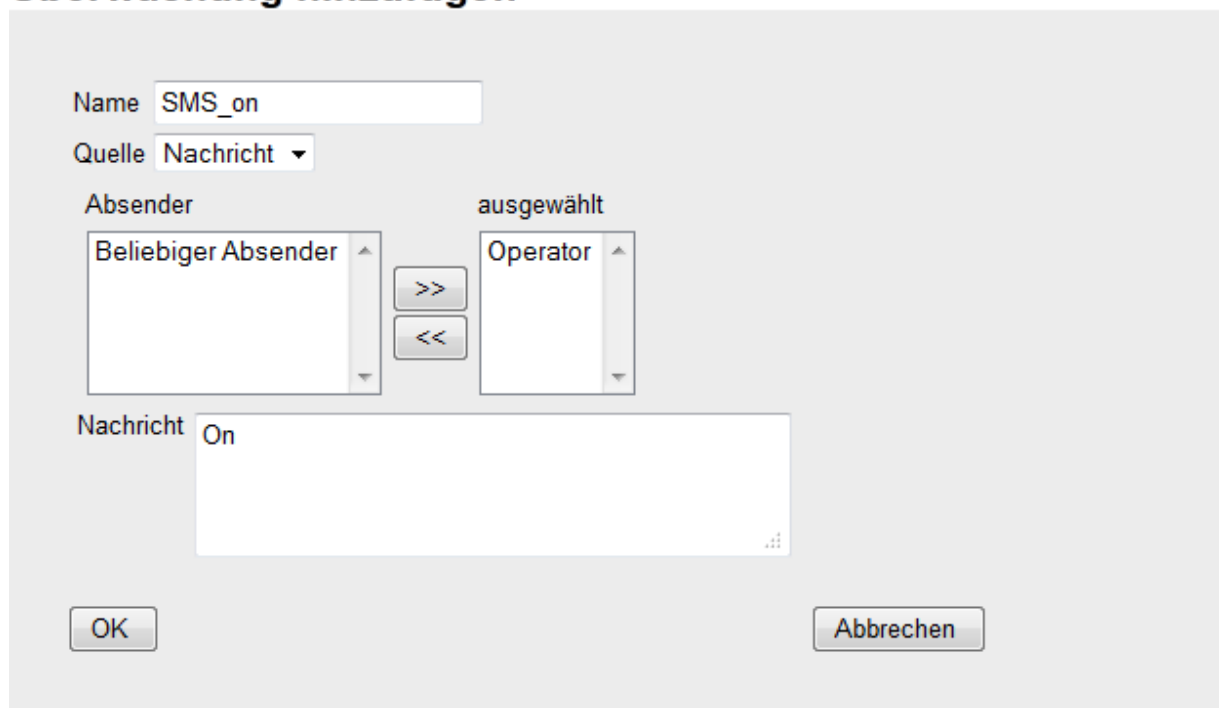
Configuration

■ Adding monitoring operations

How to add the monitoring operations for the Monitoring App. It is necessary to monitor the receipt of the switching SMS for this application.

1. Select in the menu the page → Monitoring
2. Select the **Add monitoring** button
 - ✓ The "Add monitoring" page appears.
3. Enter "SMS_on" as name and select "Message" under Source
4. Highlight "Operator" under Sender and select the **>>** button
5. Enter the text that must be contained by the acknowledgement SMS under Message

Überwachung hinzufügen







The screenshot shows a configuration window titled "Überwachung hinzufügen". It contains the following fields and controls:

- Name:** A text input field containing "SMS_on".
- Quelle:** A dropdown menu set to "Nachricht".
- Absender:** A list box containing "Beliebiger Absender".
- ausgewählt:** A list box containing "Operator".
- Navigation:** Two buttons, ">>" and "<<", are positioned between the two list boxes.
- Nachricht:** A large text area containing the text "On".
- Buttons:** "OK" and "Abbrechen" buttons are located at the bottom of the dialog.

6. Click on **OK**
7. Select the **Add monitoring** button again and add the monitoring "SMS_off" (Operator sends message with the text "Off")
 - ✓ The monitorings appear in the respective list one after another.

Überwachungen

Überwachung hinzufügen

aktiv			Name	Überwachung
<input checked="" type="checkbox"/>			SMS_on	Nachricht von Operator On
<input checked="" type="checkbox"/>			SMS_off	Nachricht von Operator Off

- ✓ You have added the monitoring operations that are necessary for the application with this.

Configuration

■ Adding actions

How to add the actions for the Monitoring App. It is necessary to close and open output 1 for this application.

1. Select in the menu the page → Actions → Definitions
2. Select the **Add action** button
 - ✓ The "Add action" page appears.
3. Enter "OUT_1_close" as name and select "Element", "OUT_1" and "close" under Source



Aktion hinzufügen



4. Click on **OK**
5. Select the **Add action** button and add the action "OUT_1_open" (opening output 1)
 - ✓ The actions appear in the respective list one after another.

Definition Aktionen

Aktion hinzufügen

aktiv		Name	Aktion
<input checked="" type="checkbox"/>		OUT_1_close	OUT_1 schließen
<input checked="" type="checkbox"/>		OUT_1_open	OUT_1 öffnen

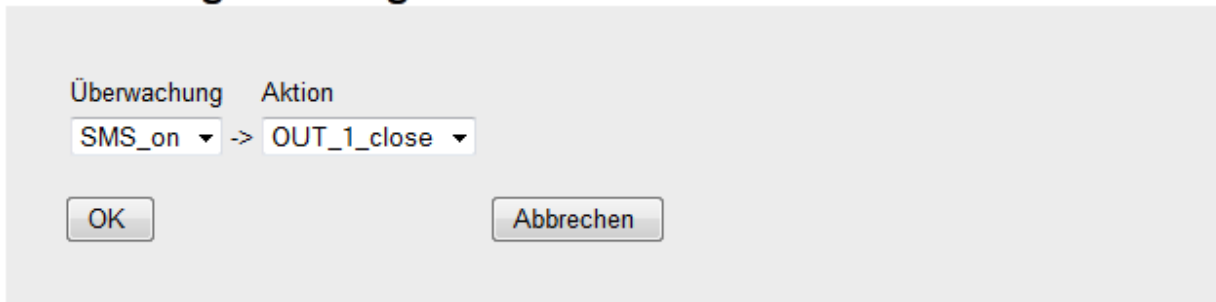
- ✓ You have added the actions that are necessary for the application with this.

■ Adding assignments

How to add the assignments for the Monitoring App. It is necessary to assign the respective actions to the monitorings for this application.

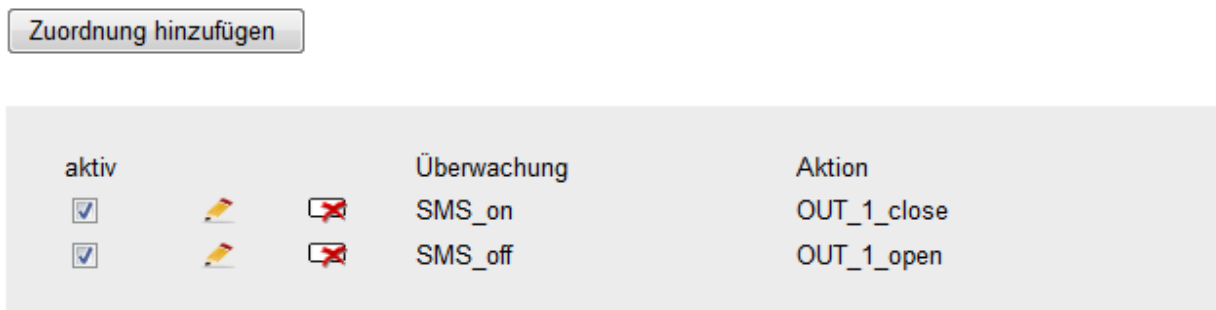
1. Select in the menu the page → Actions → Assignments
2. Select the **Add assignment** button
 - ✓ The "Add assignment" page appears.
3. Select "SMS_on" as Monitoring and "OUT_1_close" as Action

Zuordnung hinzufügen



4. Click on **OK**
5. Select the **Add assignment** button again and add the assignment "SMS_off" to "OUT_1_open"
 - ✓ The assignments appear in the respective list one after another.

Zuordnungen



- ✓ You have added the assignments that are necessary for the application with this.

4 Test

Testing the application

The Monitoring App is active directly after configuration. You can check the correct function directly by sending the respective SMS to the fault monitor.

The current status of the output is indicated directly on the status page of the web interface of the Monitoring App (consider update interval). If you send the SMS with the text for closing the output (here "On") to the fault monitor from the configured mobile phone, the output should close. Output OUT_1 is closed in the following figure. If you send the SMS with the text for opening the output (here "Off") to the fault monitor, the output should open again. If the acknowledgement of received SMS is enabled in the fault monitor (see manual section Messages), an acknowledgement SMS will be returned to the mobile phone.

Status

Aktualisierung alle Sekunden

IMON		
IO	OUT_1	1

5 Used Components

Please observe: The power supply units required to operate devices are not listed here in detail. Take care for a provision at the site, if they are not part of the scope of delivery.

Hardware

Description	Manufacturer	Type	Version
Fault monitors	INSYS	IMON-G100 IMON-G200	Firmware 2.12.5 Monitoring 2.2.0

Table 1: Used hardware

Software

Description	Manufacturer	Type	Version
Operating system	Microsoft	Windows 7	Ultimate SP1
Browser	Mozilla	Firefox	39

Table 2: Used software

Germany

INSYS icom GmbH
Hermann-Köhl-Str. 22
93049 Regensburg
Germany

Phone +49 941 58692 0
Fax +49 941 58692 45

E-mail info@insys-icom.com
URL www.insys-icom.com

Czech Republic

INSYS icom CZ, s.r.o.
Slovanská alej 1993 / 28a
326 00 Plzeň-Východní Předměstí
Czech Republic

Phone +420 377 429 952
Fax +420 377 429 952
Mobile +420 777 651 188

E-mail info@insys-icom.cz
URL www.insys-icom.cz