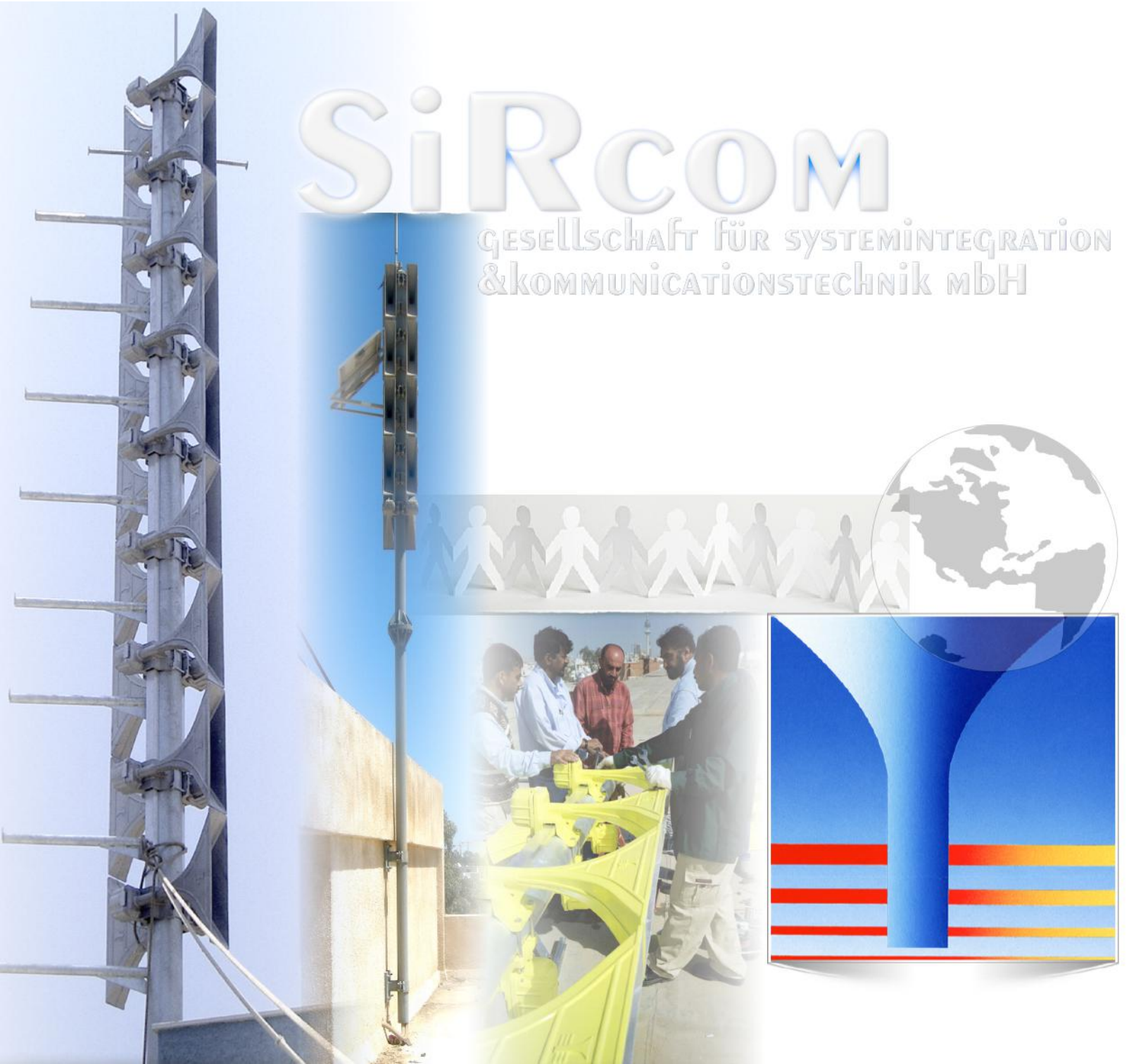
warning **PUBLIC**

SiCAS

SiRcoM

SiRcom

gesellschaft für systemintegration
&kommunikationstechnik mbH



The Company

Experience the difference

SiRcom is a system house for Public - Warning - and Information-Systems founded in 1993 by a team of experts with many years of knowledge in acoustics and warning technologies.

Since the beginning our founder Norbert Hunger has taken over business as CEO and established an International and successfully operating company.

SiRcom´s activities worldwide are co-ordinated from the Headquarter in Forstinning near Munich.

The SiRcom team has many years of experience not only in the development of new products but also in the handling of complete turn-key warning and communication systems around the world.

Culture & Philosophy

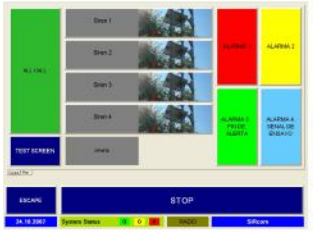
Over the years our leaders have combined **SiRcom´s** culture and knowledge into what it is today - a company which brings new ideas to life.

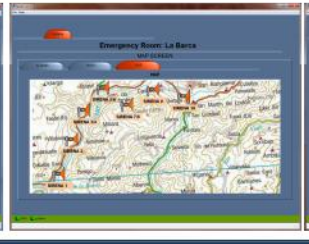
The combination of long-time experience in advanced acoustical solutions, communication technologies, warning system designs and tailor-made complete systems is our unique competitive strength as well as your chance to a successful business.

„It is **SiRcom´s** declared aim to offer a perfect economical and competitive solution for any requirement and complexity"

Customized GUI's ***overtheYEARS***

SiCAS





SOFTWARE-Performance

The Control and Management Software **SiCAS** is designed to allow one or several user(s) on remote control by the highest possible security for any siren-function within any communication structure.

It is our absolute priority to secure high flexibility without risking failures and any malfunction.

At any time the alarm-activation has highest priority. Showing the operator the system-performance as well any technical status of each siren within a System.

The **SiCAS-SW** can be used as a single application as well as multi-centre-architecture with a priorty- hierarchy.

Monitoring the siren-functionality is a permanent task. Reporting to the control centre can be done automatically or on request.

SiRcom offers to customize the Control-Application as well, the Screen-Designs as per customer needs.

The MAIN-Features of **SiCAS** are:

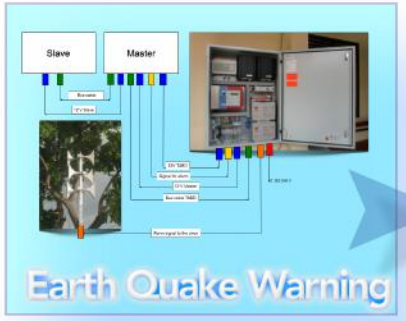
- Touch Screen / Panel-PC - Operation
- Secure Access Control by:

  USB-Stick or Chip-Card with controlled Access Data and Pass-Word
- Log-File documentation of any activity
- MAP-GUI sirens on geographical maps with active functional indication.
- Customized screens of any functional button
- Customized language (control by USB-Stick)
- Customized functional features
- Remote VPN-System-Support
- Operating-Systems available, Windows / Apple OSX, iOS / Linux / Unix
- Apple iPAD- & iPhone,- Android - Control

SiRcom offers Interface to any existing communication means via IP

customized solution

TAILORED Communication & Control System



SiCAS

Audio Interface
Live PA.

Industrial PC
with Windows Vista32
optional,
-Linux
-MAC-OS

MTU-Radio-
Terminal with
Motorola GM340

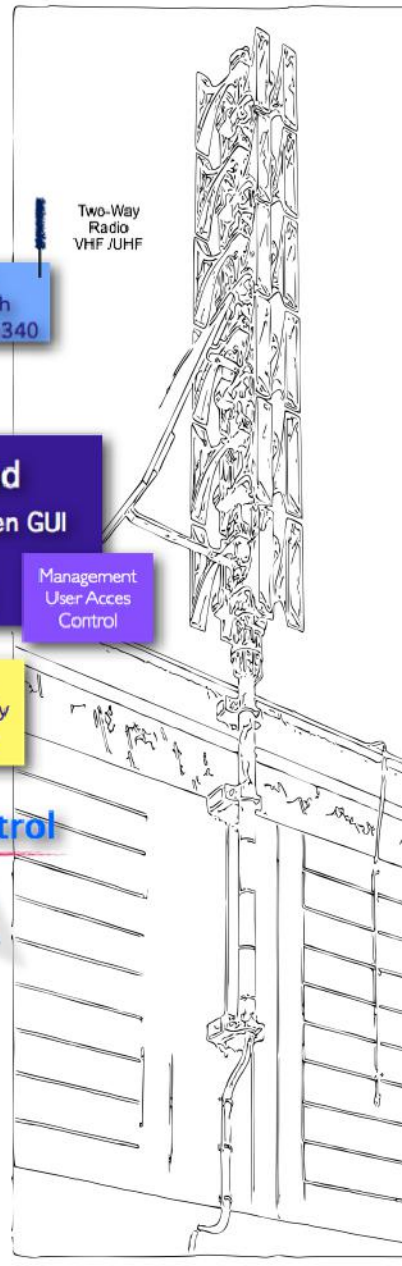
Two-Way
Radio
VHF /UHF

Customized
SiCAS / Siren GUI
and System
Management

Management
User Acces
Control

UPS / Power Supply
with Batterie Backup

Command&Control



SiCAS
KEY-Features of any SiRcom Systems

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Control /Management
All the sirens can be controlled from one or many control stations, as individual, as group, and all together.

Selected Sirens
Any number of sirens (units) can be activated at any given time from the control station (group-activation)

Auto Reporting
After activation a feed back message will be received in the control station that the alarm has been activated and is running.

Status of Equipment
Through the control station the status of all the functions/ performance of the equipment like mains, batteries, amplifiers, drivers etc in less than 60 seconds will be provided.

No False Alarm
Through CONTROL DATA SECURITY(Dual-Command-Time-Control) SiRcom can guarantee that false alarm can never be triggered.

Power Supply
through SOLAR PANELS. SiRcom-Sirens made with high efficient low consumption-design allows a supply and charging the batteries through off the shelf SOLAR PANELS.

Command & Communication
Wireless communication through VHF,UHF, GSM/3G/4G, WiFi and Satellite.
Line based communication by telephone link, IP, RS485 or any other local infrastructure can be used.

Safety against Lightning & Thunder Storms
As SiRcom siren head is made out of aluminum, our whole equipment is safely-covered (Faraday effect, siren-head has fully ground potential). Once the siren head is grounded properly any lightning-current runs direct into the earth/ ground.

Warning Signals & Messages
Any number can be created. Any number of voice messages can be stored.

Minimum Maintenance Visits
Maintenance visits are minimized by the remote status monitoring feature.

Bi-Directional Communication
A bi-directional communication between control station and sirens gives the status of the communication and state of the equipment in real-time.

Siren Silent Testing
The sirens are tested by using the normal output power with a high frequency where it generates no Sound Pressure Level but gives a real measuring value controlled from and to the control station.

Activation Screen

SiCAS Operations

portfolio products & solutions

Standard Functionality

Warning System Control Application Software **SiCAS**

The warning system control software can be considered to be in three parts:

1. The communication application in which control strings for activation and remote testing are routed to selected sirens for groups of sirens and additional warning device controllers. Status reports and autonomous alarms are sent from these controllers back to the control station. This communication protocol can be used with both landline and radio. This proposal if for landline only owing to the widely dispersed locations of the three pilot siren sites.

2. The Man Machine Interface (MMI). This part concerns the presentation and display on the PC that is used by the Operator and Service Engineers. A library of standard PC screens is available, including mouse and touch screen interfaces. Graphic displays with site maps showing the location and status of the warning devices. Combined screens that show the warning system control, siren status, MAP displays, weather and gas concentration data.

The activation screen always shows a window with system status and siren availability. The Service screen shows the details of the Quiet Test results from each siren.

It is possible to restrict access to the various functions of the control system by the use of Passwords or by Smart Card Readers connected to the PC

It is proposed that the End User control screens (MMI) and access rights will be developed in cooperation with the Safety Department during the System Study and Design phase

(A SiCAS Technical Description on a CD Rom is available on request)

Operation Alarm Activation

SiCAS allows activation of predefined alarm-sounds, stored messages or live announcements.

After choosing one of above Alarm-Types **SiCAS** allows to activate by ***All ad Once*** or predefined ***Groups*** or any ***Single*** Siren by choosing the relevant dress button.

A special feature is our **adHoc-grouping**, this means any single buttons can be chosen in any combination and will generate an alarm ad this group of sirens in the moment of releasing this unique activation.

For security **SiCAS** will ask for activation confirmation after pushing the START-Button. This allows to verify the chosen alarm-type swell the sirens involved and gives the operator the change for modification.

Confirming the activation means a data-package is send to all or relevant sirens and within milli-seconds the sirens will sound.

Monitoring Screen

SiCAS Operations

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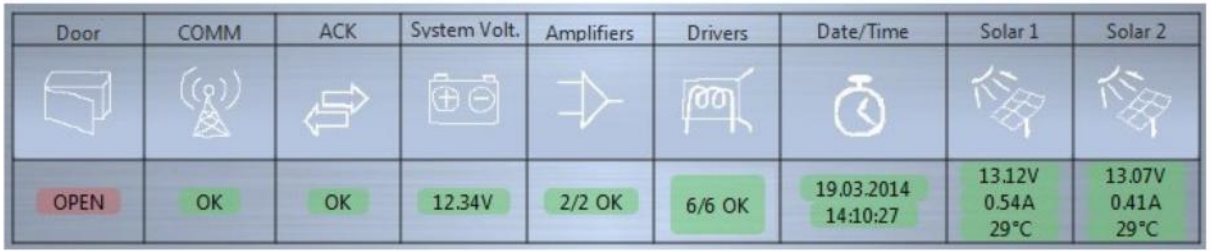
operating STATUS

- select any siren- or total-button
- click on the STATUS button
  immediately a STATUS-request is send to the sirens involved
- wait until the progress bar reaches the end for all three commands
- for each selected siren the status-data appears updates the STATUS-Window



operating TEST

- select any siren- or total-button
- click on the TEST button
  immediately a TEST-request is send to the sirens involved
- wait until the progress bar reaches the end for all three commands
- for each selected siren the status-data appears updates the STATUS-Window

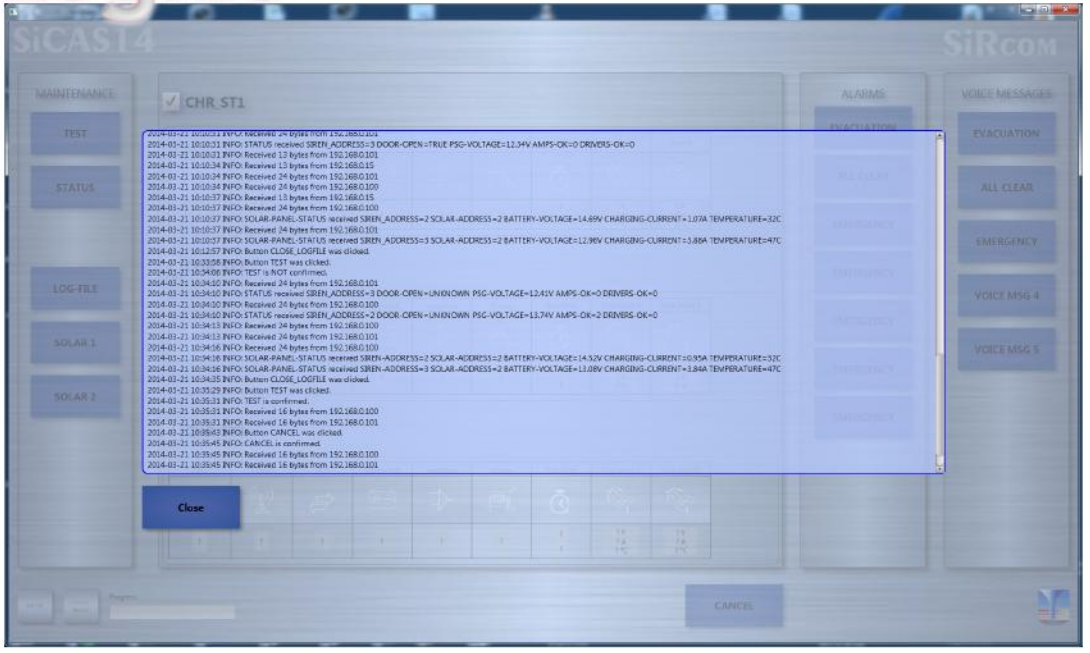
operation Monitoring

SiCAS has the features to request an technical **status** of any siren in a system or to trigger a functional **test** in order to get the actual status of the complete functionality of any siren.

SiCAS allows to start above function for all sirens ad once or for any individual siren if required.

A STATUS-request will feedback the last test-result from the siren memory.
A TEST-request will start the test-procedure ad each siren involved ad the same moment and feedback the actual live status.

Logfile

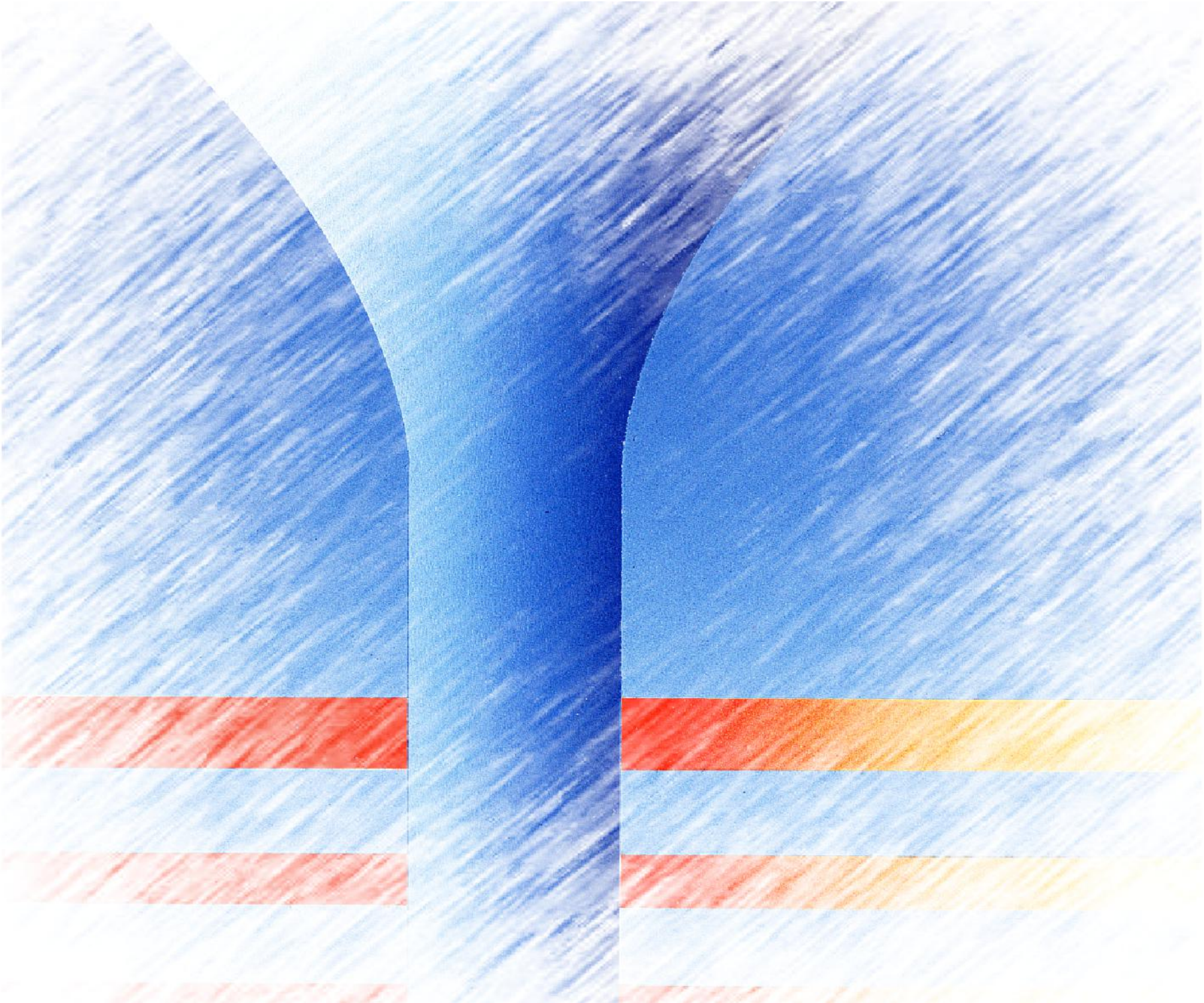

SiCAS14
SiRcom
MAINTENANCE
TEST
STATUS
LOG-FILE
SOLAR 1
SOLAR 2
CHR_ST1
ALARMS
EVACUATION
ALL CLEAR
EMERGENCY
VOICE MESSAGES
EVACUATION
ALL CLEAR
EMERGENCY
VOICE MSG 4
VOICE MSG 5
2014-03-21 10:10:31 INFO: STATUS received SIREN_ADDRESS=3 DOOR-OPEN=TRUE PSG-VOLTAGE=12.34V AMPS-OK=0 DRIVERS-OK=0
2014-03-21 10:10:31 INFO: Received 13 bytes from 192.168.0.101
2014-03-21 10:10:34 INFO: Received 13 bytes from 192.168.0.15
2014-03-21 10:10:34 INFO: Received 24 bytes from 192.168.0.101
2014-03-21 10:10:34 INFO: Received 24 bytes from 192.168.0.100
2014-03-21 10:10:37 INFO: Received 13 bytes from 192.168.0.15
2014-03-21 10:10:37 INFO: Received 24 bytes from 192.168.0.100
2014-03-21 10:10:37 INFO: SOLAR-PANEL-STATUS received SIREN_ADDRESS=2 SOLAR-ADDRESS=2 BATTERY-VOLTAGE=14.69V CHARGING-CURRENT=1.07A TEMPERATURE=32C
2014-03-21 10:10:37 INFO: Received 24 bytes from 192.168.0.101
2014-03-21 10:10:37 INFO: SOLAR-PANEL-STATUS received SIREN_ADDRESS=3 SOLAR-ADDRESS=2 BATTERY-VOLTAGE=12.96V CHARGING-CURRENT=3.86A TEMPERATURE=47C
2014-03-21 10:12:57 INFO: Button CLOSE_LOGFILE was clicked.
2014-03-21 10:33:58 INFO: Button TEST was clicked.
2014-03-21 10:34:06 INFO: TEST is NOT confirmed.
2014-03-21 10:34:10 INFO: Received 24 bytes from 192.168.0.101
2014-03-21 10:34:10 INFO: STATUS received SIREN_ADDRESS=3 DOOR-OPEN=UNKNOWN PSG-VOLTAGE=12.41V AMPS-OK=0 DRIVERS-OK=0
2014-03-21 10:34:10 INFO: Received 24 bytes from 192.168.0.100
2014-03-21 10:34:10 INFO: STATUS received SIREN_ADDRESS=2 DOOR-OPEN=UNKNOWN PSG-VOLTAGE=13.74V AMPS-OK=2 DRIVERS-OK=0
2014-03-21 10:34:13 INFO: Received 24 bytes from 192.168.0.100
2014-03-21 10:34:13 INFO: Received 24 bytes from 192.168.0.101
2014-03-21 10:34:16 INFO: Received 24 bytes from 192.168.0.100
2014-03-21 10:34:16 INFO: SOLAR-PANEL-STATUS received SIREN-ADDRESS=2 SOLAR-ADDRESS=2 BATTERY-VOLTAGE=14.52V CHARGING-CURRENT=0.95A TEMPERATURE=32C
2014-03-21 10:34:16 INFO: SOLAR-PANEL-STATUS received SIREN-ADDRESS=3 SOLAR-ADDRESS=2 BATTERY-VOLTAGE=13.08V CHARGING-CURRENT=3.84A TEMPERATURE=47C
2014-03-21 10:34:35 INFO: Button CLOSE_LOGFILE was clicked.
2014-03-21 10:35:29 INFO: Button TEST was clicked.
2014-03-21 10:35:31 INFO: TEST is confirmed.
2014-03-21 10:35:31 INFO: Received 16 bytes from 192.168.0.100
2014-03-21 10:35:31 INFO: Received 16 bytes from 192.168.0.101
2014-03-21 10:35:43 INFO: Button CANCEL was clicked.
2014-03-21 10:35:45 INFO: CANCEL is confirmed.
2014-03-21 10:35:45 INFO: Received 16 bytes from 192.168.0.100
2014-03-21 10:35:45 INFO: Received 16 bytes from 192.168.0.101
Close
CANCEL

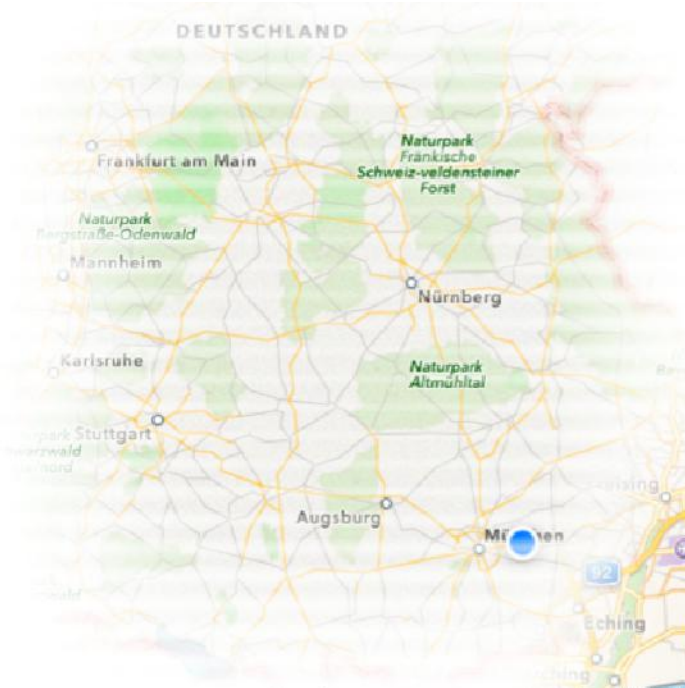
Log File

SiCAS stores ALL operational tasks in a Log File, this allows to recall any activities done in the Past.

If the SiCAS is operated with the **SiRcom** Aces-Management-Feature.
(either using a Chip-Card or USB-Stick)
The operator will be personalized, such allows to record SiCAS-Operation with the operators name in the Log File.

For security reason **SiRcom** offers to store the log-file automatically ad pre set schedules on a external network server.
This is to avoid local manipulations.





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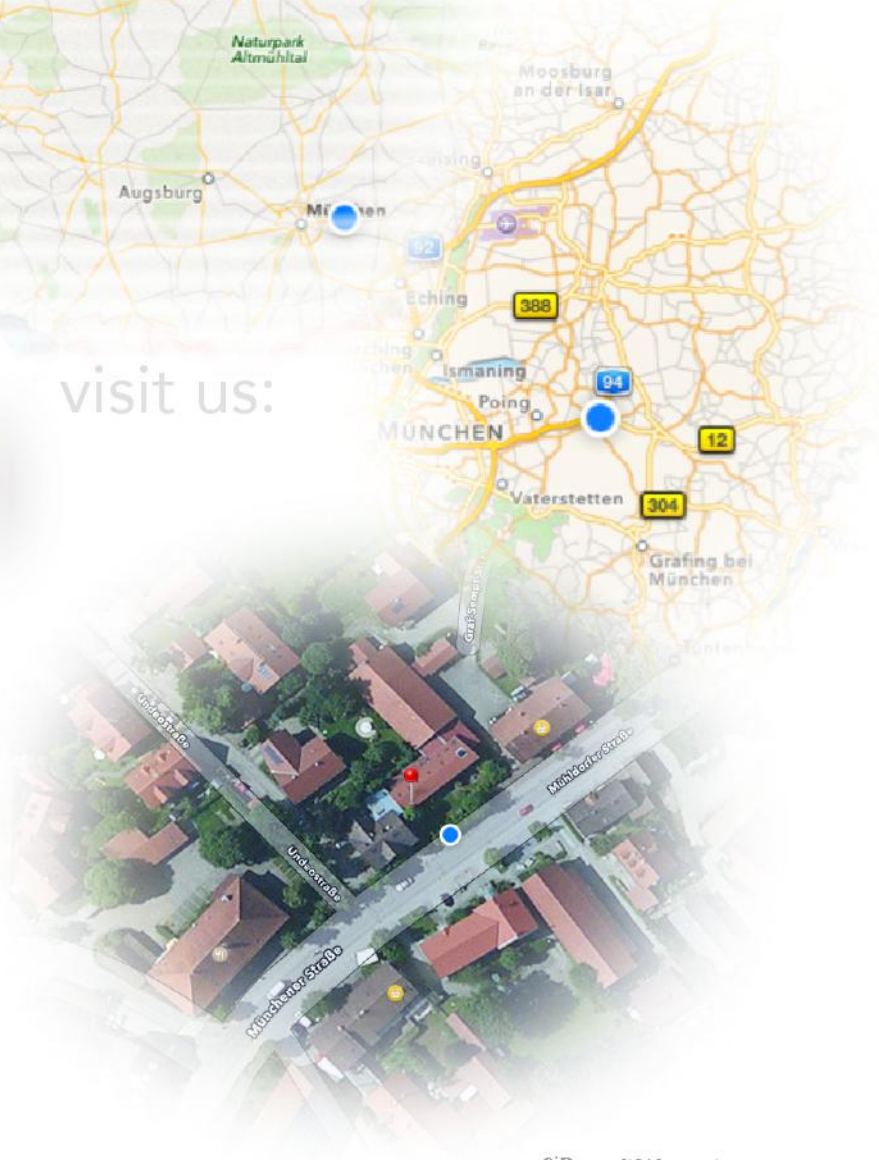
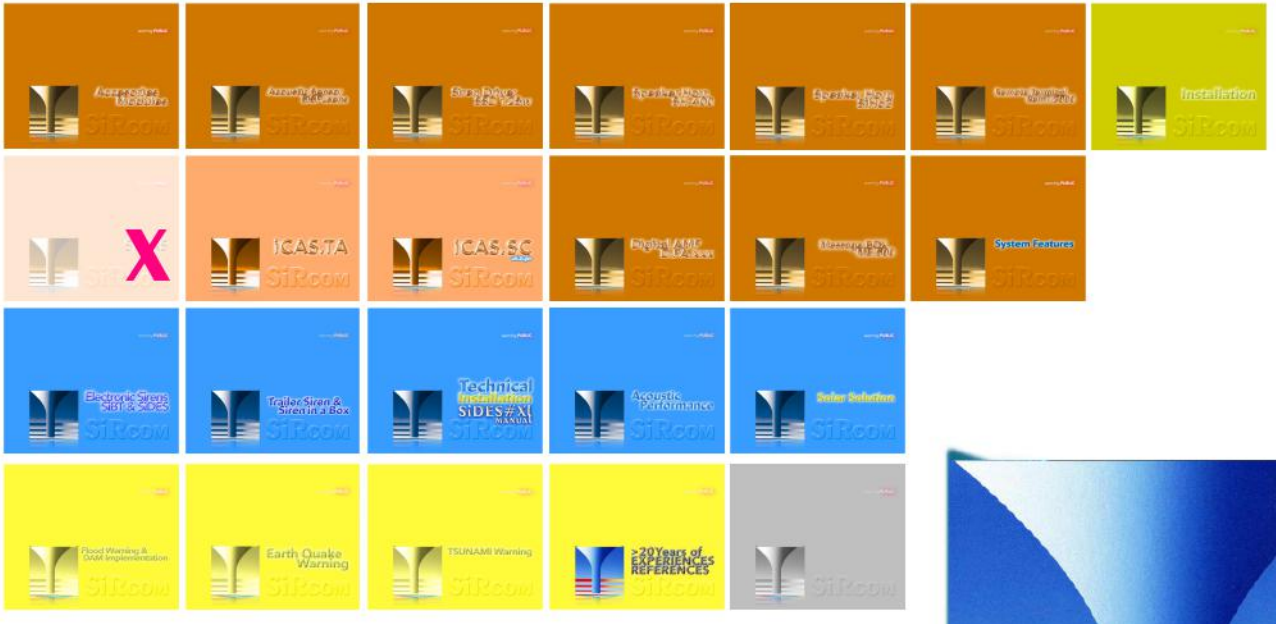


PUBLIC warning



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