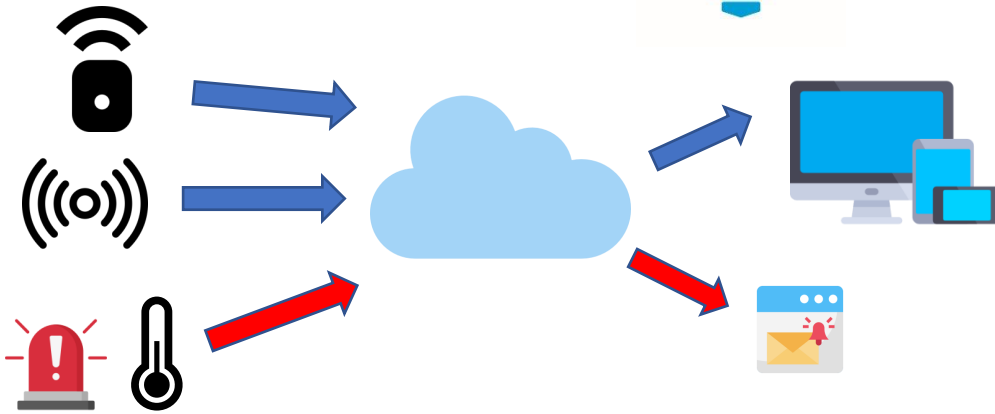
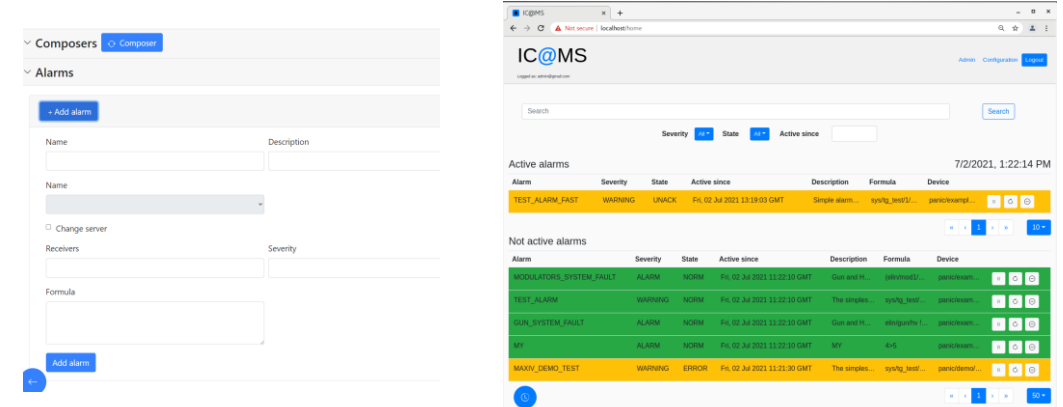


Why do you need this?

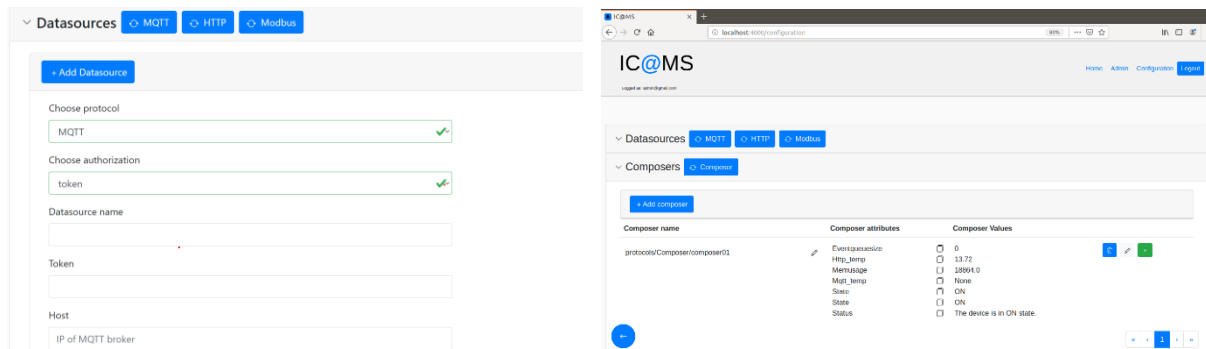


How to manage alarms?



Alarm	Severity	State	Active since	Description	Formula	Device
TEST_ALARM_FAST	WARNING	UNACK	Fri, 02 Jul 2021 13:13:03 GMT	Simple alarm...	sys/tg_test/...	panic/temp1
MODULATORS_SYSTEM_FAULT	ALARM	NORM	Fri, 02 Jul 2021 11:22:10 GMT	Gas and H...	...	panic/...
TEST_ALARM	WARNING	NORM	Fri, 02 Jul 2021 11:22:10 GMT	The system...	...	panic/...
RAIN_SYSTEM_FAULT	ALARM	NORM	Fri, 02 Jul 2021 11:22:10 GMT	Gas and H...	...	panic/...
SP	ALARM	NORM	Fri, 02 Jul 2021 11:22:10 GMT	SP	...	panic/...
MAINTY_DEMO_TEST	WARNING	ERROR	Fri, 02 Jul 2021 11:21:30 GMT	The simple...	...	panic/...

How to add device?



Choose protocol: MQTT

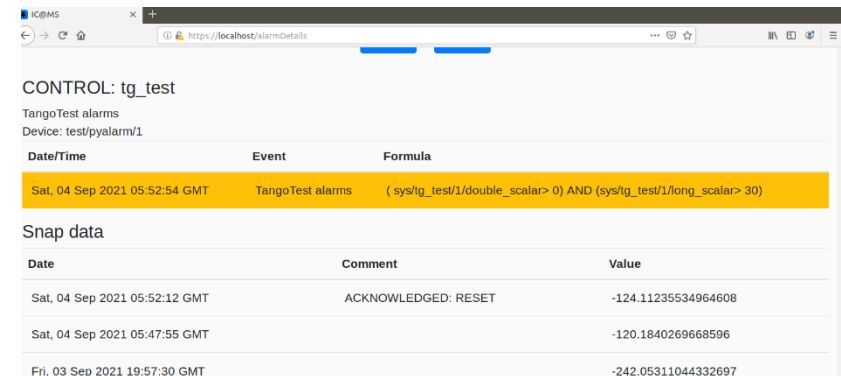
Choose authorization: token

Datasource name: []

Token: []

Host: IP of MQTT broker

How to check history?



CONTROL: tg_test

TangoTest alarms

Device: test/pyalarm/1

Date/Time	Event	Formula
Sat, 04 Sep 2021 05:52:54 GMT	TangoTest alarms	(sys/tg_test/1/double_scalar > 0) AND (sys/tg_test/1/long_scalar > 30)

Snap data

Date	Comment	Value
Sat, 04 Sep 2021 05:52:12 GMT	ACKNOWLEDGED: RESET	-124.11235534964608
Sat, 04 Sep 2021 05:47:55 GMT		-120.1840269668596
Fri, 03 Sep 2021 19:57:30 GMT		-242.0531104432697

Integrated, Cloud ready @Iarm Management System



CLOUD BASED alarm Management System

Aim: increase company efficiency

- Non-typical situations monitored
- Supported most popular communication protocols
- Easy to define new alarms
- Possible to view history
- **Based on PANIC**

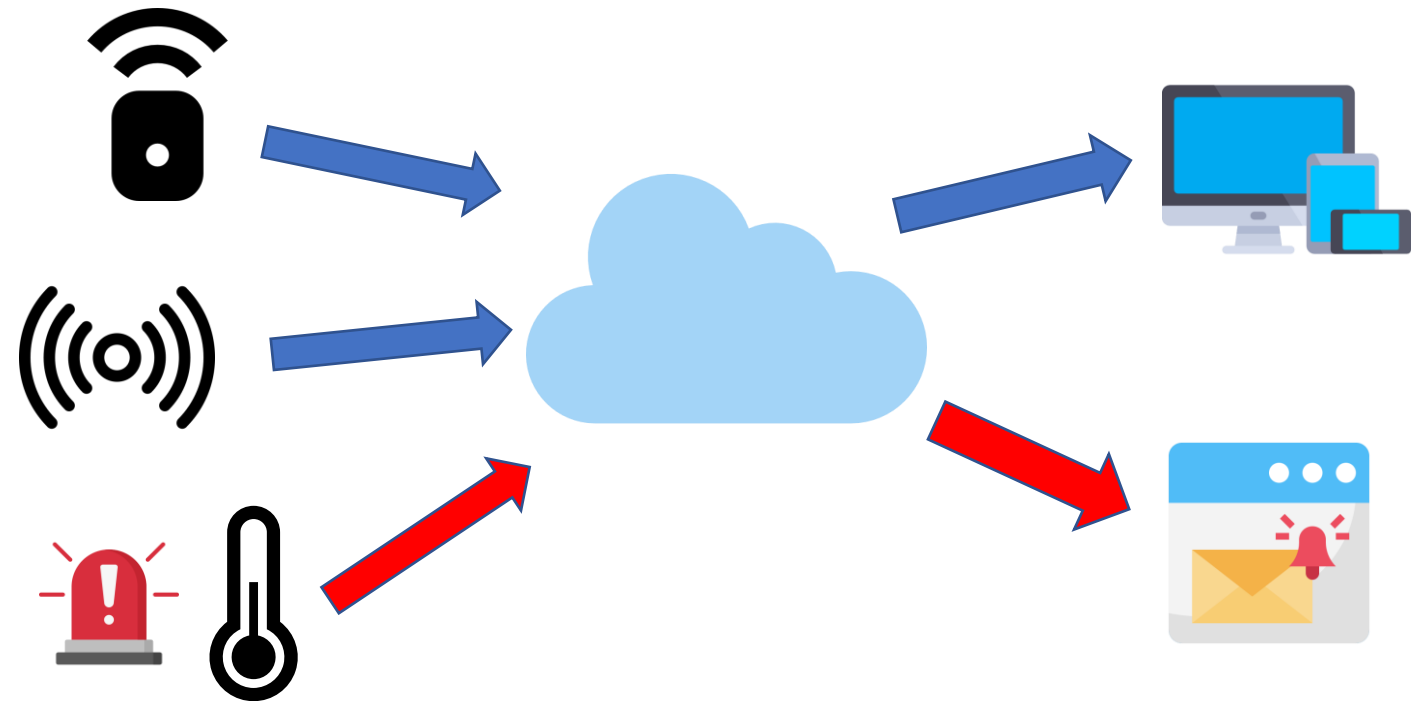


Fig.1 System schema

How to manage alarms?

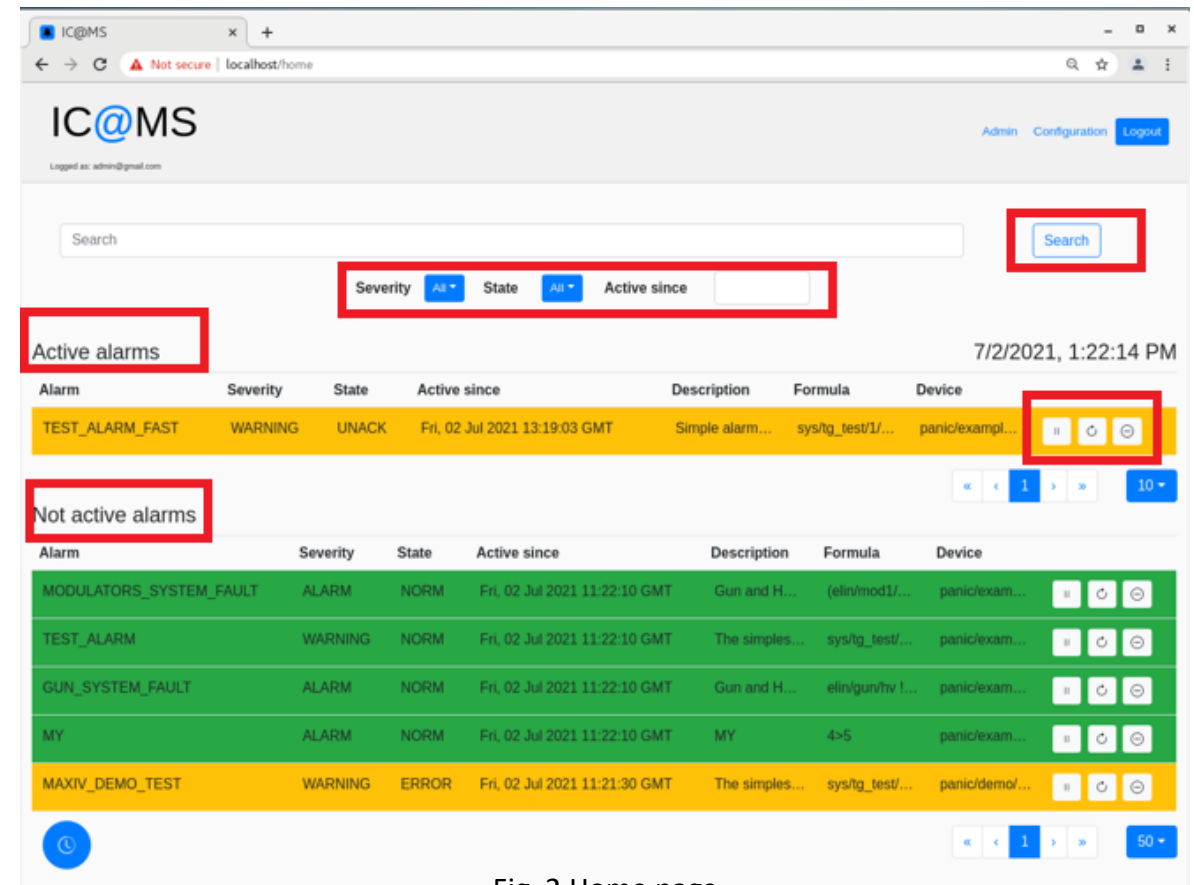
To create form alarm you should provide:

- Alarm name
- Receivers (email / phone number)
- Formula
- Severity

Fields can be modified.

In main window you can browse alarms:

- Active alarms first
- Acknowledge, reset and disable



The screenshot shows the IC@MS web interface. At the top, there is a search bar and a 'Search' button. Below the search bar, there are filters for 'Severity' (set to 'All'), 'State' (set to 'All'), and 'Active since'. The main content area is divided into two sections: 'Active alarms' and 'Not active alarms'. The 'Active alarms' section shows a table with columns: Alarm, Severity, State, Active since, Description, Formula, and Device. The first row is 'TEST_ALARM_FAST' with a severity of 'WARNING' and state of 'UNACK'. The 'Not active alarms' section shows a similar table with columns: Alarm, Severity, State, Active since, Description, Formula, and Device. The first row is 'MODULATORS_SYSTEM_FAULT' with a severity of 'ALARM' and state of 'NORM'. Both sections have pagination controls at the bottom.

Alarm	Severity	State	Active since	Description	Formula	Device
TEST_ALARM_FAST	WARNING	UNACK	Fri, 02 Jul 2021 13:19:03 GMT	Simple alarm...	sys/tg_test/1/...	panic/exampl...
MODULATORS_SYSTEM_FAULT	ALARM	NORM	Fri, 02 Jul 2021 11:22:10 GMT	Gun and H...	(elin/mod1/...	panic/exam...
TEST_ALARM	WARNING	NORM	Fri, 02 Jul 2021 11:22:10 GMT	The simples...	sys/tg_test/...	panic/exam...
GUN_SYSTEM_FAULT	ALARM	NORM	Fri, 02 Jul 2021 11:22:10 GMT	Gun and H...	elin/gun/tv 1...	panic/exam...
MY	ALARM	NORM	Fri, 02 Jul 2021 11:22:10 GMT	MY	4>5	panic/exam...
MAXIV_DEMO_TEST	WARNING	ERROR	Fri, 02 Jul 2021 11:21:30 GMT	The simples...	sys/tg_test/...	panic/demof...

Fig. 2 Home page

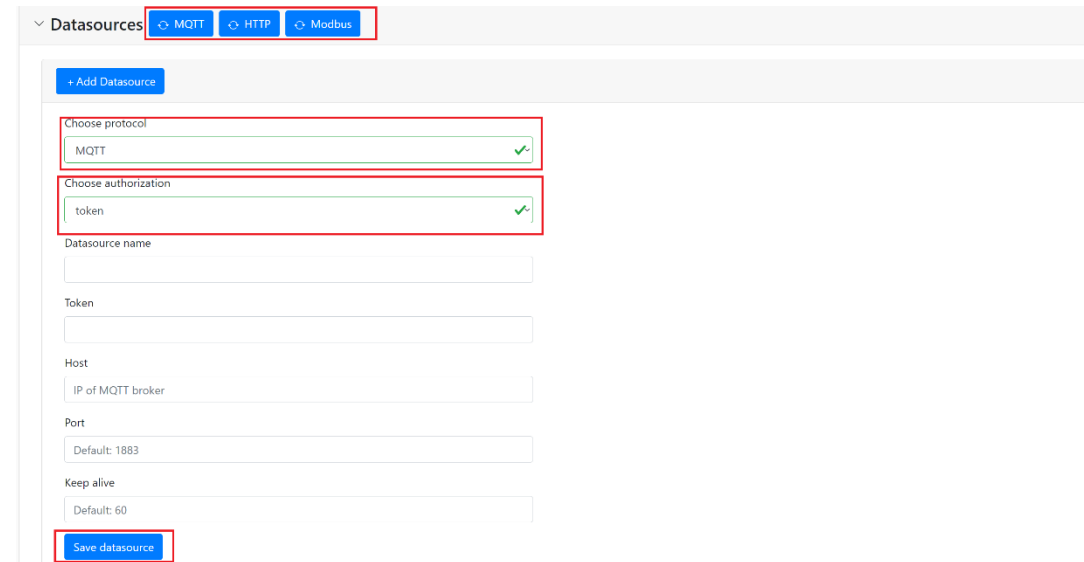
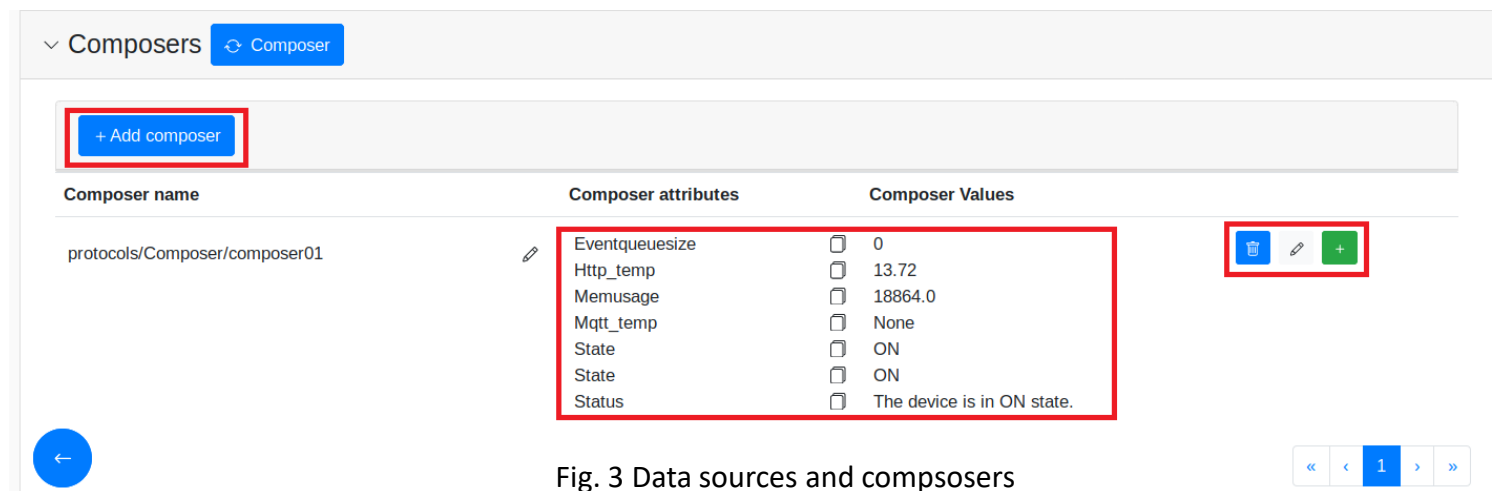
Supported data sources

User can easily create new data source:

- HTTP
- MQTT
- Modbus

Composers:

- propagates signal from low level device
- Compatible with HTTP, MQTT, Modbus
- Extracts data from different data formats: JSON, XML, HTML, raw strings, Modbus register

Composer name	Composer attributes	Composer Values
protocols/Composer/composer01	<ul style="list-style-type: none"> Eventqueue size Http_temp Memusage Mqtt_temp State State Status 	<ul style="list-style-type: none"> 0 13.72 18864.0 None ON ON The device is in ON state.

Fig. 3 Data sources and composers

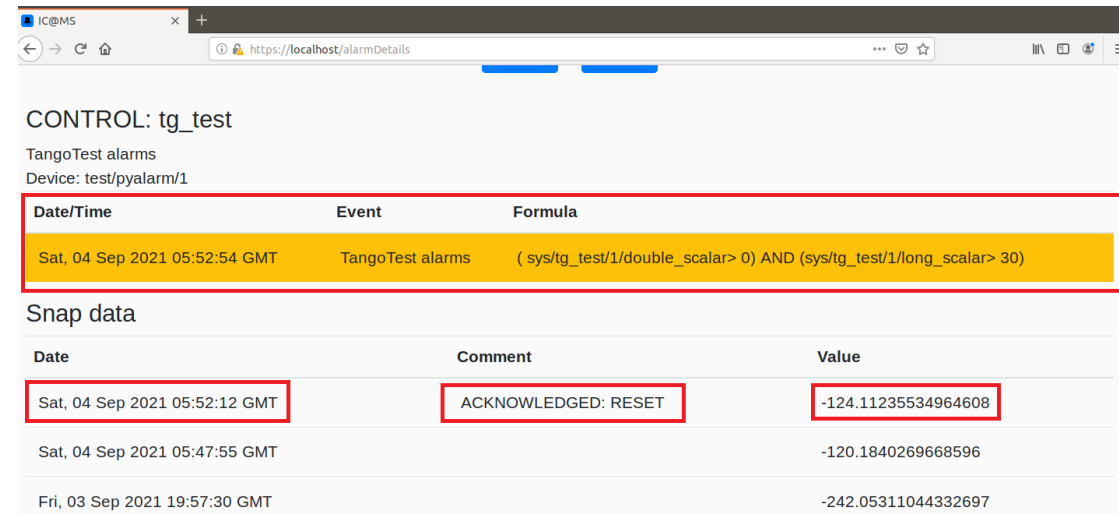
Viewing alarm history

Alarm events are **archived**.

Possible to check **all** alarms history as well as **single** alarm.

Information about:

- Alarm severity
- Date
- Value



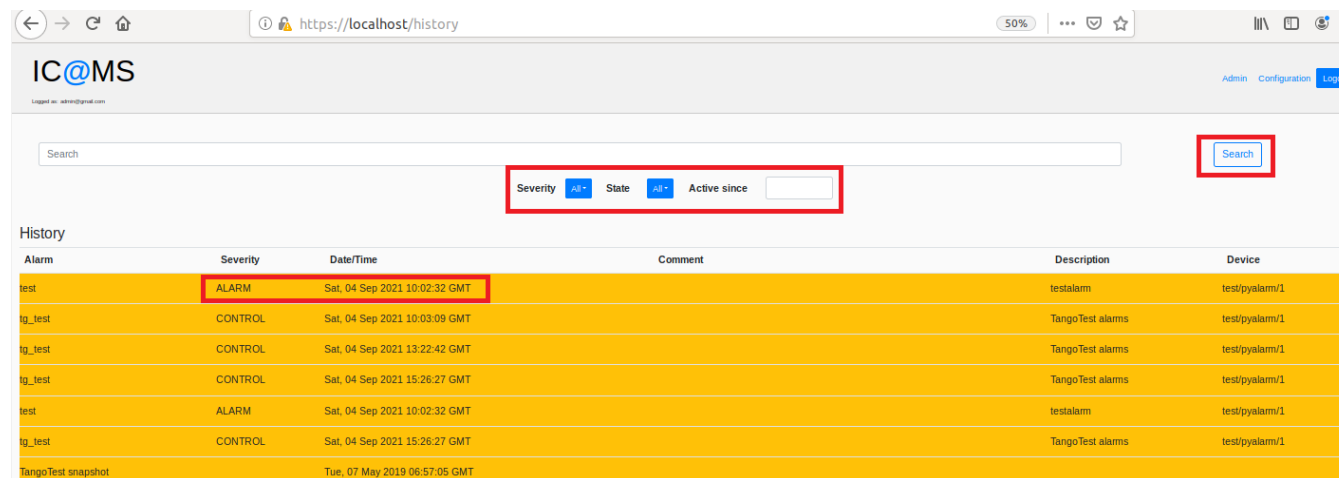
CONTROL: tg_test
TangoTest alarms
Device: test/pyalarm/1

Date/Time	Event	Formula
Sat, 04 Sep 2021 05:52:54 GMT	TangoTest alarms	(sys/tg_test/1/double_scalar > 0) AND (sys/tg_test/1/long_scalar > 30)

Snap data

Date	Comment	Value
Sat, 04 Sep 2021 05:52:12 GMT	ACKNOWLEDGED: RESET	-124.11235534964608
Sat, 04 Sep 2021 05:47:55 GMT		-120.1840269668596
Fri, 03 Sep 2021 19:57:30 GMT		-242.05311044332697

Fig. 4 Single alarm history



IC@MS

Search

Severity: All State: All Active since:

History

Alarm	Severity	Date/Time	Comment	Description	Device
test	ALARM	Sat, 04 Sep 2021 10:02:32 GMT		testalarm	test/pyalarm/1
tg_test	CONTROL	Sat, 04 Sep 2021 10:03:09 GMT		TangoTest alarms	test/pyalarm/1
tg_test	CONTROL	Sat, 04 Sep 2021 13:22:42 GMT		TangoTest alarms	test/pyalarm/1
tg_test	CONTROL	Sat, 04 Sep 2021 15:26:27 GMT		TangoTest alarms	test/pyalarm/1
test	ALARM	Sat, 04 Sep 2021 10:02:32 GMT		testalarm	test/pyalarm/1
tg_test	CONTROL	Sat, 04 Sep 2021 15:26:27 GMT		TangoTest alarms	test/pyalarm/1
TangoTest snapshot		Tue, 07 May 2019 06:57:05 GMT			

Fig. 5 All alarms history