



A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000 Assistant/Manager V11

Alarm Configurator - Fault Management

Administrator Documentation

06/2024

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1 Overview

The Alarm Configurator is used to manage switch alarms. It is used to assign alarms to subscribers or trunks and to generate alarms automatically for trunks to which alarms have not yet been assigned.

If the SNMP Service is enabled in the Application Control, you can start the Alarm Configurator from the Fault Management subitem of the Diagnostic folder on the Web based GUI.

NOTICE: Starting with HiPath 4000 Management V4, the Alarm Configurator is also available for the Assistant. There is one restriction: The Assistant version can only be used for the switch the Alarm Configurator is installed on; i.e. other switches can not be handled using this Alarm Configurator. Therefore, there is no switch selection option during startup in the Assistant version of the Alarm Configurator.

The following options are available for configuring alarms using the Alarm Configurator:

- **Update** You can update the alarm data on the switch.
- **Manage alarms in the service module** You can enable, disable and configure the two alarm groups – central alarms and peripheral alarms – in accordance with the AMO VADSU.
- **Manage alarms in the switching unit (SWU)** You can enable, disable and configure central, peripheral and logical alarms in accordance with the AMO VADSU.
- **Assign alarms** You can assign the logical alarms in the SWU to subscribers or trunks.
- **Generate alarms and assignments for trunks** You can check the proposed assignments and enable them.

2 Alarm Configurator

You must first select the switch that you want to manage before the main Alarm Configurator window opens.

Service Module Alarms

Service module alarms can be classified into two types:

- Peripheral alarms
- Central alarms

Switching Unit Alarms

There are three different types of switching unit alarms:

- Peripheral alarms
- Central alarms
- Logical alarms:
 - Special alarms: range 1 to 7 These alarms are preset by the system. You may only change the threshold values.
 - Directional alarms: range 8 to 519 These alarms are used to indicate errors in trunks.
 - Personal alarms: range 520 to 583 These alarms are used to indicate a fault on devices belonging to special subscribers (VIP alarms).

2.1 Structure of the Windows and Window Elements

Each window in the Alarm Configurator consists of

- a [Toolbar](#).
- [Navigation Section](#): on the left
- dialog area: on the right
 - [State Field](#) on the left-hand side of the dialog area (except in the **Configuration of Alarms** dialog area)
 - [Error Field](#) on the right-hand side of the dialog area (except in the **Configuration of Alarms** dialog area)
 - [Other Fields](#)

Toolbar

The toolbar contains the identification of the switch and the following icons:

	Help	Link to window help
---	-------------	---------------------

Navigation Section

The navigation section is located at the left-hand side of every window in the Alarm Configurator. It contains the links to the dialog areas for configuring alarms and is accessible as long as the Alarm Configurator is selected.

- The **Alarm Configurator** link brings you to the **Configuration of Alarms** dialog area.

- All other links bring you to dialog areas where you can execute alarms and assignments.

State Field

The state is indicated by colored dots.

green dot	Marks the current or the proposed configuration
yellow dot	Marks a configuration that is currently being set by the server on the switch.
red dot	Marks a configuration in which an error has occurred. The text of the error message is displayed in the relevant Error field.
no dot	The data record was changed but was not yet transmitted with Save.

Error Field

The **Error** field is an output field that displays the text of the AMO error message when a red dot appears in the relevant **State** field.

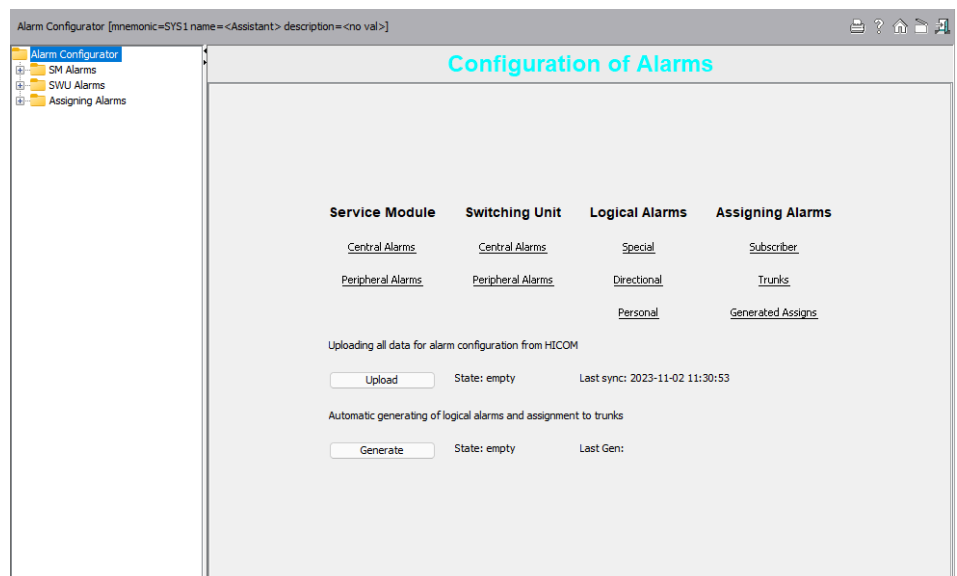
Other Fields

If you can edit a field, it changes into a drop-down list or an input field when you double-click it.

- **BCGR**: B channel group
- **HWCON**: Hardware contact
- **Major Threshold**: Threshold for urgent alarms
- **Minor Threshold**: Threshold for non-urgent alarms
- **Major Time (sec.)**: Validation time for urgent alarms in seconds
- **Minor Time (sec.)**: Validation time for non-urgent alarms in seconds
- **Name**: Name proposed for the generated alarm. The alarm name consists of the alarm number, the trunk group number and the PEN each connected by a colon (:). It can consist of a maximum of 17 characters.
- **Alarm No.:** Alarm number
- **Trunk No.:** Trunk number
- **PEN**: Port equipment number
- **Prio**: Priority of the alarm (possible values: 0 to 11)
- **Single Device Time (h)**: Single device time in hours
- **Subscriber**: Subscriber number
- **Trunk Name**: Name of the trunk
- **Assigned PENS**: Assigned port equipment numbers

2.2 Configuration of Alarms Dialog Area

The **Configuration of Alarms** dialog area is used for configuring the alarms and for assigning these to subscribers and trunks.



- [Toolbar](#)
- [Navigation Section](#)
- dialog area:
 - Links as for navigation section
 - [Buttons](#)
 - [Fields for the Upload Button](#)
 - [Fields for the Generating Button](#)
- Step-by-step instructions: [Generating Alarms](#), see [page 25](#).

Buttons

	Upload Starts uploading data that the Alarm Configurator reads out from the switch.
	Generating Starts generating the proposed assignments for trunks where alarms have not been set. The result is a list of alarm assignments to trunks via PENs, which you can edit and save. If you save these, the assignments will be set in the switch.

Fields for the Upload Button

- **State:** The state of the upload is indicated by colored dots.

done, empty	The upload was performed or an upload was not performed.
busy	Upload in progress.
error	An error occurred during the upload.

- **Last Sync:** shows the time of the last upload.

Fields for the Generating Button

- **State:** The state of the generation is indicated by colored dots.

Alarm Configurator

Service Module – Central Alarms Dialog Area

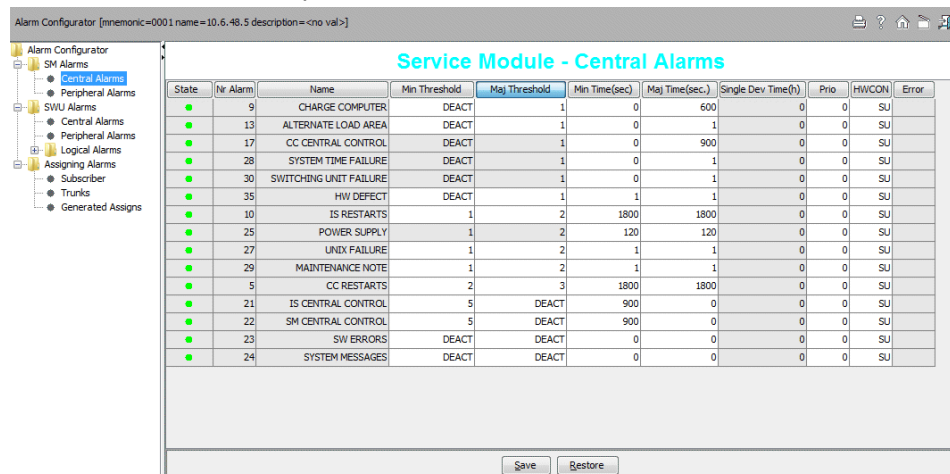
done, empty	Generation has been executed or generation has not yet begun.
started	Generation in progress.
error	An error occurred during generation.
proposed	Generation proposed/prepared: At this stage, you can check the proposed seizure of trunks with alarms and correct them manually if required.

- **Last Sync:** shows the time of the last generation.

2.3 Service Module – Central Alarms Dialog Area

The [Service Module Alarms](#) are classified into two types.

In the **Service Module – Central Alarms** dialog area you can change the central alarms that were preset in the switch.



- **Toolbar**
- **Navigation Section**
- **dialog area**
 - **State Field**
 - **Other Fields**
 - **Error Field**
 - **Buttons**

Buttons

	Save Sends the changes entered in the dialog area via AMO VADSU to the switch.
	Restore Restores the original state.

2.4 Service Module – Peripheral Alarms Dialog Area

The [Service Module Alarms](#) are classified into two types.

In the **Service Module – Peripheral Alarms** dialog area you can change the peripheral alarms that were preset in the switch.

S...	Nr. Alarm	Name	Min T...	Maj T...	Min T...	Maj T...	Single...	Prio	HWCON	Error
●	0	SERVICE TELETYPE	DEACT	1	0	600	0	0	SU	
●	1	SERVICE UTC	DEACT	1	0	600	0	0	SU	
●	2	SERVICE TTX	DEACT	1	0	600	0	0	SU	
●	3	SERVICE FAX	DEACT	1	0	600	0	0	SU	
●	4	SERVICE VOICE	DEACT	1	0	600	0	0	SU	
●	5	SERVICE UNIX	DEACT	1	0	600	0	0	SU	
●	6	SERVICE BSC	DEACT	1	0	600	0	0	SU	
●	7	SERVICE ISO	DEACT	1	0	600	0	0	SU	
●	8	SERVICE IBM	DEACT	1	0	600	0	0	SU	
●	14	IS FLASH MEMORY	DEACT	1	0	600	0	0	SU	
●	15	SM FLASH MEMORY	DEACT	1	0	600	0	0	SU	
●	16	IS DAT RECORDER	DEACT	1	0	600	0	0	SU	
●	17	SM DAT RECORDER	DEACT	1	0	600	0	0	SU	
●	18	IS HARD DISK	DEACT	1	0	600	0	0	SU	
●	19	IS CARTRIDGE	DEACT	1	0	600	0	0	SU	
●	20	IS TAPE	DEACT	1	0	600	0	0	SU	
●	21	SM HARD DISK	DEACT	1	0	600	0	0	SU	

- [Toolbar](#)
- [Navigation Section](#)
- [Dialog area](#)
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#) see [page 13](#).

2.5 Switching Unit – Central Alarms Dialog Area

The central alarms from the SWU are managed in exactly the same way as those of the service module.

In the **Switching Unit – Central Alarms** dialog area you can change the central alarms in the SWU that were preset in the switch.

Alarm Configurator

Switching Unit – Peripheral Alarms Dialog Area

Alarm Configurator [mnemonic=0001 name=10.6.48.5 description=<no val>]

Switching Unit - Central Alarms

State	Nr Alarm	Name	Min Threshold	Maj Threshold	Min Time(sec)	Maj Time(sec.)	Single Dev Time(h)	Prio	HWCON	Error
●	0	LTG RESTARTS	2	4	1800	1800	0	0	SU	
●	1	LTG FAILURE	1	2	420	420	0	0	SU	
●	2	LTU FAILURE	1	2	600	600	0	0	SU	
●	3	PHONEMAIL ALARM	1	DEACT	300	0	0	0	SU	
●	4	LTU STANDBY CABLE	1	DEACT	300	0	0	0	SU	
●	5	CC RESTARTS	2	3	1800	1800	0	0	SU	
●	6	STBY-CC FAILURE	1	DEACT	900	0	0	0	SU	
●	8	RMS FAILURE	DEACT	1	0	600	0	0	SU	
●	15	EXTERNAL SERVER	1	2	600	600	0	0	SU	
●	16	LTG CENTRAL CONTROL	5	8	900	900	0	0	SU	
●	17	CC CENTRAL CONTROL	2	DEACT	900	900	0	0	SU	
●	18	SWITCHING NETWORK	1	2	900	900	0	0	SU	
●	19	CLOCKING SYSTEM	2	4	900	900	0	0	SU	
●	20	SIGNAL UNIT	1	2	900	900	0	0	SU	
●	23	SW ERRORS	DEACT	DEACT	0	0	0	0	SU	
●	24	SYSTEM MESSAGES	DEACT	DEACT	0	0	0	0	SU	
●	25	POWER SUPPLY	1	2	120	120	0	0	SU	
●	26	SM FAILURE	DEACT	1	0	1800	0	0	SU	
●	29	MAINTENANCE NOTE	1	2	1	1	0	0	SU	
●	32	ACCESS POINT FAILURE	1	2	120	120	0	0	SU	
●	33	BAD IP CONNECTIVITY	10	50	120	120	0	0	SU	
●	34	LW-SW VERSION CONFLICT	1	DEACT	120	0	0	0	SU	
●	36	PER-BOARD SWITCHOVER	1	2	120	120	0	0	SU	
●	37	AP EMERGENCY	DEACT	1	1	1	0	0	SU	

Save Restore

- [Toolbar](#)
- [Navigation Section](#)
- [Dialog area](#)
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#) see [page 13](#)

2.6 Switching Unit – Peripheral Alarms Dialog Area

The peripheral alarms from the SWU are managed in exactly the same way as those from the service module.

In the **Switching Unit – Peripheral Alarms** dialog area you can change the central alarms in the SWU that were preset in the switch.

Alarm Configurator [mnemonic=0001 name=10.6.48.5 description=<no val>]

Switching Unit - Peripheral Alarms

State	Nr Alarm	Name	Min Threshold	Maj Threshold	Min Time(sec)	Maj Time(sec.)	Single Dev Time(h)	Prio	HWCON	Error
●	0	CO TRUNK/EXCH LINE	50	90	600	600	0	0	SU	
●	1	TIE LINE	50	90	600	600	0	0	SU	
●	2	MULTIPLE DEVICES	50	90	600	600	0	0	SU	
●	3	ANALOG VOICE DEVICES	10	90	600	600	0	0	SU	
●	4	DIGITAL VOICE DEVICES	10	90	600	600	0	0	SU	
●	5	ATTENDANT CONSOLE	DEACT	1	0	600	0	0	SU	
●	6	CO/EXCHANGE DATA LINE	50	90	600	600	0	0	SU	
●	7	TIE DATA LINE	50	90	600	600	0	0	SU	
●	8	BASE STATION	1	50	600	600	0	0	SU	
●	9	LOGICAL DEVICES	0	90	600	600	0	0	SU	
●	10	TFS LINE	25	50	600	600	0	0	SU	
●	11	VMS LINE	25	50	600	600	0	0	SU	
●	12	APSE	50	90	600	600	0	0	SU	
●	13	OTHER DEVICES	DEACT	DEACT	0	0	0	0	SU	
●	14	DATA DEVICES	10	90	600	600	0	0	SU	
●	15	CONVERSION RESOURCES	1	50	600	900	0	0	SU	

Save Restore

- [Toolbar](#)
- [Navigation Section](#)

- Dialog area
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#) see [page 13](#).

2.7 Switching Unit – Logical/Special Alarms Dialog Area

Logical alarms range from 1 to 583. Logical alarms are classified into three types, see also [Switching Unit Alarms](#) on [page 7](#).

In the **Switching Unit – Logical/Special Alarms** dialog area you can edit the data for the special alarms. These alarms are preset by the system. You may only change the threshold values.

State	Nr Alarm	Name	Min Threshold	Maj Threshold	Min Time(sec)	Maj Time(sec)	Single Dev Time(h)	Prio	HWCON	Error
●	1	INWARD TRUNK/EX LINE	DEACT	DEACT	0	0	0	0	0	SU
●	2	OUTWARD TRUNK/EX LINE	DEACT	100	0	1	0	0	0	SU
●	4	DIUC ITALY	1	DEACT	300	0	0	0	0	SU
●	5	PHONEMAIL ACCESS	50	90	600	600	0	0	0	SU

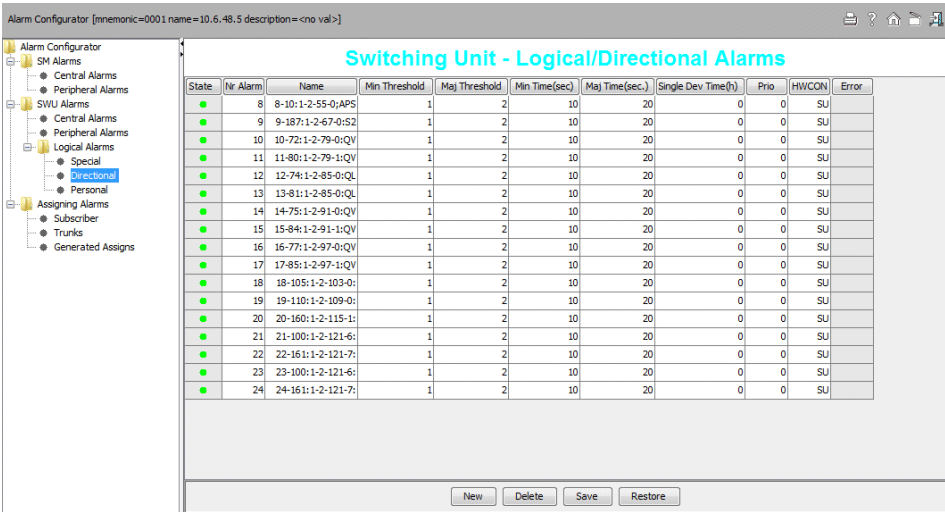
- [Toolbar](#)
- [Navigation Section](#)
- Dialog area
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#) see [page 13](#).

2.8 Switching Unit – Logical/Directional Alarms Dialog Area

Logical alarms range from 1 to 583. Logical alarms are classified into three types, see also [Switching Unit Alarms](#) on [page 7](#).

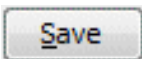
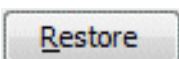
In the **Switching Unit – Logical/Directional Alarms** dialog area you can edit the data for directional alarms and add alarm data. Directional alarms are used to indicate trunk errors.

Alarm Configurator
Switching Unit – Logical/Personal Alarms Dialog Area



- [Toolbar](#)
- [Navigation Section](#)
- [Dialog area](#)
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#)

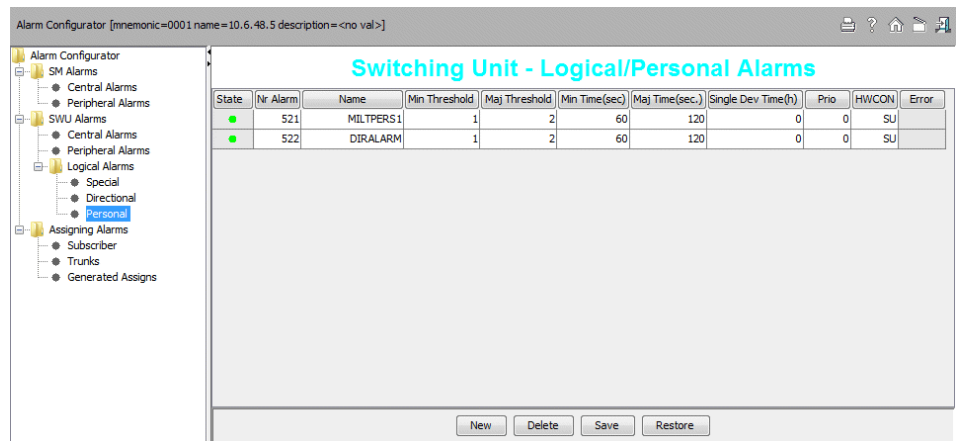
Buttons

	New Inserts a new row into the table where you can enter data.
	Delete Deletes the row from the table on which the cursor is located.
	Save Sends the changes entered in the dialog area via AMO VADSU to the switch.
	Restore Deletes any changes made.

2.9 Switching Unit – Logical/Personal Alarms Dialog Area

Logical alarms range from 1 to 583. Logical alarms are classified into three types, see also [Switching Unit Alarms](#) on [page 7](#).

In the **Switching Unit – Logical/Personal Alarms** dialog area you can edit the data for personal alarms and add alarm data. Personal alarms are used to signal faults in the devices of special subscribers (VIP alarms).



- [Toolbar](#)
- [Navigation Section](#)
- [Dialog area](#)
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#) see [page 18](#).

2.10 Assign Alarm to Trunk via PEN Dialog Area

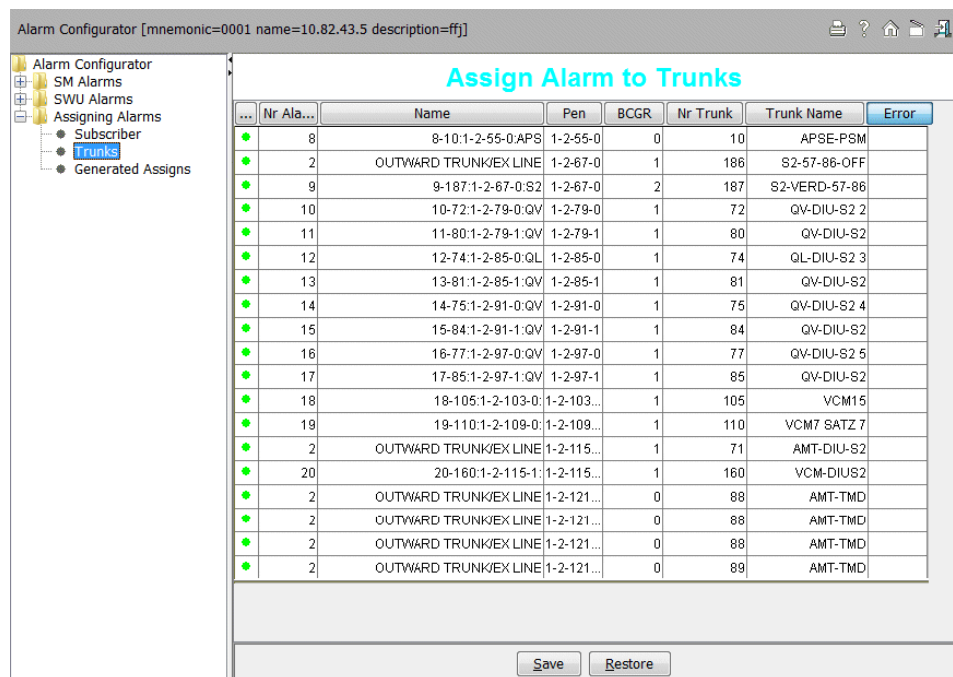
In the **Assign Alarm to Trunks via PEN** dialog area you can assign logical alarms to the SWU via the AMOs TSCSU, TACSU and TDCSU. The trunks are identified by means of PENs. All of the PENs available in the system are displayed in the dialog area.

All alarms created from 1 to 519 are displayed in the list.

The user's assignments are checked to prevent a PEN number from being used twice.

Alarm Configurator

Assign Alarm to Subscriber Dialog Area



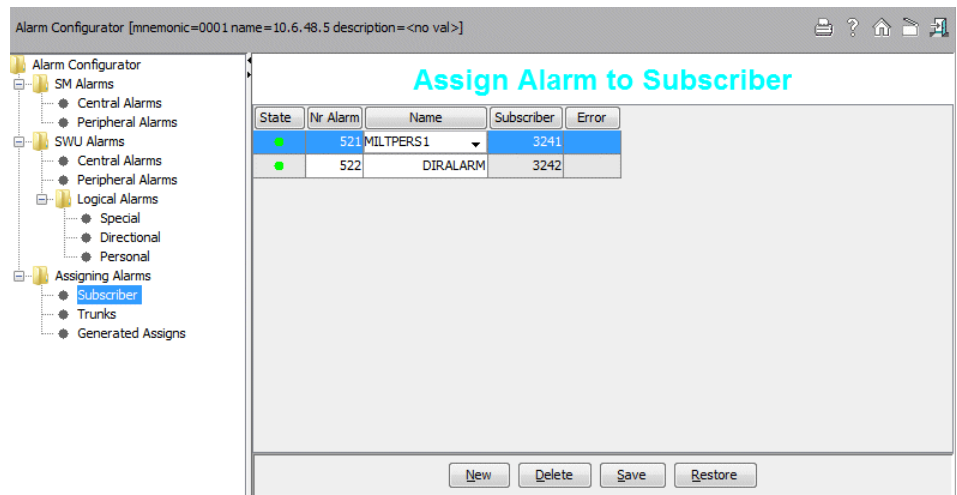
- [Toolbar](#)
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 - [Buttons](#) see [page 13](#).

2.11 Assign Alarm to Subscriber Dialog Area

In the **Assign Alarm to Subscriber** dialog area you can assign logical alarms to subscribers via the AMOs SCSU and SBSCSU. The subscribers are identified by means of telephone numbers. These telephone numbers are entered as individual values.

All alarms created from 520 to 583 are displayed in the list. You can create these in the **Switching Unit - Logical/Personal Alarms** dialog area (see also [page 20](#)).

The user's assignments are checked to prevent a telephone number from being used twice.



- [Toolbar](#)
- [Navigation Section](#)
- Dialog area
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#) see [page 18](#).

2.12 Generated Assigns Dialog Area

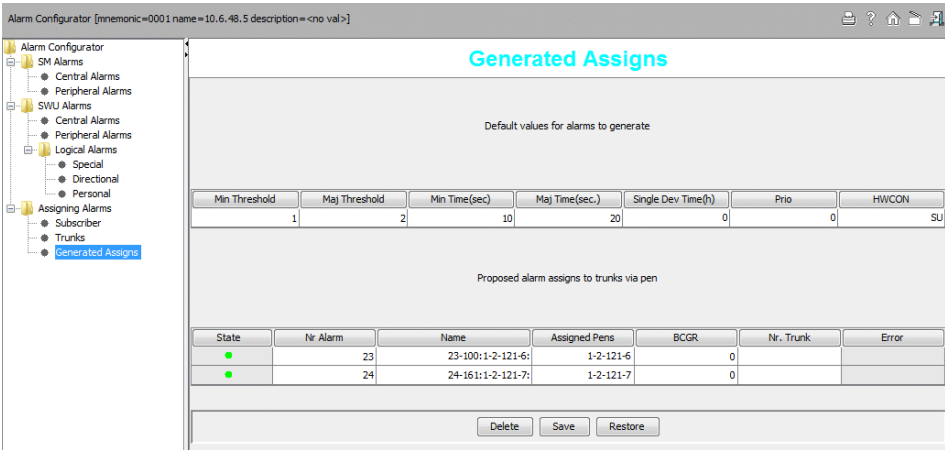
When you click the **Generating** button in the **Configuration of Alarms** dialog area (see also [page 11](#)), the server starts to check the trunks and the alarms assigned to them. If it finds trunks without any assigns, it generates an alarm and assigns it to the respective trunk in the database.

If the generation is in the **proposed** state, you can display generated data via the link **Generated Assigns** in the [Navigation Section](#).

The **Generated Assigns** dialog area is divided into two parts:

- The upper part contains settings for all new alarms to be set up.
- The lower part of the dialog area contains the proposals. You can change the alarm name and number if the alarm selected does not already exist in the switch.

The following AMOs are used: VADSU, TDCSU, TSCSU and TACSU.



- [Toolbar](#)
- [Navigation Section](#)
- [Dialog area](#)
 - **Default values for alarms to generate** The fields in the table contain standard parameters for generating alarms, see [Other Fields](#).
 - **Proposed alarm assigns to trunk via PEN**
 - [State Field](#)
 - [Other Fields](#)
 - [Error Field](#)
 - [Buttons](#)
- Step-by-step instructions: [Generating Alarms](#), see [page 25](#).

Buttons

	Save Sets the alarms and assignments at the switch via the AMO VADSU.
	Restore Deletes any changes made.
	Delete Deletes alarm assignments on the switch.

3 Step by Step

Topics

[Generating Alarms](#)

[OpenScapeFM Grace Period \(for Service Use\)](#)

3.1 Generating Alarms

Since alarms are not assigned to trunk groups by default during switch configuration, Alarm Configurator allows you to generate alarms and assign them to trunk groups.

Prerequisite:

PBX data must be correctly downloaded. This is indicated by the state done beside the **Upload** button in the **Configuration of Alarms** dialog area.

Step	Action	Meaning/result
Generate proposal	Configuration of Alarms dialog area -> Generating button	The state field first displays busy, then the number of trunks and trunk groups. The application searches for an available alarm for every trunk group and the correct one is assigned. This proposal is displayed in the lower part of the Generated Assigns dialog area. You can change the alarm name and the trunk group if the selected one does not already exist in the trunk groups.
Activate proposal on the switch	Generated Assigns dialog area -> Save button	The state field next to the Generating button in the Configuration of Alarms dialog area changes to a successful, automatic upload, then to error or done. A batch file is generated and forwarded to the switch. The configuration and assignment is completed at this time.
Respond to error	After modifying a data record: Generated Assigns dialog area -> Save button	You can read the error text in the lower part of the Generated Assigns dialog area. The data records must be transmitted again after they have been changed.

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