

Configuring Alarms

Alarms are intended to detect various real-time configuration and system errors which require the attention of the administrator to resolve. These include unexpected process failure; incorrectly configured ITSP; STUN server unreachable; CPU or disk threshold exceeded; etc.

The Alarm Server collects alarms detected by the various components of sipXecs and sends out notifications to contacts configured in alarm groups. These groups contain contacts in the form of email addresses, phone numbers for short messages (SMS) (new in), or SNMP trap receivers (new in). You can select a different alarm group for each alarm type.

Configuring Alarms

The set of available alarms is listed on the Alarms Configuration panel (Diagnostics -> Alarms -> Configuration). On this screen you can set the master switch to turn on or off all notifications, and configure the "From" address used in email notifications (default is postmaster@<localhost.domain.com>).

Also on this screen, you can select which Alarm Group should receive each alarm, or disable specific alarms, and in some cases configure the "Minimum Threshold" which prevents alarms from being reported until the threshold is exceeded.

Alarms

[Download Alarm MIB](#)

Configuration

Alarm Groups

History

Send alarm notifications

From e-mail address

Alarm types

Alarm Code	Alarm Title	Severity	Alarm Group	Minimum Threshold
SPX00001	Process started	info	default	n/a
SPX00002	Restarting process	warning	disabled	n/a
SPX00004	Process failed	crit	default	n/a
SPX00005	Login failed	warning	default	3
SPX00006	CPU threshold exceeded	warning	default	n/a
SPX00007	CPU threshold recovered	info	default	n/a
SPX00008	Disk usage threshold exceeded	warning	default	n/a

Add new Alarm Groups if desired, and enter the details of the alarm receivers on the Alarm Groups panel (Diagnostics -> Alarms -> Alarm Groups). If you want some alarms to be sent to different contacts, then create a group for each set of contacts. Otherwise, add the contacts to the **default** group.

In each alarm group, add the details of the contacts which should be sent the various forms of notification.

Alarm Group

Enabled

Name

Description

SMS Notification [Add SMS address](#)

[Delete](#)

SNMP Notification [Add Trap Receiver address](#)

Host Address	Port	Community String	
<input type="text" value="test.example.com"/>	<input type="text" value="162"/>	<input type="text" value="test community string"/>	Delete

E-mail Notification [Add e-mail address](#)

[Delete](#)

[Delete](#)

[Add user to be notified by e-mail](#)

<input type="checkbox"/>	User ID	Last Name ▼	First Name	E-mail
<input type="checkbox"/>				

[Delete](#)

For SMS notification, enter the email address of the phone (note that this requires an email-to-SMS gateway). An abridged version of the alarm will be sent as a text message to these numbers.

For Email notification, enter a list of email addresses which should be sent alarms. You can easily send emails to users of the sipXecs system by searching for them in the internal list of users. Email notifications include a brief suggestion on how the alarm condition could be investigated or resolved.

For SNMP notification, enter the trap receiver address and details.

Displaying alarms

Alarms generated within the last month can be viewed under Diagnostics -> Alarms -> History. Alarms are always logged in `/var/sipxpbx/sipXalarms.log`. Note that alarms are generated and logged on each server in a cluster. You can select which server's alarm history to display.

Localizing alarms

There is some support for generating alarm notifications in a language other than English, though this requires a bit of back-door work at this point. Translate the files containing the alarm strings found in `/usr/share/sipxecs/alarms` (at a minimum, `alarm-strings.xml` contains the headers, and `sipXalarms-strings.xml` contains the alarms generated by sipXecs components. Other files could be dropped in by other components). The translated files should be given a `_locale` suffix: e.g. `alarm-strings_fr.xml`. Then edit the file `/etc/sipxpbx/alarm-config.xml`, and change the value of the **language** entry to match the locale suffix (e.g. `fr`). Restart sipxecs to make this take effect. Note that any changes to the alarm configuration through sipXconfig will undo the language change.