

# Manual of the Aarenet VoIP Switch Support Tools

## Introduction

The VoIP Switch Administrators, Operators, Supporters find here information about the Aarenet VoIP Switch "On Board" tools for analyzing and supporting general VoIP Switch issues and customer problems:

- ◊ The ConfigCenter "Support Log" displays the VoIP Switch internal activities
- ◊ The ConfigCenter "Traces" displays the signaling between the VoIP Switch and external devices
- ◊ The ConfigCenter "Call Data" lists the CDR of all incoming or outgoing connections or connection attempts. The "Call Data" provide shortcuts to SIP, SDP trace and RTP statistic information of a single call.
- ◊ The ConfigCenter "Address Registration" displays if a SIP device or MGCP MTA has registered a telephone number
- ◊ The ConfigCenter "System Components" displays the state and activity of the VoIP Switch components
- ◊ The ConfigCenter "Channels" displays the state of connections
- ◊ The ConfigCenter "System Utilization" displays a statistical overview of the VoIP Switch resource utilization

## Contents

- 1 VoIP Switch ConfigCenter Support Tools
  - ◆ 1.1 The ConfigCenter **Support Log**
    - ◊ 1.1.1 Navigate to the "Support Log"
    - ◊ 1.1.2 Get a "Support Log"
    - ◊ 1.1.3 Interpretation of a "Support Log"
  - ◆ 1.2 ConfigCenter **Trace**
    - ◊ 1.2.1 Navigate to the "Trace"
    - ◊ 1.2.2 Get a "Trace"
    - ◊ 1.2.3 Interpretation of a "Trace"
  - ◆ 1.3 The ConfigCenter **Call Data**
    - ◊ 1.3.1 Navigate to the "Call Data"
    - ◊ 1.3.2 Get the "Call Data"
  - ◆ 1.4 The ConfigCenter **Address Registration**
    - ◊ 1.4.1 Navigate to "Registrations"
    - ◊ 1.4.2 Interpretation of "Registrations" Information
  - ◆ 1.5 The ConfigCenter **Components**
    - ◊ 1.5.1 Navigate to "Components"
    - ◊ 1.5.2 Interpretation of "Components" Information
  - ◆ 1.6 The ConfigCenter **Channels**
    - ◊ 1.6.1 Navigate to "Channels"
    - ◊ 1.6.2 Interpretation of "Channels" Information
  - ◆ 1.7 The ConfigCenter **System Utilization**
    - ◊ 1.7.1 Navigate to "System Utilization"
    - ◊ 1.7.2 Interpretation of the "System Utilization" Information

# VoIP Switch ConfigCenter Support Tools

## The ConfigCenter Support Log

The "Support Log" provides the supporter with information from the internal processes of the ServiceCenter:

- ◇ Registration
- ◇ Connection setup, release and exceptions
- ◇ Call Routing
- ◇ Used Ruleset
- ◇ Emergency calls
- ◇ etc

The "Support Log" provides filters for:

- ◇ Time based selection: From ? Until, From ? Duration
- ◇ Text filter
- ◇ Registration events
- ◇ Call events
- ◇ etc.

The "Support Log" has a limited history. The history may last from a few hours up to some days. The length of the history may be different from VoIP switch to VoIP switch and depends on the length of log files and amount of logging events.

### Note

The "Support Log" is tenant sensitive. This means a supporter of tenant A is not able to see events of tenant B!

## Navigate to the "Support Log"

ConfigCenter:

- ➔ Menu "Support"
- ➔ Menu "Support Log"

## Get a "Support Log"

Dialog: "Support Log":

The screenshot shows the 'Support Log' dialog box with several annotations:

- Optional Filter for Text String, e.g.:**
  - Call Id
  - Telephone number
- Time Span or Duration: Mandatory:**
  - "From"
  - "Until" or "Duration"
- Optional Filters for Different Categories**

The dialog box itself contains the following fields and options:

- To limit the size of data the following restrictions can be configured:**
  - Text:** sc1278747363657
  - From:** 2015/12/22 16:00:00
  - Until:** (empty)
  - Duration:** 00:14:42
- If at least one Category is selected, only matching entries are displayed:**
  - ☐ All ☐ Registr. ☐ Routing ☐ Calls
  - ☐ Timeout ☐ Authent. ☐ Config. ☐ Outported
  - ☐ Emerg. ☐ Rules ☐ Alarm ☐ Presence
- Additional information to display:**
  - ☐ Domain ☐ Component ☐ Categories
- Buttons:** Download, Close

When the dialog "Support Log" opens it contains by default in "From" the actual date/time (-5min) and in "Duration" a duration of 5min:

1. Click the Button [ Download ]
2. Via HTTP an ASCII formatted file with the last 5 minutes will be downloaded

Retrieving a "Support Log" in the past:

1. Insert the in "From" the desired start date/time
2. Insert in "Duration" the needed length
3. Press on the PC keyboard the 'Enter' key : The "Until" date/time will be computed
4. Click the Button [ Download ]

or

1. Insert the in "From" the desired start date/time
2. Insert the in "Until" the desired stop date/time
3. Press on the PC keyboard the 'Enter' key: The "Duration" will be computed
4. Click the Button [ Download ]

### Best Practice

Get the events of a connection in the past:

1. Search the Call ID of the connection in the "Call Data"
2. Use the Call ID in the "Text" filter of the Support Log dialog
3. Make sure that the connection date/time match "From"- "Until"
4. Download the Support Log

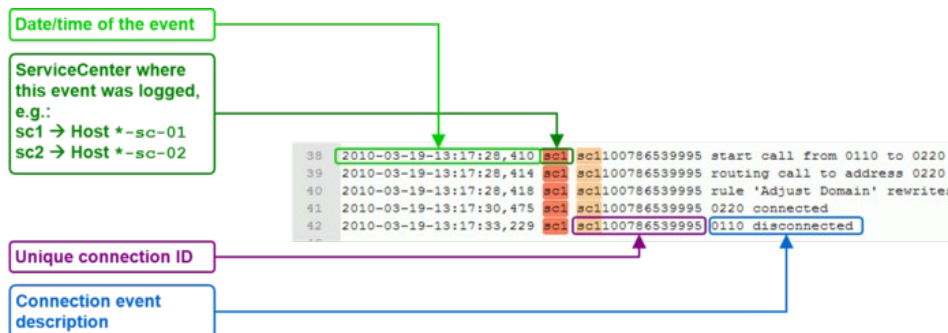
Get the events of a just finished connection:

1. Set the "Duration" to 5min (or shorter)
2. Download the Support Log
3. Search for the connection

## Interpretation of a "Support Log"

The interpretation of a "Support Log" is quite easy and straight forward. With a little experience one will be soon familiar with the interpretation.

Interpretation and example of a call setup and release:



## ConfigCenter Trace

The "Trace" provides the supporter with information from the message traffic between the VoIP switch and external VoIP devices, such as PSTN gateway, SIP CPE, SIP or MGCP telephones.

The "Trace" contains:

- ◇ Session Initiation Protocol SIP registration and connection signaling messages
- ◇ Media Gateway Control Protocol MGCP audit and endpoint control messages
- ◇ Session Description Protocol SDP streaming media initialization parameters

The "Trace" provides filters for:

- ◇ Time based selection: From ? Until, From ? Duration
- ◇ Text filter

The "Trace" has a limited history. The history may last from a few hours up to some days. The length of the history may be different from VoIP switch to VoIP switch and depends on the length of log files and amount of logging events.

The interpretation of a "Trace" (PCAP formatted file) has to be done in an external application like Wireshark network protocol analyzer. Wireshark offers deep and rich VoIP analysis .

### Note

The "Trace" is **not** tenant sensitive. This means a supporter of tenant A is able to see signaling messages of tenant B!

Due to this open display of information it may be possible that the "Trace" is not available for the supporters and operators on a multi tenant VoIP Switch.

## Navigate to the "Trace"

ConfigCenter:

- ➔ Menu "Support"
- ➔ Menu "Trace"

## Get a "Trace"

Dialog: "Trace":

The screenshot shows the 'Trace' dialog box with the following fields and annotations:

- Optional Filter for Text String, e.g.:**
  - Call Id
  - Telephone number
- Time Span or Duration: Mandatory:**
  - "From"
  - "Until" or "Duration"

The dialog box itself contains the following fields:

- Text: 0443027192
- From: 2015/12/22 16:00:00
- Until: (empty)
- Duration: 00:05:00
- Buttons: Download, Close

When the dialog "Trace" opens it contains by default in "From" the actual date/time (-5min) and in "Duration" a duration of 5min:

1. Click the Button [ Download ]

2. Via HTTP an PCAP formatted file with the last 5 minutes will be downloaded

Retrieving a "Trace" in the past:

1. Insert the in "From" the desired start date/time
2. Insert in "Duration" the needed length
3. Press on the PC keyboard the 'Enter' key: The "Until" date/time will be computed
4. Click the Button [ Download ]

or

1. Insert the in "From" the desired start date/time
2. Insert the in "Until" the desired stop date/time
3. Press on the PC keyboard the 'Enter' key: The "Duration" will be computed
4. Click the Button [ Download ]

**Best Practice**

Get the events of a connection in the past:

1. Search the connection in the "Call Data"
2. Click the Button [ Trace ]

Get the events of a just finished connection:

1. Set the "Duration" to 5min (or shorter)
2. Download the Trace
3. Search for the connection

## Interpretation of a "Trace"

The interpretation of a "Trace" needs experience!

For more information:

- ◇ See also article "Brief Tutorial of the SIP Signaling and SDP Media Protocols"
- ◇ Get a Wireshark training

Example of a Wireshark call capture, SIP setup and release:

No.	Time	Source	Destination	Protocol	Length	Info
64264	2015-11-06 08:49:19.390000	81...	81...	SIP/SDP	794	Request: INVITE sip:041...@81...
64265	2015-11-06 08:49:19.408000	81...	81...	SIP	319	Status: 100 Trying
64266	2015-11-06 08:49:19.543000	192.168.222.53	192.168.222.53	SIP/SDP	947	Request: INVITE sip:mcf_conf@192.168.222.53:5062
64267	2015-11-06 08:49:19.544000	192.168.222.53	192.168.222.53	SIP	388	Status: 100 Trying
64268	2015-11-06 08:49:19.547000	192.168.222.53	192.168.222.53	SIP/SDP	692	Status: 200 OK
64269	2015-11-06 08:49:19.550000	81...	81...	SIP/SDP	663	Status: 200 OK
64270	2015-11-06 08:49:19.573000	81...	81...	SIP	434	Request: ACK sip:0435210557081...:5060
64271	2015-11-06 08:49:19.574000	192.168.222.53	192.168.222.53	SIP	353	Request: ACK sip:mcf_conf@192.168.222.53:5062
64272	2015-11-06 08:49:43.095000	81...	81...	SIP	434	Request: BYE sip:0435210557081...:5060
64273	2015-11-06 08:49:43.095000	81...	81...	SIP	353	Status: 200 OK
64274	2015-11-06 08:49:43.098000	192.168.222.53	192.168.222.53	SIP	342	Request: BYE sip:mcf_conf@192.168.222.53:5062
64275	2015-11-06 08:49:43.099000	192.168.222.53	192.168.222.53	SIP	372	Status: 200 OK

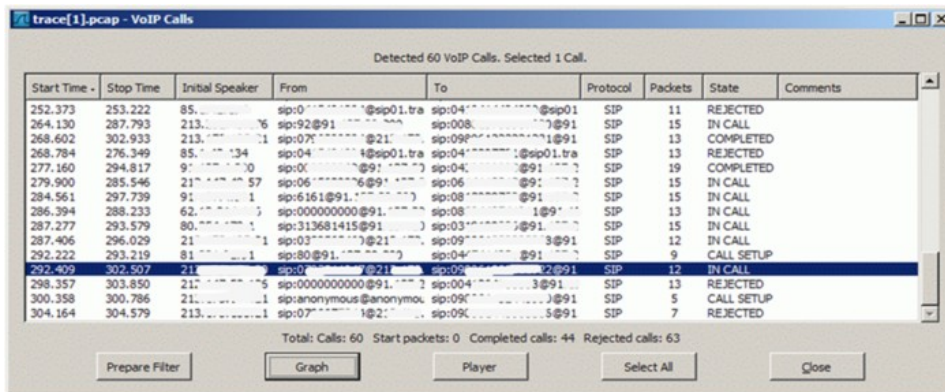
Frame 64264: 794 bytes on wire (6352 bits), 794 bytes captured (6352 bits)
Ethernet II, Src: 00:00:00:00:5c:01 (00:00:00:00:5c:01), Dst: 00:00:00:00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 81..., Dst: 81...
User Datagram Protocol, Src Port: 5062 (5062), Dst Port: 5060 (5060)
Session Initiation Protocol (INVITE)
Request-Line: INVITE sip:041...@81... SIP/2.0
Message Header
Via: SIP/2.0/UDP 81...:5062;branch=z9hG4bKdfcbf3dadb48886
Max-Forwards: 70
From: <sip:071...@81...>;tag=f82a933b62
To: <sip:041...@81...>
Call-ID: 2132cad34d6bbe47
CSeq: 28929 INVITE
Contact: <sip:071...@81...:5062;transport=udp>
Supported: replaces
User-Agent: Patton SN4960 4E60V UI 00A0BA01CE73 R6.T 2013-03-14 H323 RBS SIP M5T SIP Stack/4.1.12.18
Content-Type: application/sdp
Content-Disposition: rtp
Message Body
Session Description Protocol
Session Description Protocol Version (v): 0
Owner/Creator, Session Id (o): MxSIP 0 559 IN IP4 81...
Session Name (s): SIP Call
Connection Information (c): IN IP4 81...
Time Description, active time (t): 0 0
Media Description, name and address (m): audio 4926 RTP/AVP 8 0 18 125 101
Media Attribute (a): rtpmap:8 PCMA/8000
Media Attribute (a): rtpmap:0 PCMU/8000
Media Attribute (a): rtpmap:18 G/729/8000
Media Attribute (a): rtpmap:125 CLEARMODE/8000
Media Attribute (a): rtpmap:101 telephone-event/8000
Media Attribute (a): fmtp:18 annex-b=0
Media Attribute (a): fmtp:101 0-16
Media Attribute (a): sendrecv

Example of a Wireshark call list:

Navigate in Wireshark:

- ➔ Menu "Statistics"
- ➔ Menu "VoIP Calls"

Wireshark dialog where all calls are listed of the actual trace:



The dialog titled "trace[1].pcap - VoIP Calls" displays a table of detected VoIP calls. The table has columns for Start Time, Stop Time, Initial Speaker, From, To, Protocol, Packets, State, and Comments. A summary at the bottom indicates 60 total calls, 0 start packets, 44 completed calls, and 63 rejected calls. Buttons for "Prepare Filter", "Graph", "Player", "Select All", and "Close" are at the bottom.

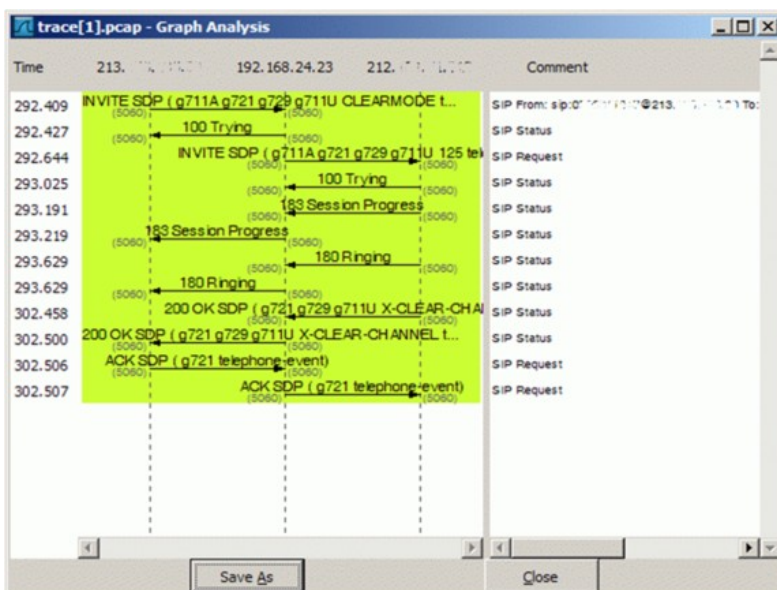
Start Time	Stop Time	Initial Speaker	From	To	Protocol	Packets	State	Comments
252.373	253.222	85...	sip:0...@sip01.tra	sip:04...@sip01	SIP	11	REJECTED	
264.130	287.793	213...	sip:92@91	sip:008...@91	SIP	15	IN CALL	
268.602	302.933	213...	sip:07...@21	sip:09...@1@91	SIP	13	COMPLETED	
268.784	276.349	85...	sip:04...@sip01.tra	sip:04...@sip01.tra	SIP	13	REJECTED	
277.160	294.817	91...	sip:06...@91	sip:04...@91	SIP	19	COMPLETED	
279.900	285.546	21...	sip:06...@91	sip:06...@91	SIP	15	IN CALL	
284.561	297.739	91...	sip:6161@91	sip:08...@91	SIP	15	IN CALL	
286.394	288.233	62...	sip:000000000@91	sip:08...@1@91	SIP	13	IN CALL	
287.277	293.579	80...	sip:313681415@91	sip:03...@91	SIP	15	IN CALL	
287.406	296.029	21...	sip:03...@21	sip:09...@3@91	SIP	12	IN CALL	
292.222	293.219	81...	sip:80@91	sip:04...@91	SIP	9	CALL SETUP	
292.409	302.507	21...	sip:000000000@91	sip:006...@2@91	SIP	12	IN CALL	
298.357	303.850	21...	sip:000000000@91	sip:004...@3@91	SIP	13	REJECTED	
300.358	300.786	21...	sip:anonymous@anonymous	sip:09...@91	SIP	5	CALL SETUP	
304.164	304.579	213...	sip:07...@21	sip:09...@5@91	SIP	7	REJECTED	

Example of a Wireshark call flow:

Navigate in Wireshark:

- ➔ Menu "Statistics"
- ➔ Menu "VoIP Calls"
- ➔ Select the call of interest
- ➔ Click Button [ Graph ]

Wireshark dialog where the message flow is shown of the selected call:



# The ConfigCenter Call Data

The "Call Data" lists the CDR of all incoming or outgoing connections or connection attempts. Extended filters enable the supporter to search for specific calls. The filters can be combined with logical AND.

Filter CDRs according:

- ◇ Call start and end date/time
- ◇ Call duration
- ◇ Call charges
- ◇ Telephone number of caller and/or callee.
- ◇ Tenants & account
- ◇ Price list attributes "Destination Type" & "Destination"

The "Call Data" has a limited history. The length of the history may be different from VoIP switch to VoIP switch and depends on the CDR storage length in the date base.

Selected CDR details allow direct access to the information of:

- ◇ SIP Trace:  
The SIP message contents of this specific connection or call attempt is shown. For the interpretation of the trace consult the article "Brief Tutorial of the SIP Signaling and SDP Media Protocols", chapter "Knowhow SIP Signaling" .
- ◇ RTP/RTCP Media:  
The RTP/RTCP information and statistics of this specific connection or call attempt is shown. For the interpretation of the media information consult the article "Brief Tutorial of the SIP Signaling and SDP Media Protocols", chapter "Knowhow Media Stream" .

## Note

- The "Call Data" has a limited history. The length of the history may be different from VoIP switch to VoIP switch and depends on the CDR storage length in the date base.
- Not all filter options may be available on the VoIP Switch.
- The "Call Data" is tenant sensitive. This means a supporter/operator of tenant A is not able to see events of tenant B!

## Warning

Depending on the settings of a VoIP system it may be possible to change values in CDR.

**Changing a CDR's contents may be a legal violation in the country of operation of the VoIP Switch!**

## Navigate to the "Call Data"

ConfigCenter:

- ➔ Menu "Rating"
- ➔ Menu "Call Data"

## Get the "Call Data"

Dialog: "Call Data":

**Filter for ranges of:**

- Time
- Duration
- Charge

Hint:  
Insert at start "Duration"  
"00:00:00" for displaying  
call attempts.

**Filter for telephone numbers**

**Export the displayed CDRs in a MS Excel file.**

**Do not use for support reasons!**

**Start the searching**

By clicking on the line of a CDR a dialog pops up, which provides a) more details of the connection and b) one click access to the call's SIP trace and media RTP/RTCP information and statistics:

**Call details**

**Do not use for support reasons!**

**Get a trace of this call as PCAP file.**

**Get the RTP information and statistics of this call as HTML file.**



For the interpretation of the trace consult the article:

"Brief Tutorial of the SIP Signaling and SDP Media Protocols", chapter "Knowhow SIP Signaling"



For the interpretation of the media information consult the article:

"Brief Tutorial of the SIP Signaling and SDP Media Protocols", chapter "Knowhow Media Stream"

# The ConfigCenter Address Registration

The ConfigCenter "Address Registration" displays if a SIP device or MGCP MTA has registered the telephone number. The supporter finds the following information of the registering devices:

- ◇ Type of registration, SIP, notifications, presence, etc
- ◇ IP address
- ◇ SIP user agent
- ◇ Registration time left.

Registrations can be de-registered on the VoIP Switch by force.

Hint:

The device cannot be informed that it was de-registered on the VoIP Switch. That means you have to wait until it re-registers automatically or force the device manually to re-register.

## Navigate to "Registrations"

ConfigCenter:

→ Menu "Addresses"

or

→ Menu "Accounts"

→ Click on the line of the desired account

→ Click on the right arrow at "Addresses"

For details:

→ Click on the line of the desired address

→ Click on the right arrow at "Registration"

## Interpretation of "Registrations" Information

Display of "Addresses" and registration overview:

**Status and type of registration:**

- Active registration
- No registration

**Note:**  
If no icon is shown then more than 100 addresses are listed.

Number	Endpoint name	Registration
04 10		● sip
04 1		● sip
04 2		● sip
04 3		● sip
04 4		● sip
04 5		● sip
04 6		● sip
04 7		● sip
04 8		● sip
04 9		● sip
04 10		● sip
04 11		● sip
04 12		● sip
04 13		● sip
04 14		● sip
04 15		● sip
04 16		● sip
04 17		● sip
04 18		● sip
04 19		● sip
04 20		● sip
04 21		● sip
04 22		● sip
04 23		● sip
04 24		● sip
04 25		● sip
04 26		● sip
04 27		● sip
04 28		● sip
04 29		● sip
04 30		● sip
04 31		● sip
04 32		● sip
04 33		● sip
04 34		● sip
04 35		● sip
04 36		● sip
04 37		● sip
04 38		● sip
04 39		● sip
04 40		● sip
04 41		● sip
04 42		● sip
04 43		● sip
04 44		● sip
04 45		● sip
04 46		● sip
04 47		● sip
04 48		● sip
04 49		● sip
04 50		● sip
04 51		● sip
04 52		● sip
04 53		● sip
04 54		● sip
04 55		● sip
04 56		● sip
04 57		● sip
04 58		● sip
04 59		● sip
04 60		● sip
04 61		● sip
04 62		● sip
04 63		● sip
04 64		● sip
04 65		● sip
04 66		● sip
04 67		● sip
04 68		● sip
04 69		● sip
04 70		● sip
04 71		● sip
04 72		● sip
04 73		● sip
04 74		● sip
04 75		● sip
04 76		● sip
04 77		● sip
04 78		● sip
04 79		● sip
04 80		● sip
04 81		● sip
04 82		● sip
04 83		● sip
04 84		● sip
04 85		● sip
04 86		● sip
04 87		● sip
04 88		● sip
04 89		● sip
04 90		● sip
04 91		● sip
04 92		● sip
04 93		● sip
04 94		● sip
04 95		● sip
04 96		● sip
04 97		● sip
04 98		● sip
04 99		● sip
04 100		● sip
04 101		● sip
04 102		● sip
04 103		● sip
04 104		● sip
04 105		● sip
04 106		● sip
04 107		● sip
04 108		● sip
04 109		● sip
04 110		● sip
04 111		● sip
04 112		● sip
04 113		● sip
04 114		● sip
04 115		● sip
04 116		● sip
04 117		● sip
04 118		● sip
04 119		● sip
04 120		● sip
04 121		● sip
04 122		● sip
04 123		● sip
04 124		● sip
04 125		● sip
04 126		● sip
04 127		● sip
04 128		● sip
04 129		● sip
04 130		● sip
04 131		● sip
04 132		● sip
04 133		● sip
04 134		● sip
04 135		● sip
04 136		● sip
04 137		● sip
04 138		● sip
04 139		● sip
04 140		● sip
04 141		● sip
04 142		● sip
04 143		● sip
04 144		● sip
04 145		● sip
04 146		● sip
04 147		● sip
04 148		● sip
04 149		● sip
04 150		● sip
04 151		● sip
04 152		● sip
04 153		● sip
04 154		● sip
04 155		● sip
04 156		● sip
04 157		● sip
04 158		● sip
04 159		● sip
04 160		● sip
04 161		● sip
04 162		● sip
04 163		● sip
04 164		● sip
04 165		● sip
04 166		● sip
04 167		● sip
04 168		● sip
04 169		● sip
04 170		● sip
04 171		● sip
04 172		● sip
04 173		● sip
04 174		● sip
04 175		● sip
04 176		● sip
04 177		● sip
04 178		● sip
04 179		● sip
04 180		● sip
04 181		● sip
04 182		● sip
04 183		● sip
04 184		● sip
04 185		● sip
04 186		● sip
04 187		● sip
04 188		● sip
04 189		● sip
04 190		● sip
04 191		● sip
04 192		● sip
04 193		● sip
04 194		● sip
04 195		● sip
04 196		● sip
04 197		● sip
04 198		● sip
04 199		● sip
04 200		● sip
04 201		● sip
04 202		● sip
04 203		● sip
04 204		● sip
04 205		● sip
04 206		● sip
04 207		● sip
04 208		● sip
04 209		● sip
04 210		● sip
04 211		● sip
04 212		● sip
04 213		● sip
04 214		● sip
04 215		● sip
04 216		● sip
04 217		● sip
04 218		● sip
04 219		● sip
04 220		● sip
04 221		● sip
04 222		● sip
04 223		● sip
04 224		● sip
04 225		● sip
04 226		● sip
04 227		● sip
04 228		● sip
04 229		● sip
04 230		● sip
04 231		● sip
04 232		● sip
04 233		● sip
04 234		● sip
04 235		● sip
04 236		● sip
04 237		● sip
04 238		● sip
04 239		● sip
04 240		● sip
04 241		● sip
04 242		● sip
04 243		● sip
04 244		● sip
04 245		● sip
04 246		● sip
04 247		● sip
04 248		● sip
04 249		● sip
04 250		● sip
04 251		● sip
04 252		● sip
04 253		● sip
04 254		● sip
04 255		● sip
04 256		● sip
04 257		● sip
04 258		● sip
04 259		● sip
04 260		● sip
04 261		● sip
04 262		● sip
04 263		● sip
04 264		● sip
04 265		● sip
04 266		● sip
04 267		● sip
04 268		● sip
04 269		● sip
04 270		● sip
04 271		● sip
04 272		● sip
04 273		● sip
04 274		● sip
04 275		● sip
04 276		● sip
04 277		● sip
04 278		● sip
04 279		● sip
04 280		● sip
04 281		● sip
04 282		● sip
04 283		● sip
04 284		● sip
04 285		● sip
04 286		● sip
04 287		● sip
04 288		● sip
04 289		● sip
04 290		● sip
04 291		● sip
04 292		● sip
04 293		● sip
04 294		● sip
04 295		● sip
04 296		● sip
04 297		● sip
04 298		● sip
04 299		● sip
04 300		● sip
04 301		● sip
04 302		● sip
04 303		● sip
04 304		● sip
04 305		● sip
04 306		● sip
04 307		● sip
04 308		● sip
04 309		● sip
04 310		● sip
04 311		● sip
04 312		● sip
04 313		● sip
04 314		● sip
04 315		● sip
04 316		● sip
04 317		● sip
04 318		● sip
04 319		● sip
04 320		● sip
04 321		● sip
04 322		● sip
04 323		● sip
04 324		● sip
04 325		● sip
04 326		● sip
04 327		● sip
04 328		● sip
04 329		● sip
04 330		● sip
04 331		● sip
04 332		● sip
04 333		● sip
04 334		● sip
04 335		● sip
04 336		● sip
04 337		● sip
04 338		● sip
04 339		● sip
04 340		● sip
04 341		● sip
04 342		● sip
04 343		● sip
04 344		● sip
04 345		● sip
04 346		● sip
04 347		● sip
04 348		● sip
04 349		● sip
04 350		● sip
04 351		● sip
04 352		● sip
04 353		● sip
04 354		● sip
04 355		● sip
04 356		● sip
04 357		● sip
04 358		● sip
04 359		● sip
04 360		● sip
04 361		● sip
04 362		● sip
04 363		● sip
04 364		● sip
04 365		● sip
04 366		● sip
04 367		● sip
04 368		● sip
04 369		● sip
04 370		● sip
04 371		● sip
04 372		● sip
04 373		● sip
04 374		● sip
04 375		● sip
04 376		● sip
04 377		● sip
04 378		● sip
04 379		● sip
04 380		● sip
04 381		● sip
04 382		● sip
04 383		● sip
04 384		● sip
04 385		● sip
04 386		● sip
04 387		● sip
04 388		● sip
04 389		● sip
04 390		● sip
04 391		● sip
04 392		● sip
04 393		● sip
04 394		● sip
04 395		● sip
04 396		● sip
04 397		● sip
04 398		● sip
04 399		● sip
04 400		● sip
04 401		● sip
04 402		● sip
04 403		● sip
04 404		● sip
04 405		● sip
04 406		● sip
04 407		● sip
04 408		● sip
04 409		● sip
04 410		● sip
04 411		● sip
04 412		● sip
04 413		● sip
04 414		● sip
04 415		● sip
04 416		● sip
04 417		● sip
04 418		● sip
04 419		● sip
04 420		● sip
04 421		● sip
04 422		● sip
04 423		● sip
04 424		● sip
04 425		● sip
04 426		● sip
04 427		● sip
04 428		● sip
04 429		● sip
04 430		● sip
04 431		● sip
04 432		● sip
04 433		● sip
04 434		● sip
04 435		● sip
04 436		● sip
04 437		● sip
04 438		● sip
04 439		● sip
04 440		● sip

**Release all registrations of all devices on the VoIP Switch.**

Registration for number: 04[redacted]@2[redacted]

Status	● registered
Registration Time left	00:06:41
IP Address	9[redacted] 2:5060
User Agent	FPBX-13.0.192.8(13.14.0)
Connection	SIP
Weight	1.000
Endpoint	Public IP

**Delete** Close

## The ConfigCenter Components

The "Components" displays the state and activity of the VoIP Switch components. The components are the entities of the VoIP Switch that provide all functionality and features. The display is automatically updated every few seconds and shows the actual state and load of every component.

### Note

On most VoIP Switches the "Components" display is not available for the supporters and operators.

## Navigate to "Components"

ConfigCenter:

➔ Menu "System"

➔ Menu "Components"

## Interpretation of "Components" Information

Display of "Components":

**Name of all installed components.**

**Presents the state of a connection:**

- active:**  
The component is working correctly and is active.
- passive:**  
The component is correctly working and ready for jump in.
- barred:**  
The component is correctly working but is suspended from its task.
- unavailable:**  
The component is not working correctly!

**In the remarks mostly the load of an active component is displayed. In an exceptional situation a short description is given.**

Name	State	Remark
HealthCheck 1	● active	
HealthCheck 2	● passive	
LoadBalancer 1	● active	153/508 messages
LoadBalancer 2	● passive	0/0 messages
CallBalancer 1	● active	
CallBalancer 2	● passive	
MediaServer 1	● active	919 streams
MediaServer 2	● active	914 streams
ServiceCenter 1	● active	434 calls
ServiceCenter 2	● active	453 calls
MediaCenter 1	● active	
MediaCenter 2	● active	
FaxServer 1	● active	
FaxServer 2	● active	
CallAgent 1	● active	108 endpoints
CallAgent 2	● active	102 endpoints
CDRCollector	● active	
RatingCenter 1	● passive	
RatingCenter 2	● passive	
AdminCenter 1	● active	
AdminCenter 2	● active	28 sessions
ConfigCenter 1	● active	6 sessions
ConfigCenter 2	● active	
Database 1	● active	209 connections
Database 2	● active	95 connections

By clicking on the line of a component a dialog pops up, which provides more informations or enables to send messages or handle the work load of the component:

**IP address of the component within the VoIP Switch internal communication.**

**Installed software version of the component**

**The Acceptance defines the work load that a component has to take over. A value of 0 puts the component in the "barred" state.**

**Enables the possibility to generate a message with a certain severity and any text in the log files of the component.**

**With a severity higher than "Info" an E-mail will be sent to the defined addressees in the Xymon alerting.**

The dialog box shows fields for Name, State, IP Address, Version, Remark, Acceptance, and a Test-Alarm section with a severity dropdown and a Send button.

## The ConfigCenter Channels

The ConfigCenter "Channels" is a live display of the current active connections and connection build-up. The administrator can filter an search the connections. If needed a connection can be forced to be released.

### Note

On most VoIP Switches the "Channels" display is not available for the supporters and operators.

## Navigate to "Channels"

ConfigCenter:

➔ Menu "Channels"

## Interpretation of "Channels" Information

Display of "Channels":

**The telephone number of the connection peers.**  
Click on "Number" or "Peer" for sorting the list.

**Search for text string, e.g.:**

- Telephone number
- ServiceCenter

**Presents the call leg of a connection:**

- Calling : A leg
- Called: B leg

Click on "Direction" for selecting just one or all call leg.

**State and duration of the connection.**  
Click on "State" or "Duration" for sorting the list.

**Release a connection by clicking X.**

**Indicates on which ServiceCenter server the connection is handled:**

- sc1: ServiceCenter 1
- sc2: ServiceCenter 2

Click on "SC" for sorting the list.

The Channels window displays a table with columns: Number, Direction, Peer, State, Duration, and SC. It includes a search bar and sorting options.

## The ConfigCenter System Utilization

The "System Utilization" gives a statistical overview of the VoIP Switch resource utilization:

- ◇ Number of accounts
- ◇ Number of addresses (telephone numbers)
- ◇ Number of registrations
- ◇ etc

### Note

On most VoIP Switches the "System Utilization" display is not available for the supporters and operators.

## Navigate to "System Utilization"

ConfigCenter:

- Menu "System"
- Menu "Utilization"

## Interpretation of the "System Utilization" Information

The "System Utilization" provides the numbers of used resources:

