# 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 an 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
- Onection 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":

Optional Filter for Text	Support Log
String, e.g.: • Call Id • Telephone number	To limit the size of data the following restrictions can be configured: Text sc1278747363657 From 2015/12/22 16:00.00
Time Span or Duration: Mandatory: • "From" • "Until" or "Duration"	Duration 00.14.42 If at least one Category is selected, only matching entries are displayed:
	All Registr. Routing Calls
Optional Filters for Different Categories	Timeout Authent. Config. Outported Emerg. Rules Alarm Presence
	Additional information to display: Domain Component Categories
	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:

- Insert the in "From" the desired start date/time
   Insert in "Duration" the needed length
   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 ]

	Get the events of a connection in the past:	
Best Practice	<ol> <li>Search the Call ID of the connection in the "Call Data"</li> <li>Use the Call ID in the "Text" filter of the Support Log dialog</li> <li>Make sure that the connection date/time match "From"- "Until"</li> <li>Download the Support Log</li> </ol>	
	Get the events of a just finished connection:	
	<ol> <li>Set the "Duration" to 5min (or shorter)</li> <li>Download the Support Log</li> <li>Search for the connection</li> </ol>	

### 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:

Date/time of the event	
ServiceCenter where this event was logged, e.g.:	
sc1 → Host *-sc-01	
sc2 → Host *-sc-02	38 2010-03-19-13:17:28,410 scl scl 00786539995 start call from 0110 to 0220
	39 2010-03-19-13:17:28,414 scl scl100786539995 routing call to address 0220
	40 2010-03-19-13:17:28,418 scl scl100786539995 rule 'Adjust Domain' rewrites
	41 2010-03-19-13:17:30,475 sc1 sc1100786539995 0220 connected
	42 2010-03-19-13:17:33,229 sci sci100786539995 0110 disconnected
Connection event	
description	

### 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 .



### Navigate to the "Trace"

ConfigCenter:

→ Menu "Support"

Menu "Trace"

### Get a "Trace"

Dialog: "Trace":



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 ]

Retrieving a "Trace" in the past:

- Insert the in "From" the desired start date/time
   Insert in "Duration" the needed length
   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 ]

	Get the events of a connection in the past:	
	<ol> <li>Search the connection in the "Call Data"</li> <li>Click the Button [Trace]</li> </ol>	
Best Practice	Get the events of a just finished connection:	
	<ol> <li>Set the "Duration" to 5min (or shorter)</li> <li>Download the Trace</li> <li>Search for the connection</li> </ol>	

#### 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:

64264	Time		Source	Destination	Protocol 14	reath lafo
	2015-11-06 08:49:19	390000	81.	81.	STP/SOF	794 Request: INVITE sin:04: "081
64265	2015-11-06 08:49:19.4	408000	81.	81.	SIP	319 Status: 100 Trying
64266	2015-11-06 08:49:19	543000	192, 168, 222, 53	192, 168, 222, 53	STP/SDF	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	STP	388 Status: 100 Trying
64268	2015-11-06 08:49:19	547000	192.168.222.53	192, 168, 222, 53	STP/SOF	692 Status: 200 0K 1
64260	2015-11-06 08:49:19	550000	81	81	STP/SDE	663 Status: 200 OK 1
64270	2015-11-06 08:49:19	573000	81	81	STP	434 Request: ACK sin:0435210557081 5060 1
64271	2015-11-06 08:49:10	574000	107 168 222 53	102 168 222 53	STD	353 Dequest: ACK sin:mcf conf@102 168 222 53:5062
64272	2015-11-06 08:49:43	095000	81	81	STD	434 Dequest: BVE sin:0435210557081 :5060
64273	2015-11-06 08:49:43	095000	81	81	STP	353 Status · 200 OK 1
64274	2015-11-06 08:40:43	008000	107 168 222 52	102 168 222 53	STD	342 Dequest: DVE sin:mcf conf@102 168 222 53:5062
64275	2015-11-06 08:49:43.4	099000	102 168 222 53	102 168 222 53	STP	372 Status - 200 OK 1
04273	2013-11-00 08.49.43.0	099000	192.100.222.33	192.100.222.33	216	372 Status: 200 OK
4			811			
· Erane	64264: 794 bytes on	wire (635	2 hits), 794 hvt	es cantured (6352 h	hits)	
Ethan	not IT Free: 00:00:00	00:50:01	(00:00:00:00:50	(01) Det: 00:00:00	00:00:00	(00:00:00:00:00)
B Ether	net 11, Src: 00:00:00	1_00:50:01	(00:00:00:00:50	:01), DSE: 00:00:00	00:00:00	(00:00:00:00:00)
a Inter	net protocol version	4, Src: 8	1 (81	), DST: 81.	(81	)
User	Datagram Protocol, Sr	rc Port: 5	062 (5062), Dst	Port: 5060 (5060)		
B Sessi	on Initiation Protoco	OT (INVITE	)			
R Recu	uest-Line: INVITE sip	:04.	7081. 3 SIP/	/2.0		
a read	sage Header					
B Mest	ange menner		hunneh abhealaidheadh	cbfbe3dadb48886		
B Mess	ia: SIP/2.0/UDP 81	:5062;	Dranch=Z9h64bK0t	CO. 0 C 2 C C C C C C C C C C C C C C C C C		
B Mess B Vi Ma	ia: SIP/2.0/UDP 81 x-Forwards: 70	:5062;	brancn=z9nG4bK01			
B Mess B Vi Ma B Fr	ia: SIP/2.0/UDP 81 ux-Forwards: 70 rom: <sip:07< td=""><td>:5062;</td><td>:tag=f82a933b62</td><td></td><td></td><td></td></sip:07<>	:5062;	:tag=f82a933b62			
B Mess B Vi Ma B Fr	ia: SIP/2.0/UDP 81 IX-Forwards: 70 "om: <sip:07! 081<="" td=""><td>:5062; 81. &gt;</td><td>;tag=f82a933b62</td><td></td><td></td><td></td></sip:07!>	:5062; 81. >	;tag=f82a933b62			
B Mes: B Vi Ma B Fr B To	ia: SIP/2.0/UDP 81 IX-Forwards: 70 "om: <sip:07!""""""""""""""""""""""""""""""""""""< td=""><td>:5062; 81. &gt;&gt;</td><td>; tag=f82a933b62</td><td></td><td></td><td></td></sip:07!""""""""""""""""""""""""""""""""""""<>	:5062; 81. >>	; tag=f82a933b62			
B Mes: B Vi Ma B Fr B To Ca	a: SIP/2.0/UDP 81 ax-Forwards: 70 "om: <sip:07[ 081.<br="">csip:04" 7081. all-ID: 2132cad34d6bbe con: 28290 INVITE</sip:07[>	:5062; 81. >> 3> e47	; tag=f82a933b62			
Mes: Win Ma Fr B To Ca B CS	a: SIP/2.0/UDP 81 tx-Forwards: 70 rom: <sip:07! 7081<br="">all-ID: 2132cad34d6bbe seq: 28929 INVITE</sip:07!>	:5062; 81. >> 	;tag=f82a933b62	t-udos		
B Mes: B Vi Ma B Fr B To Ca B CS B CS	a: SIP/2.0/UDP 81 ux-Forwards: 70 oom: <sip:07: 08<br="">o: <sip:04 708<br="">01 - U2132cad34d6bbe Seq: 28929 INVITE untact: <sip:07 unantad: penlacer</sip:07 </sip:04></sip:07:>	:5062; 81. >> 	;tag=f82a933b62 :5062;transpor	∙t=udp>		
B Mes: B Vi Ma B Fr B To Ca B CS Su	a: SIP/2.0/UDP 81 xx=Forwards: 70 rom: <sip:07 : <sip:04 10: 2132cad34d6bbe seq: 28929 INVITE untact: <sip:07 upported: replaces</sip:07 </sip:04 </sip:07 	:5062; 81. >> 	;tag=f82a933b62 :5062;transpor	t=udp>		
Messi  Maa  Maa  Fr  To  Ca  Ca  Su  Us	a: SIP/2.0/UDP 81 xx-Forwards: 70 om: <sjp:07 281 11-ID: 2132cad34d6bbe seq: 28929 INVITE ntact: <sjp:07 </sjp:07 </sjp:07 	:5062; 81. >> e47 .4081. 960 4E60V	;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73	t≈udp> R6.T 2013-03-14 H3	23 RBS SIP	MST SIP Stack/4.1.12.18
III Mess III Vi Ma III Fr III To Ca III CS III CO Su Us Co	a: SIP/2.0/UDP 81 tx=Forwards: 70 om: ssp:077 ssp:04 sc:sip:04 sc: 28292 INVITE botted: replaces ser-Agent: Patton SN49 bottent-Type: application	:5062; 81. >> . 3> e47 . 4081. 960 4E60V ion/sdp	;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73	"t≈udp> R6.T 2013-03-14 H3;	23 RBS SIP	MST SIP Stack/4.1.12.18
III Messi III Vi Ma III Fr III Ca III CC III Ca III CC Su US CC	a: SIP/2.0/UDP 81 kx=Forwards: 70 om: csip:0/7 7881. 11-D: 2132cad34d6bbe ieq: 28929 INVITE mtact: <sip:07 mtact: <sip:07 mtact: splace ker-Agent: Patton SN45 ontent-Type: application mtent-Length: 294</sip:07 </sip:07 	:5062; 81. >> 	;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73	∙t=udp> R6.T 2013-03-14 H3;	23 RBS SIP	MST SIP Stack/4.1.12.18
III Mess III Vi Ma III Fr III To Ca III CS III CS I	a: SIP/2.0/UDP 81 x=Forwards: 70 om: <sip:07' 983.<br="">11-10: 2132-cad34d6bb seq: 28929 INVITE omtact: <sip:07 upported: replaces ser-Agent: Patton SN46 omtent-Type: application ment-Length: 294 sage Body</sip:07 </sip:07'>	:5062; 81. >> e47 .4081. 960 4E60v ion/sdp	;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73	°t≈udp> R6.T 2013-03-14 H3;	23 RBS SIP	MST SIP Stack/4.1.12.18
Mession     Maximum Second Secon	a: SIP/2.0/UDP 81 ux-Forwards: 70 rom: <sip:07 0: <sip:07 0: <sip:04 111-ID: 2132cad34d6bbe deg: 28929 INVITE siported: replaces 4er-Agent: Patton SN49 ontent=Length: 204 Sage Body ssion Description Pro-</sip:04 </sip:07 </sip:07 	:5062; 81. >> e47 .4081. 960 4E60v ion/sdp	;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73	∙t=udp> R6.T 2013-03-14 H3	23 RBS SIP	MST SIP Stack/4.1.12.18
a Mess b Vi	a: SIP/2.0/UDP 81 x=Forwards: 70 om: <sip:07' 982<br="">S: <sip:04' 7881.<br="">11-TD: 2132cad34d6bbe Generation of the second of the second sip:07</sip:04'></sip:07'>	:5062; 81. >> e47 .4081. 960 4E60V ion/sdp protocol Vio	;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73 ersion (v): 0	∙t≈udp> R6.T 2013-03-14 H3;	23 RBS SIP	MST SIP Stack/4.1.12.18
Mess     Work	ia: SIP/2.0/UDP 81 ux-Forwards: 70 rom: <sip:07 rom: <sip:07 rom: <sip:07 rom: <sip:07 rom: 2322cad34d6bbe lea: 2322cad34d6bbe lea: 2322cad34d6bbe romtact: <sip:07 romtact: <sip:07 romtact: <sip:07 romtact: sip:07 romtact: romported: replaces signification pro- Session Description Pro- Pro- Session Description Pro- Pro- Pro- Session Description Pro- Pro</sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 	:5062; 81. >> e47 .4081. 960 4E60V ion/sdp otocol 'rotocol V: n Id (o):	:tag=f82a933b62 :5062;transpor UI 00A0BA01CE73 ersion (v): 0 MxSIP 0 559 IN 3	т=udp> R6.T 2013-03-14 н3. IP4 81.	23 RBS SIP	MST SIP Stack/4.1.12.18
Mess     vi     Woss     vi     Woss     vi     Ma     Fr     G     Co     Co     Su     Us     Co     Co     Su     Se     Se     Se     B	a: SIP/2.0/UDP 81 x=Forwards: 70 om: <sip:07' 082<br="">S: <sip:04' 7881.<br="">Il-TD: 2132cad34d6bbe Generation of the second of the second sec-Agent: Patton SN48 ontent=Type: application mentelscopin: 294 sage Body sage Body sage son Description Pro- Session Description Pro- Session Description Pro- Session Description Pro- Session Description Pro- Session Session Sesion Session Session Session Session Session Session Se</sip:04'></sip:07'>	:5062; 81. >> e47 -4081. 960 4E60V ion/sdp protocol V: protocol	;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 ersion (v): 0 MxSIP 0 559 IN 1	't∞udp> R6.T 2013-03-14 H3. IP4 81.	23 RBS SIP	MST SIP Stack/4.1.12.18
Mess  Vi  Ma  Fr  To To Ca  Ca  Co  Co  Co  Mess  Se  Se	a: SIP/2.0/UDP 81 ux-Forwards: 70 rom: <sip:07 rom: <sip:07 rom: <sip:07 rom: <sip:07 rom: <rbox <br="" rom="">rom: <rbox <br="" rom="">rom: <rbox <br="" rom="">rom: </rbox>rom: </rbox>rom: </rbox>rom: rom: <td>:5062; 81. &gt;&gt; e47 .4081. 960 4E60V ion/sdp otocol Protocol V on Id (o): Call on (c): IN</td><td>:5062;transpor UI 00A0BA01CE73 ersion (v): 0 MxSIP 0 559 IN 1 IP4 81.</td><td>t=udp&gt; R6.T 2013-03-14 н3. IP4 81.</td><td>23 RBS SIP</td><td>MST SIP Stack/4.1.12.18</td></sip:07 </sip:07 </sip:07 </sip:07 	:5062; 81. >> e47 .4081. 960 4E60V ion/sdp otocol Protocol V on Id (o): Call on (c): IN	:5062;transpor UI 00A0BA01CE73 ersion (v): 0 MxSIP 0 559 IN 1 IP4 81.	t=udp> R6.T 2013-03-14 н3. IP4 81.	23 RBS SIP	MST SIP Stack/4.1.12.18
Mess     vi     Ma     Fr     Ca     Ca     Ca     Ca     Ca     Ca     Su     Us     Ca     Su     Us     Ca     Su     Us     Ca     Su     Us     Ca     Su	ia: SIP/2.0/UDP 81 ux-Forwards: 70 rom: csip:07/	:5062; \$1. >> 	:5062;transpor UI 00A08A01CE73 ersion (v): 0 MxSIP 0 559 IN : IP4 81. (b): 0 0	't∞udp> R6.T 2013-03-14 H3. IP4 81.	23 RBS SIP	MST SIP Stack/4.1.12.18
Messi Vi Ma Fri To Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca	a: STP/2.0/UDP 81 ux-Forwards: 70 rom: <sip:07 7081.01 11-ID: 2132cad34d6bbe iei: 28929 INVITE ntact: <sip:07 ier-Agent: Patton SN45 Sntent-Type: Application intentelength: 294 Sage Body Sasion Description Pro Session Description Pro Session Name (S): SIP Connection Information Time Description, act Media Description, act</sip:07 </sip:07 	:5062; 81. >> 	;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 MxSIP 0 55 IN ; IP4 81. (t): 0 0 dress (m); audio	t=udp> R6.T 2013-03-14 H3. IP4 81. 4926 RTP/AVP 8 0 1	23 RBS SIP	MST SIP Stack/4.1.12.18
Mess Vi Vi Ma Fri To Ca Ca Ca Co Su Us Co Ca Mess Se	ia: SIP/2.0/UDP 81 ux-Forwards: 70 rom: csip:07	:5062; 81. >> 	<pre>pranch=zmwekki ;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73 ersion (v): 0 MoSIP 0 559 IN : IP4 81. (v): 0 0 dress (m): audio prdw/8000</pre>	"t∞udp> R6.T 2013-03-14 H3. IP4 81. 4926 RTP/AVP 8 0 1	23 RBS SIP	MST SIP Stack/4.1.12.18
Mess Vi Vi Vi Va Fri To Ca	a: SIP/2.0/UDP 81 ux-Forwards: 70 rom: <sip:07'< td=""><td>:5062; 81. &gt;&gt; </td><td>ranch=29No40KdT ;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 MKSIP 0 59 IN ; IP4 81. (t): 0 0 dress (m); audio PCMM/8000 PCMM/8000</td><td>t=udp&gt; R6.T 2013-03-14 H3. IP4 81. 4926 RTP/AVP 8 0 1</td><td>23 RBS SIP 18 125 101</td><td>MST SIP Stack/4.1.12.18</td></sip:07'<>	:5062; 81. >> 	ranch=29No40KdT ;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 MKSIP 0 59 IN ; IP4 81. (t): 0 0 dress (m); audio PCMM/8000 PCMM/8000	t=udp> R6.T 2013-03-14 H3. IP4 81. 4926 RTP/AVP 8 0 1	23 RBS SIP 18 125 101	MST SIP Stack/4.1.12.18
Mess  Vi  Na  Fri  To Ca  Ca  Co Ca  Co C	ia: STP/2.0/UDP 81 ux-Forwards: 70 rom: csjp:07	:5062; 81. >> 447 4081. 960 4E60V 100/cotocol V 0 coll 0 coll 0 coll 10 col	<pre>pranch=zmwekki ;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73 ersion (v): 0 MoSTP 0559 IN : IP4 81. (v): 0 0 dress (m): audio pcMu/8000 cr20/R000</pre>	t=udp> R6.T 2013-03-14 H3. IP4 81. 4926 RTP/AVP 8 0 1	23 RBS SIP	MST SIP Stack/4.1.12.18
Mess Vi Ma Fri To C C C C C C C C C C C C C C C C C C	a: SIP/2.0/UDP 81 ux-Forwards: 70 rom: <sip:07 7081. 11-ID: 2132cad34d6bbe iei: 23929 INVITE ntact: <sip:07 iei: 23929 INVITE iei: 23929 INVITE iei:</sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 	:5062; 81. >> 	ranch=zmwekar ;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 ersion (v): 0 MoSIP 0 559 IN : [0000 cm/0000 cm/0000 cm/0000 g729/8000 g729/8000 g728/8000 g728/8000	t=udp> R6.T 2013-03-14 H3 IP4 81. 4926 RTP/AVP 8 0 1	23 RBS SIP 18 125 101	MST SIP Stack/4.1.12.18
Mess Vi Vi Ma Fri To Ca Ca Ca Co Ca Co Ca Su Co Co Ca Su Co Ca Ca Su Co Ca	<pre>ia: SIP/2.0/UDP 81 ux-Forwards: 70 os: csip:07</pre>	:5062; 81. >> 447 4081. 960 4E60V 100/sdp	<pre>pranch=zmwekkit ;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73 ersion (v): 0 MoSIP 0 559 IN : IP4 81. (c): 0 0 dress (m): audio PCMJ/8000 G729/8000 5 CLEARNDC/8000 5 CLEARNDC/8000</pre>	"t∞udp> R6.T 2013-03-14 H3. IP4 81. 4926 RTP/AVP 8 0 1	23 RBS SIP 18 125 101	MST SIP Stack/4.1.12.18
Mess Vi Maa Fr G C C C C C C C C C C C C C C C C C C	a: STP/2.0/UDP 81 w:Forwards: 70 rom: <sip:07 7081. 11-ID: 2132cad34d6bbe iei: 28929 INVITE mtatt: <sip:07 mtatt: <sip:07 mtattt: <sip:07 mtatt: <sip:07 mtatt: <sip:07 mtattt: <sip:07< td=""><td>:5062; 81. &gt;&gt; 4081. &gt;&gt; 4081&gt; 960 4E60V ion/sdp 970000 -&gt; 970000 -&gt; 9700000 -&gt; 970000 -&gt; 9700000 -&gt; 970000000000 -&gt; 97000000000000000000000000000000000000</td><td>ranch=znwewar ;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 ersion (v): 0 MoSIP 0 559 IN ; 104 81. (t): 0 0 iness 0 (v): audio NCM/000 NCM/000 CSU/0000 S (LEAMODE/8000 S (LEAMODE/8000 S (LEAMODE/8000</td><td>t=udp&gt; R6.T 2013-03-14 H3 IP4 81. 4926 RTP/AVP 8 0 1 t/8000</td><td>23 RBS SIP 18 125 101</td><td>MST SIP Stack/4.1.12.18</td></sip:07<></sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 </sip:07 	:5062; 81. >> 4081. >> 4081> 960 4E60V ion/sdp 970000 -> 970000 -> 9700000 -> 970000 -> 9700000 -> 970000000000 -> 97000000000000000000000000000000000000	ranch=znwewar ;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 ersion (v): 0 MoSIP 0 559 IN ; 104 81. (t): 0 0 iness 0 (v): audio NCM/000 NCM/000 CSU/0000 S (LEAMODE/8000 S (LEAMODE/8000 S (LEAMODE/8000	t=udp> R6.T 2013-03-14 H3 IP4 81. 4926 RTP/AVP 8 0 1 t/8000	23 RBS SIP 18 125 101	MST SIP Stack/4.1.12.18
Mess  Vi  Mai  Fr  To  Ca  Ca  Co  Su  Us  Co  Su  Us  Co  Su  Se	ia: SIP/2.0/UDP 81 ix:Forwards: 70 rom: esip:07///// 82 rom: esip:07//// 82 rom: esip:07/// 82 rom: esip:07/// 82 rom: esip:07/// 788 rom: esip:07// 788 rom: esip:07// 788 rom: esip:07// 788 rom: esip:07// 788	:5062; 81. >> e47 i081. 960 4E60V ion/sdp otocol vrotocol V otocol vrotocol V otocol vrotocol V otocol rotocol V otocol rotocol V otocol rotocol rotocol V otocol r	ranch=zmwekar ;tag=f82a933b62 :5062;transpor UI 00A0BA01CE73 ersion (v): 0 MxSIP 0 559 IN : IP4 81. (c): 0 0 dress (m): audio PCM/8000 GCL28M00C/8000 1 telephone=even inexb=no	"t∞udp> R6.T 2013-03-14 H3. IP4 81. 4926 RTP/AVP 8 0 1 t/8000	23 RBS 51P 18 125 101	MST SIP Stack/4.1.12.18
Mession Maa Fr K K K K K K K K K K K K K K K K K K	a: STP/2.0/UDP 81 w:rForwards: 70 rom: <sip:04''' 7081.<br="">11-ID: 2132cad34d6bbe iea: 28929 INVITE mtatt: <sip:07''' 7081.<br="">ipported: replaces ier-Agent: Patton SN45 Sntent-Type: application mtentelength: 244 Sage Body session Description Pro Session Name (s): SIP Connection Information Session Name (s): SIP Connection Information Thedia Attribute (a): Media Attribute (a): Media</sip:07'''></sip:04'''>	:5062; 81. >> e47 4081. 960 4E60V ion/sdp otocol rotocol V or call on (c): IN ion (c): IN ive time ume and ad rtpmap:0 rtpmap:12 rtpmap:10 fmtp:18 a fmtp:101.	ranch=zmwekar ;tag=f82a933b62 :5062;transpor UI 00A08A01CE73 ersion (v): 0 MeSIP 0 559 IN ; IP4 81. (t): 0 0 fress (m): audio redu/8000 GCU2/800 GCU2/8	t=udp> R6.T 2013-03-14 H3 IP4 81. 4926 RTP/AVP 8 0 1 t/8000	23 RBS SIP 18 125 101	MST SIP Stack/4.1.12.18

#### 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:

Start Time -	Stop Time	Initial Speaker	From	То	Protocol	Packets	State	Comments	
52.373	253.222	85	sip:0 'Csip01.tra	sip:04 @sip01	SIP	11	REJECTED		
54.130	287.793	213	sip:92@91	sip:008	SIP	15	IN CALL		
8.602	302.933	213. 1	sip:07: @21.	sip:0900000000000000000000000000000000000	SIP	13	COMPLETED		
8.784	276.349	85. *** 1.34	sip:04 +@sip01.tra	sip:04	SIP	13	REJECTED		
7.160	294.817	9:	sip:0( @9:	sip:04. @91 ?	SIP	19	COMPLETED		
9.900	285.546	21 57	sip:06 6@9'	sip:06 @91 ?	SIP	15	IN CALL		
4.561	297.739	91 1	sip:6161@91.	sip:08 @91	SIP	15	IN CALL		
6.394	288.233	62	sip:00000000@91.	sip:08 1@9***	SIP	13	IN CALL		
7.277	293.579	80.	sip:313681415@91 )	sip:03 3091.	SIP	15	IN CALL		
7.406	296.029	21 1	sip:03 7@21	sip:09 3@91	SIP	12	IN CALL		
2.222	293.219	811	sp:80@91. )	sp:04 291	SIP	9	CALL SETUP		
2.409	302.507	211		2002	SIP CTD	12	INCALL		
0.357	303.830	21. 5	sp:000000000091. 1	sp:004	CTD	15	CALL SETUD		
4 164	300.700	212 1	sip:anonymous ganonymou	sip:09/ 5/801	CTD	2	DE TECTED		

Example of a Wireshark call flow:

Navigate in Wireshark:

→ Menu "Statistics"
→ Menu "VoIP Calls"
$\rightarrow$ 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:

- Ocall start and end date/time
- Ocall duration
- Ocall 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" .

	<ul> <li>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.</li> </ul>
Note	<ul> <li>Not all filter options may be available on the VoIP Switch.</li> </ul>
	<ul> <li>The "Call Data" is tenant sensitive. This means a supporter/operator of tenant A is not able to see events of tenant B!</li> </ul>

Warning	Depending an the settings of a VoIP system it may be possible to change values in CDR.
wanning	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":



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:

CD	DR: sc1336652568403
Call details	Dr: sc1336652568403     X       Call ID     sc1336652568403       Charges Account     0.00       Charges Tenant     0.00       Time     2017/08/24 10:54       Duration     000000       Restricted     no       Calling Number     044       Called Number     051       State     canceled       Leg     A       CLIP     0449980912
Ra	Destination Switzerland-058 (Corporate) Dest. Type VAS Postrating Late Import Time Billing Info Ok. Save Delete Trace MediaTrace Close
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-registrated on the VoIP Switch by force.

Hint:

The device cannot be informed that it was de-registerd 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:

 $\rightarrow$  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:



By clicking on the line of an address and then the right arrow at "Registration" a dialog pops up, which provides informations of all registrations of the address:



## 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.



### Navigate to "Components"

ConfigCenter:

- → Menu "System"
  - Menu "Components"

### Interpretation of "Components" Information

Display of "Components":

Presents the state of a connection:       Name       State       Remark         connection:       Active:       Name       State       Remark         The component is working correctly and is active:       LoadBalancer 1       Chie e       153/558 messages         constance       O/0 metsages       CallBalancer 1       Chie e       0/0 metsages         passive:       CallBalancer 1       Chie e       0/0 metsages         CallBalancer 1       Chie e       0/0 metsages         CallBalancer 2       Chie e       919 streams         MediaServer 2       Active       914 streams         ServiceCenter 1       ServiceCenter 1       ServiceCenter 1         ServiceCenter 1       CallBalancer 2       Active         ServiceCenter 1       ServiceCenter 1       ServiceCenter 1         ServiceCenter 1       ServiceCenter 1       ServiceCenter 1         ServiceCenter 1       ServiceCenter 1       ServiceCenter 1         unavailable:       The component is not working correctly       RatingCenter 1       Service 1         CallCenter 1       ServiceCenter 2       Service 1       ServiceCenter 2       Service 1         Chie ConfigGenter 1       ServiceCenter 2       Service 1       Service 1         CallBalance 2		Conconents			
connection: <ul> <li>active:</li> <li>active:</li> <li>bassive:</li> <li>CaliBalance: 1</li> <li>active:</li> <li>bassive:</li> <li>CaliBalance: 2</li> <li>active:</li> <li>correctly working and ready and ready</li></ul>	Presents the state of a	Name	State	Remark	
active:       HealthCheck 2       Desive         The component is working correctly and is active.       LadBBancer 1       active         passive:       CallBalancer 1       active         The component is correctly working and ready for jump in.       CallBalancer 2       active         barred:       MediaServer 2       active       918 streams         The component is correctly working but is suspended from its task.       ServiceCenter 1       active         unavailable:       CallBalancer 2       active       433 calls         The component is norrectly working but is suspended from its task.       CallBalancer 2       active         CallBalancer 1       active       100 empoints         CallAgent 1       active       102 empoints         CallAgent 2       active       active         Passive       AdminCenter 1       active         The component is not working correctly!       CallAgent 1       active         nthe remarks mostly the load of an active configCenter 1       active       28 sesions configCenter 1         CallBalance 2       active batabase 1       active active       200 connections batabase 2	connection:	HealthCheck 1	active		
The component is working correctly variant is active. passive: The component is correctly working and ready for jump in. barrod: The component is correctly working but is suspended from its task. uavailable: The component is not working correctly! The component is not working correctly working but is suspended from its task. unavailable: The component is not working correctly! The component is not the load of an active Database 1 active schema component is not the component is not the component is not the component is not the load of an active Database 2 active schema component is not the component is not	active:	HealthCheck 2	passive	T	
The component is active.     Calibalancer 2     epsive     0/0 messages       Calibalancer 2     epsive     0/0 messages       Calibalancer 2     epsive     919 streams       Calibalancer 2     eqtive     919 streams       Calibalancer 2     eqtive     919 streams       Parred:     MediaServer 1     eqtive       The component is correctly working but is suspended from its task.     ServiceCenter 1     ective       Unavailable:     Calibalancer 2     ective       The component is suspended from its task.     Calibalancer 2     ective       Calibalancer 2     ective     100 endpoints       Calibalancer 2     ective     28 sesions       CanifgCenter 1     ective     28 sesions       ConfgCenter 1     ective     200 connections       Database 2     ective	The component is working	LoadBalancer 1	<ul> <li>active</li> </ul>	153/598 messages	
correctly and is active.       Calibrationer 1       excluse         passive:       Calibrationer 2       paysive         The component is correctly working and ready for jump in.       BerviceCenter 1       excluse         barred:       The component is correctly working but is suspended from its task.       MediaServer 1       excluse         unavailable:       The component is not working correctly!       Calibrationer 2       excluse         the remarks mostly he load of an active component is lisplayed.       Calibrationer 2       excluse         the remarks mostly he load of an active component is lisplayed.       Calibrationer 2       excluse         Correctly       Calibrationer 2       excluse       100 empoints         Calibrationer 2       excluse       Calibrationer 2       excluse         The component is component is not       Calibrationer 2       excluse       100 empoints         Calibrationer 2       excluse       100 empoints       Calibrationer 2       excluse         Calibrationer 2       excluse       28 sesions       ConfigCenter 1       excluse         ConfigCenter 1       excluse       200 connections       Database 2       excluse       200 connections	The component is working	LoadBalancer 2	passive	0/0 messages	
passive:     Calibalancer 2     pasive       The component is correctly working and ready for jump in.     MediaServer 1     active     919 streams       ServiceCenter 1     active     919 streams       ServiceCenter 1     active     919 streams       Correctly working but is suspended from its task.     MediaCenter 1     active       Unavailable:     The component is correctly working correctly     active       The component is suspended from its task.     Calibalancer 2     active       The component is not working correctly     Calibalancer 2     active       The remarks mostly he load of an active Database 1     active     28 sesions       ConfigCenter 1     active     28 sesions       Database 1     active     95 convections	correctly and is active.	CallBalancer 1	active		
The component is correctly working and ready for jump in.     MediaServer 1     exclue     919 steams       mediaServer 2     exclue     919 steams       barred: The component is correctly working but is suspended from its task. unavailable:     FacServer 1     extive       The component is correctly working but is suspended from its task.     FacServer 1     extive       The component is not working correctly!     FacServer 2     extive       The component is not working correctly!     FacServer 2     extive       The component is not working correctly!     CallAgent 1     extive       The component is not working correctly!     CallAgent 2     extive       The component is supponded from its task.     CallAgent 2     extive       CallAgent 2     extive     100 endpoints       CallAgent 2     extive     100 endpoints       CallAgent 2     extive     28 sesions       ConfgCenter 1     extive     209 connections       Database 1     extive     95 connections	passive:	CallBalancer 2	passive		
correctly working and ready for jump in.     MediaServer 2     e.give     914 steams       barred:     ServiceCenter 1     active     453 calls       barred:     MediaCenter 1     active     453 calls       The component is suspended from its task. unavailable:     MediaCenter 2     active     active       The component is not working correctly working correctly     FacServer 2     active     active       The component is not working correctly     CallAper 2     active     108 endpoints       CallAper 2     pasive RatingCenter 1     active     102 endpoints       CallAper 2     pasive RatingCenter 2     pasive Pasive     AdminCenter 1     active       ConfigCenter 1     active     28 sesions     ConfigCenter 1     pasive Pasive       AdminCenter 1     active     208 connections     ConfigCenter 1       Database 1     active     95 connections	The component is	MediaServer 1	active	919 streams	
Contextity Working all of ready for jump in.     ServiceCenter 2 = active ServiceCenter 2 = active FaxServer 1 = active FaxServer 2 = active CallAgent 1 = active CallAgent 1 = active CallAgent 2 = a	correctly working and	MediaServer 2	active	914 streams	
ready for jump in. barred: The component is correctly working but is suspended from its task. unavailable: The component is not working correctly! The remarks mostly the load of an active congocenter 1 active PasServer 1 active CallAgent 2 active CallAg	correctly working and	ServiceCenter 1	active	434 ca is	
barred:     MediaCenter 1        eative        The component is correctly working but is suspended from its task. unavailable:        eative        The component is not working correctly!        PaxServer 1       eative         active        The component is not working correctly!        PaxServer 2       active       CallAgent 1       active       CallAgent 2       active       CallAgent 4       active       active       active       active       active       active       active       active       activ	ready for jump in.	ServiceCenter 2	active	453 ca is	
The component is uspended from its task. unavailable: The component is not working correctly! The the remarks mostly te load of an active omponent is isplayed. MathingCenter 1 = active CallAgent 2 = active 102 endpoints CallAgent 2 = active 28 sessions ConfigCenter 1 = active 28 sessions ConfigCenter 2 = active 28 sessions ConfigCenter 2 = active 28 sessions ConfigCenter 2 = active 209 convections Database 1 = active 295 convections	barred:	MediaCenter 1	active	and the second	
correctly working but is suspended from its task. unavailable: The component is not the remarks mostly te load of an active confgCenter 1 = active CallAgent 2 = active ConfgCenter 1 = active ConfgCenter 2 = active ConfgCen	The component is	MediaCenter 2	active		
Confection working out its suspended from its task. unavailable:     PavServer 2        active CallAgent 1         The component is not working correctly!       CallAgent 1        active active        102 endpoints CallAgent 2         The component is not working correctly!       PatingCenter 1        active Passive AdminCenter 1        active active ConfgCenter 1        active active active confgCenter 1        active active confgCenter 1        active active active active Database 1        active gS conjections active gS conjections active active	correctly working but is	FaxServer 1	active		
suspended from its task. unavailable:     CallAgent 1        active CallAgent 2        active active active active active active callAgent 2        100 empoints 102 empoints 102 empoints 102 empoints 102 empoints 102 empoints callAgent 2       the remarks mostly the load of an active omponent is lsplayed.        AdminCenter 1 ConfigCenter 1 calle active configCenter 2 active configCenter 2 configCenter 2 calle active configCenter 2 configCenter 2 calle active configCenter 2 configCenter 2	conectly working but is	FaxServer 2	active		
unavailable: The component is not working correctly! I the remarks mostly te load of an active papaged. I the remarks mostly to far and the remarks mostly to page the remarks mostly the remarks mostly the remarks mostly to far and the re	suspended from its task.	CallAgent 1	active	108 endpoints	
The component is not configurate 1 extive exting correctly!  AdminCenter 1 extive AdminCenter 1 extive AdminCenter 1 extive ConfigCenter 2 extive ConfigCenter 1 extive ConfigCenter 1 extive ConfigCenter 1 extive Database 1 extive Database 1 extive SconfigCenter 2 extive SconfigCenter 2 extive SconfigCenter 2 extive ConfigCenter	unavailable:	CallAgent 2	active	102 endpoints	
working correctly!         RatingCenter 1         epassive Passive AdminCenter 2         epassive eactive           1 the remarks mostly to load of an active omponent is isplayed.         ConfigCenter 1         eactive eactive         28 sessions configCenter 2	The component is not	CdrCollector	active		
Working contecty:         PastingContect 2         • passive           AdminiCenter 1         • active         AdminiCenter 1         • active           I the remarks mostly te load of an active configCenter 1         • active • active         28 sessions         ConfigCenter 1           ConfigCenter 1         • active • active         0 sessions         ConfigCenter 2         • active           Database 1         • active • active         95 connections         Database         9 active	working correctly!	RatingCenter 1	passive		
AdminiCenter 1 eactive 28 sessions ConfigCenter 2 eactive 28 sessions ConfigCenter 2 eactive 28 sessions ConfigCenter 2 eactive 6 sessions ConfigCenter 2 eactive 200 connections Isplayed. Database 1 eactive 95 connections	working correctly:	RatingCenter 2	passive		
a the remarks mostly         adminCenter 2         active         28 sessions           te load of an active         ConfigCenter 1         active         6 sessions           component is         Database 1         active         200 connections           isplayed.         Database 2         active         95 connections		AdminCenter 1	active		
ConfigCenter 1         eactive         6 sessons           component is         Database 1         eactive         200 connections           isplayed.         Database 2         eactive         95 connections	the remarke mostly	AdminCenter 2	active	28 sessions	
te load of an active ConfigCenter 2 eactive Database 1 eactive 209 connections Database 2 eactive 95 connections	the remarks mostly	ConfigCenter 1	active	6 sessions	
omponent is Database 1 • active 200 connections Isplayed. • • • • • • • • • • • • • • • • • • •	ie load of an active	ConfigCenter 2	active		
Isplayed.	omponent is	Database 1	active	209 connections	
isplayed.	omponentis	Database 2	active	95 connections	
an eventional	isplayed. –				
an exceptional	an exceptional				

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	ServiceCenter	×	
VoIP Switch internal communication.	Name ServiceCenter State active		
Installed software	IP Address 192.168.32.12 Version 6.8.10542 Remark	Enables the poss	ibility
component	Acceptance 100	Change with a certain sev and any text in th	verity le log
The Acceptance defines the work load that a component has		files of the compo Close With a severity hi	onent. igher
to take over. A value of 0 puts the component in the "barred" state.		than "Info" an E- will be sent to the defined addresse the Xymon alertin	mail e es in 1g.

## 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 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



### Navigate to "System Utilization"

ConfigCenter:



Menu "Utilization"

### Interpretation of the "System Utilization" Information

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

