

Event List

0. About

All the [events](#) that can be handled by FreeSWITCH's [event system](#).



The current up-to-date list of events can be found in [src/switch_event.c](#) in a char array called `EVENT_NAMES`.

1. Channel events

The channel events are event types/classes that can be used to monitor which calls come into an extension, and what states are the calls currently in.

Channel events can carry additional information for the protocol (i.e. SIP) used to transport the call. This information can safely be ignored, you don't have to use it to be able to track calls.

The minimum information sent for channel events (plus the headers in **0.1 Minimum event information**):

```
Channel-State: CS_NEW
Channel-State-Number: 0
Channel-Name: sofia/192.168.0.58/jonas%40192.168.0.58%3A5060
```



Channel states

The state the channel can be in. Indicated by the `Channel-State` and `Channel-State-Number`, which are sent with all CHANNEL events.

See [Channel States](#) for the complete list.

1.1 CHANNEL_CALLSTATE event

TODO

There seems to be a correspondence between channel states and CHANNEL_*STATE events. For example, only saw CHANNEL_CALLSTATE with channel states RINGING and HANGUP, and CHANNEL_STATE with the rest.

Also corroborated by a mailing list thread: <https://lists.freeswitch.org/pipermail/freeswitch-users/2012-February/080189.html>, and the answer may lie in `switch_core_state_machine.c`.

Creating a New Endpoint: Lifecycle of a Session page also goes into the FreeSWITCH state machine.

David Artuñedo Guillén David at jajah.com

Tue Feb 7 12:05:13 MSK 2012

Hi,

I'm new to FreeSwitch world. I'm looking at using the `mod_event_socket` interface to write some simple call control app. The Events I'm interested at are `CHANNEL_STATE` and `CHANNEL_CALLSTATE` to recognize the status of the calls and how they progress. I have not found any docs describing the state machines for channels and Calls. I look up in the Source code as well and couldn't find the place where the state machine is implemented.

Does anybody know where can I find this info?

EG, when setting up some call through FS these are the events I am getting with the uuids associated:

```
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_INIT
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_CALLSTATE RINGING
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_ROUTING
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_CONSUME_MEDIA
9a66eaf9-e11e-4f9c-9623-19deac73fc2e CHANNEL_CALLSTATE ACTIVE
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_CALLSTATE EARLY
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_CALLSTATE ACTIVE
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_EXECUTE
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_HIBERNATE
9a66eaf9-e11e-4f9c-9623-19deac73fc2e CHANNEL_STATE CS_HIBERNATE
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_RESET
9a66eaf9-e11e-4f9c-9623-19deac73fc2e CHANNEL_STATE CS_RESET
9a66eaf9-e11e-4f9c-9623-19deac73fc2e CHANNEL_STATE CS_SOFT_EXECUTE
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_SOFT_EXECUTE
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_CONSUME_MEDIA
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_EXCHANGE_MEDIA
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_CALLSTATE HANGUP
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_HANGUP
9a66eaf9-e11e-4f9c-9623-19deac73fc2e CHANNEL_STATE CS_PARK
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_REPORTING
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_CALLSTATE DOWN
bbac39e0-9025-4969-a6ba-b49c89b12237 CHANNEL_STATE CS_DESTROY
```

Thanks in advance.

David

The reply:

João Mesquita jmesquita at freeswitch.org

Tue Feb 7 19:47:32 MSK 2012

The documentation of this state machine is something that I would love to have documented somewhere. Unfortunately, very few people really know how it works and most of them are busy actually coding the core of freeswitch.

I wonder if someday someone will accept this challenge and document it, it would help a lot of other not-so-core developers to understand how things work inside FS.

Regards,

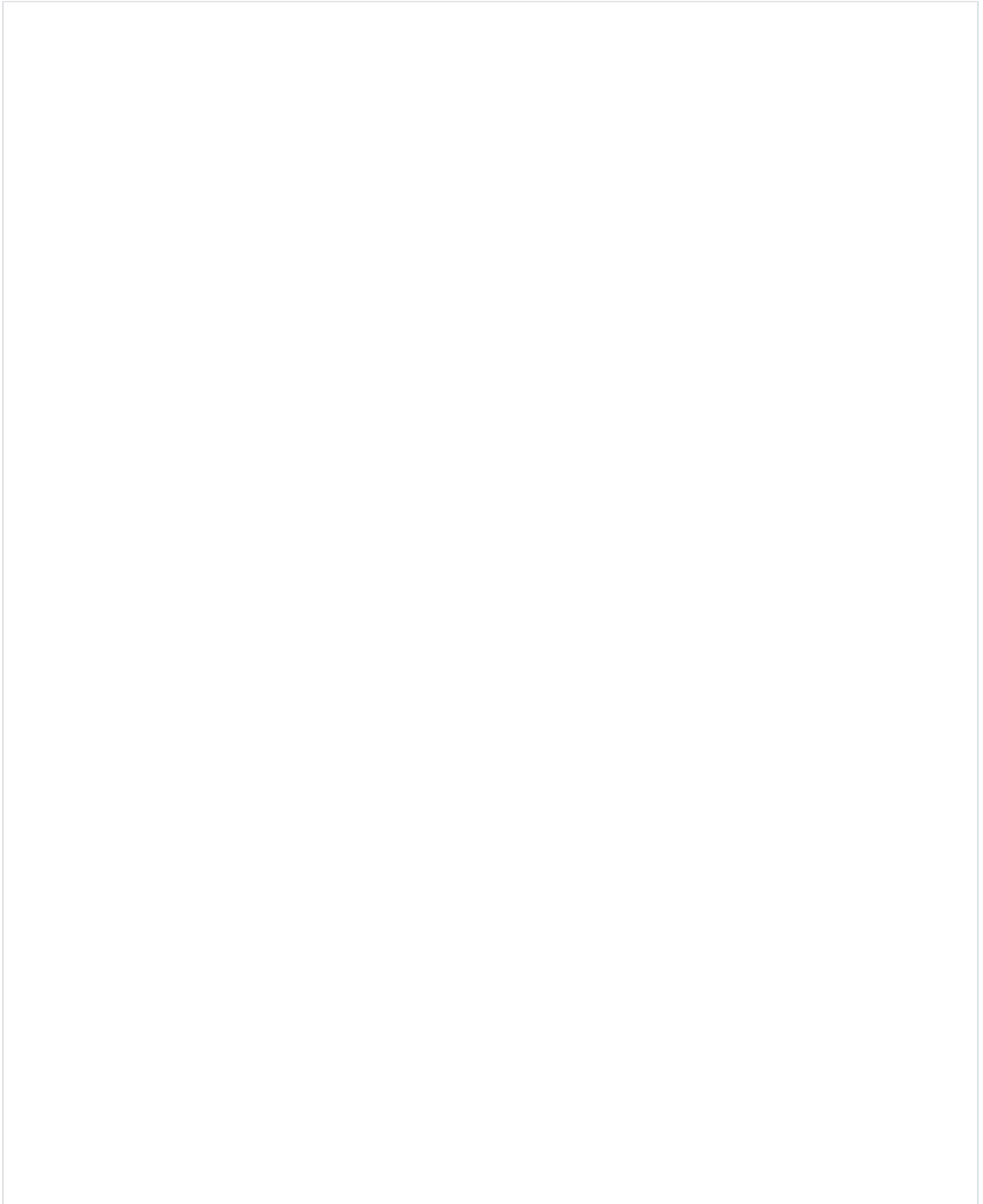
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João Mesquita

The empty lines denote the boundaries between different events. Made a test call (that hasn't been answered, only routed by an extension), and the resulting events have been filtered in Vim using `/ "Channel-State"\| "Channel-Call-State"`
`\|^$\|CHANNEL_CALLSTATE\|CHANNEL_STATE`

The UML diagram in [Life Cycle of a Call](#) and the dump below should be helpful to decipher this. See [attachment](#) for a diff between two CHANNEL_STATE event, one in CS_ROUTING and one in CS_EXECUTE state (there's very little difference).

See also [Creating a New Endpoint: Lifecycle of a Session](#) page!



```
{ "Channel-State", "CS_NEW" },

{ "Channel-State", "CS_INIT" },

    { "Channel-Call-State", "DOWN" },
    { "Channel-State", "CS_NEW" },
    { "Event-Name", "CHANNEL_STATE" },

    { "Channel-Call-State", "DOWN" },
    { "Channel-State", "CS_INIT" },
    { "Event-Name", "CHANNEL_STATE" },

    { "Channel-Call-State", "DOWN" },
    { "Channel-State", "CS_INIT" },
    { "Event-Name", "CHANNEL_CREATE" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_ROUTING" },
    { "Event-Name", "CHANNEL_CALLSTATE" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_ROUTING" },
    { "Event-Name", "CHANNEL_STATE" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_EXECUTE" },
    { "Event-Name", "CHANNEL_STATE" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_EXECUTE" },
    { "Event-Name", "CHANNEL_EXECUTE" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_EXECUTE" },
    { "Event-Name", "CHANNEL_EXECUTE_COMPLETE" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_ROUTING" },
    { "Event-Name", "CHANNEL_STATE" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_ROUTING" },
    { "Event-Name", "CHANNEL_HANGUP" },

    { "Channel-Call-State", "RINGING" },
    { "Channel-State", "CS_HANGUP" },
    { "Event-Name", "CHANNEL_STATE" },

    { "Channel-Call-State", "HANGUP" },
    { "Channel-State", "CS_HANGUP" },
    { "Event-Name", "CHANNEL_CALLSTATE" },

    { "Channel-Call-State", "HANGUP" },
    { "Channel-State", "CS_REPORTING" },
    { "Event-Name", "CHANNEL_STATE" },

    { "Channel-Call-State", "HANGUP" },
    { "Channel-State", "CS_REPORTING" },
    { "Event-Name", "CHANNEL_HANGUP_COMPLETE" },

    { "Channel-Call-State", "HANGUP" },
    { "Channel-State", "CS_REPORTING" },
    { "Event-Name", "CHANNEL_DESTROY" },

    { "Channel-Call-State", "HANGUP" },
    { "Channel-State", "CS_DESTROY" },
    { "Event-Name", "CHANNEL_STATE" },
```

CHANNEL_CALLSTATE example

```
Content-Length: 1754
Content-Type: text/event-plain

Event-Name: CHANNEL_CALLSTATE
Core-UUID: f852daae-6da9-4979-8dc8-fall651a7891
FreeSWITCH-Hostname: test
FreeSWITCH-IPv4: 1.2.3.4
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2010-12-21%2014%3A21%3A54
Event-Date-GMT: Tue,%2021%20Dec%202010%2013%3A21%3A54%20GMT
Event-Date-Timestamp: 1292937714788536
Event-Calling-File: switch_channel.c
Event-Calling-Function: switch_channel_perform_set_callstate
Event-Calling-Line-Number: 213
Original-Channel-Call-State: HANGUP
Channel-State: CS_DESTROY
Channel-Call-State: DOWN
Channel-State-Number: 12
Channel-Name: sofia/internal_et/8000%40sipdomain.de
Unique-ID: 005f03fa-c803-428e-92cb-10534ac780dd
Call-Direction: inbound
Presence-Call-Direction: inbound
Channel-Presence-ID: 8000%40sipdomain.de
Answer-State: hangup
Channel-Read-Codec-Name: G722
Channel-Read-Codec-Rate: 16000
Channel-Read-Codec-Bit-Rate: 64000
Channel-Write-Codec-Name: G722
Channel-Write-Codec-Rate: 16000
Channel-Write-Codec-Bit-Rate: 64000
Caller-Direction: inbound
Caller-Username: 8000
Caller-Dialplan: LUA
Caller-Caller-ID-Name: Helmut%20Kuper
Caller-Caller-ID-Number: 8000
Caller-Network-Addr: 2.2.2.2
Caller-ANI: 8000
Caller-Destination-Number: ***6
Caller-Unique-ID: 005f03fa-c803-428e-92cb-10534ac780dd
Caller-Source: mod_sofia
Caller-Context: internal.lua
Caller-Channel-Name: sofia/internal_et/8000%40sipdomain.de
Caller-Profile-Index: 1
Caller-Profile-Created-Time: 1292937711184483
Caller-Channel-Created-Time: 1292937711184483
Caller-Channel-Answered-Time: 1292937711200482
Caller-Channel-Progress-Time: 0
Caller-Channel-Progress-Media-Time: 1292937711200482
Caller-Channel-Hangup-Time: 1292937714786536
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: true
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
```

1.2 CHANNEL_CREATE event

CHANNEL_CREATE is sent when an extension is going to do something. It can either be dialing someone or it can be an incoming call to an extension.

This event does not have any additional information.

CHANNEL_CREATE example

```
Event-Name: CHANNEL_CREATE
Core-UUID: 17c1c070-8a13-11de-9ab6-91a5c9f91e77
FreeSWITCH-Hostname: jmesquita-dell
FreeSWITCH-IPv4: 186.18.21.203
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2009-08-16%2000%3A26%3A08
Event-Date-GMT: Sun,%2016%20Aug%202009%2003%3A26%3A08%20GMT
Event-Date-Timestamp: 1250393168131798
Event-Calling-File: switch_channel.c
Event-Calling-Function: switch_channel_set_caller_profile
Event-Calling-Line-Number: 1428
Channel-State: CS_NEW
Channel-State-Number: 0
Channel-Name: sofia/internal/1000%40192.168.1.100
Unique-ID: 89aaa4da-8a14-11de-9ab6-91a5c9f91e77
Call-Direction: inbound
Presence-Call-Direction: inbound
Answer-State: ringing
```

1.3 CHANNEL_DESTROY event

Called when a channel should get destroyed.

CHANNEL_DESTROY example

```
Channel-Read-Codec-Name: PCMU
Channel-Read-Codec-Rate: 8000
Channel-Write-Codec-Name: PCMU
Channel-Write-Codec-Rate: 8000
Caller-Username: jonas
Caller-Dialplan: XML
Caller-Caller-ID-Name: jonas
Caller-Caller-ID-Number: jonas
Caller-Network-Addr: 192.168.0.58
Caller-Destination-Number: 192.168.0.58/arne%25192.168.0.58
Caller-Unique-ID: f66e8e31-c9fb-9b41-a9a2-a1586facb97f
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/192.168.0.58/arne
Caller-Screen-Bit: yes
Caller-Privacy-Hide-Name: no
Caller-Privacy-Hide-Number: no
Originator-Username: jonas
Originator-Dialplan: XML
Originator-Caller-ID-Name: jonas
Originator-Caller-ID-Number: jonas
Originator-Network-Addr: 192.168.0.58
Originator-Destination-Number: 541
Originator-Unique-ID: 0dd4e4f7-36ed-a04d-a8f7-7aebb683af50
Originator-Source: mod_sofia
Originator-Context: default
Originator-Channel-Name: sofia/192.168.0.58/jonas%40192.168.0.58%3A5060
Originator-Screen-Bit: yes
Originator-Privacy-Hide-Name: no
Originator-Privacy-Hide-Number: no
```

1.4 CHANNEL_STATE event

Sent when a channel has switched its call state.

This event does not contain any additional information.

CHANNEL_STATE example

```
Content-Length: 646
Content-Type: text/event-plain

Channel-State: CS_EXECUTE
Channel-State-Number: 4
Channel-Name: sofia/default/1006%4010.0.1.250%3A5060
Unique-ID: 74775b0d-b112-46e2-95af-c28258650blb
Call-Direction: inbound
Answer-State: ringing
Event-Name: CHANNEL_STATE
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A33%3A18
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A33%3A18%20GMT
Event-Date-timestamp: 1197865998931097
Event-Calling-File: switch_channel.c
Event-Calling-Function: switch_channel_perform_set_running_state
Event-Calling-Line-Number: 620
```

1.5 CHANNEL_ANSWER event

Someone calls and answer

CHANNEL_ANSWER - outbound example

```
Answer-State: answered
Call-Direction: outbound
Caller-ANI: 100
Caller-Callee-ID-Name: Outbound%20Call
Caller-Callee-ID-Number: 1000
Caller-Caller-ID-Name: Extension%20100
Caller-Caller-ID-Number: 100
Caller-Channel-Answered-Time: 1358091528753446
Caller-Channel-Bridged-Time: 0
Caller-Channel-Created-Time: 1358091527433428
Caller-Channel-Hangup-Time: 0
Caller-Channel-Hold-Accum: 0
Caller-Channel-Last-Hold: 0
Caller-Channel-Name: sofia/internal/sip%3A1000%40192.168.1.11%3A5062
Caller-Channel-Progress-Media-Time: 0
Caller-Channel-Progress-Time: 1358091527433428
Caller-Channel-Resurrect-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Context: default
Caller-Destination-Number: 1000
Caller-Dialplan: XML
Caller-Direction: outbound
Caller-Network-Addr: 192.168.1.11
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
Caller-Profile-Created-Time: 1358091527433428
Caller-Profile-Index: 1
Caller-Screen-Bit: true
Caller-Source: mod_sofia
Caller-Unique-ID: 81273088-c31f-4469-85a6-c878e42210e5
Caller-Username: 100
Channel-Call-State: ACTIVE
Channel-Call-UUID: c9bbde8b-379b-45d4-b193-3f761a44f3e2
Channel-HIT-Dialplan: false
Channel-Name: sofia/internal/sip%3A1000%40192.168.1.11%3A5062
Channel-Presence-ID: 1000%40192.168.1.11
Channel-Read-Codec-Bit-Rate: 64000
Channel-Read-Codec-Name: PCMU
```

Channel-Read-Codec-Rate: 8000
Channel-State: CS_CONSUME_MEDIA
Channel-State-Number: 7
Channel-Write-Codec-Bit-Rate: 64000
Channel-Write-Codec-Name: PCMU
Channel-Write-Codec-Rate: 8000
Core-UUID: 347c8e76-2a34-423a-8199-50860933a276
Event-Calling-File: switch_channel.c
Event-Calling-Function: switch_channel_perform_mark_answered
Event-Calling-Line-Number: 3397
Event-Date-GMT: Sun,%2013%20Jan%202013%2015%3A38%3A48%20GMT
Event-Date-Local: 2013-01-13%2010%3A38%3A48
Event-Date-Timestamp: 1358091528753446
Event-Name: CHANNEL_ANSWER
Event-Sequence: 6726
FreeSWITCH-Hostname: aztrock-home
FreeSWITCH-IPv4: 192.168.1.11
FreeSWITCH-IPv6: %3A%3A1
FreeSWITCH-Switchname: aztrock-home
Other-Leg-ANI: 100
Other-Leg-Caller-ID-Name: 100
Other-Leg-Caller-ID-Number: 100
Other-Leg-Channel-Answered-Time: 0
Other-Leg-Channel-Bridged-Time: 0
Other-Leg-Channel-Created-Time: 0
Other-Leg-Channel-Hangup-Time: 0
Other-Leg-Channel-Hold-Accum: 0
Other-Leg-Channel-Last-Hold: 0
Other-Leg-Channel-Name: sofia/internal/100%40192.168.1.11
Other-Leg-Channel-Progress-Media-Time: 0
Other-Leg-Channel-Progress-Time: 1358091527433428
Other-Leg-Channel-Resurrect-Time: 0
Other-Leg-Channel-Transfer-Time: 0
Other-Leg-Context: default
Other-Leg-Destination-Number: 1000
Other-Leg-Dialplan: XML
Other-Leg-Direction: inbound
Other-Leg-Network-Addr: 192.168.1.11
Other-Leg-Privacy-Hide-Name: false
Other-Leg-Privacy-Hide-Number: false
Other-Leg-Profile-Created-Time: 0
Other-Leg-Screen-Bit: true
Other-Leg-Source: mod_sofia
Other-Leg-Unique-ID: c9bbde8b-379b-45d4-b193-3f761a44f3e2
Other-Leg-Username: 100
Other-Type: originator
Presence-Call-Direction: outbound
Unique-ID: 81273088-c31f-4469-85a6-c878e42210e5
variable_RFC2822_DATE: Sun,%2013%20Jan%202013%2010%3A38%3A47%20-0500
variable_absolute_codec_string: PCMU%408000h%4020i%4064000b,PCMA%408000h%4020i%4064000b
variable_advertised_media_ip: 192.168.1.11
variable_call_uuid: c9bbde8b-379b-45d4-b193-3f761a44f3e2
variable_channel_name: sofia/internal/sip%3A1000%40192.168.1.11%3A5062
variable_dialed_domain: 192.168.1.11
variable_dialed_extension: 1000
variable_dialed_user: 1000
variable_direction: outbound
variable_dtmf_type: info
variable_ep_codec_string: PCMU%408000h%4020i%4064000b
variable_export_vars: RFC2822_DATE,dialed_extension
variable_is_outbound: true
variable_local_media_ip: 192.168.1.11
variable_local_media_port: 20342
variable_max_forwards: 69
variable_originate_early_media: true
variable_originating_leg_uuid: c9bbde8b-379b-45d4-b193-3f761a44f3e2
variable_originator: c9bbde8b-379b-45d4-b193-3f761a44f3e2
variable_originator_codec: PCMU%408000h%4020i%4064000b,PCMA%408000h%4020i%4064000b
variable_presence_id: 1000%40192.168.1.11
variable_read_codec: PCMU
variable_read_rate: 8000

variable_recovery_profile_name: internal
variable_remote_media_ip: 192.168.1.11
variable_remote_media_port: 30882
variable_rtp_use_ssrc: 3506474416
variable_session_id: 66
variable_signal_bond: c9bbde8b-379b-45d4-b193-3f761a44f3e2
variable_sip_audio_recv_pt: 0
variable_sip_call_id: 29869441-d83a-1230-d6a0-60eb69774d98
variable_sip_contact_host: 192.168.1.11
variable_sip_contact_port: 5062
variable_sip_contact_uri: 1000%40192.168.1.11%3A5062
variable_sip_contact_user: 1000
variable_sip_cseq: 38709699
variable_sip_destination_url: sip%3A1000%40192.168.1.11%3A5062
variable_sip_from_display: Extension%20100
variable_sip_from_host: 192.168.1.11
variable_sip_from_tag: 814HZmprB9N5m
variable_sip_from_uri: 100%40192.168.1.11
variable_sip_from_user: 100
variable_sip_full_from: %22Extension%20100%22%20%3Csip%3A100%40192.168.1.11%3E%3Btag%3D814HZmprB9N5m
variable_sip_full_to: %3Csip%3A1000%40192.168.1.11%3E%3Btag%3D90972448-fb32-4a25-b753-2c6a56174df1
variable_sip_full_via: SIP/2.0/UDP%20192.168.1.11%3Bsport%3D5060%3Breceived%3D192.168.1.11%3Bbranch%3Dz9hG4bK174m9mUp22Bej
variable_sip_invite_domain: 192.168.1.11
variable_sip_local_network_addr: 181.133.83.254
variable_sip_local_sdp_str: v%3D0%0A%3DFreeSWITCH%201358071185%201358071186%20IN%20IP4%20192.168.1.11%0A%3DFreeSWITCH%0Ac%3DIN%20IP4%20192.168.1.11%0At%3D0%200%0Am%3DAudio%2020342%20RTP/AVP%200%208%20101%2013%0Aa%3Drtmpmap%3A101%20telephone-event/8000%0Aa%3Dfmp%3A101%200-16%0Aa%3Dptime%3A20%0Aa%3Dsendrecv%0A
variable_sip_network_ip: 192.168.1.11
variable_sip_network_port: 5062
variable_sip_outgoing_contact_uri: %3Csip%3Amod_sofia%40192.168.1.11%3A5060%3E
variable_sip_profile_name: internal
variable_sip_recover_contact: %3Csip%3A1000%40192.168.1.11%3A5062%3E
variable_sip_recover_via: SIP/2.0/UDP%20192.168.1.11%3Bsport%3D5060%3Breceived%3D192.168.1.11%3Bbranch%3Dz9hG4bK174m9mUp22Bej
variable_sip_reply_host: 192.168.1.11
variable_sip_reply_port: 5062
variable_sip_req_uri: 1000%40192.168.1.11%3A5062
variable_sip_to_host: 192.168.1.11
variable_sip_to_tag: 90972448-fb32-4a25-b753-2c6a56174df1
variable_sip_to_uri: 1000%40192.168.1.11
variable_sip_to_user: 1000
variable_sip_use_codec_name: PCMU
variable_sip_use_codec_ptime: 20
variable_sip_use_codec_rate: 8000
variable_sip_use_pt: 0
variable_sofia_profile_name: internal
variable_switch_m_sdp: v%3D0%0D%0A%3Daztrock-home%203567080327%200%20IN%20IP4%20192.168.1.11%0D%0As%3Dsfphone%0D%0Ac%3DIN%20IP4%20192.168.1.11%0D%0At%3D0%200%0D%0Am%3DAudio%2032770%20RTP/AVP%200%203%208%209%2011%2011%20112%0D%0Aa%3Drtmpmap%3A0%20PCMU/8000%0D%0Aa%3Drtmpmap%3A3%20GSM/8000%0D%0Aa%3Drtmpmap%3A8%20PCMA/8000%0D%0Aa%3Drtmpmap%3A9%20G722/8000%0D%0Aa%3Drtmpmap%3A110%20speex/8000%0D%0Aa%3Drtmpmap%3A111%20speex/16000%0D%0Aa%3Drtmpmap%3A112%20speex/32000%0D%0A
variable_switch_r_sdp: v%3D0%0D%0A%3Daztrock-home%203567080327%201%20IN%20IP4%20192.168.1.11%0D%0As%3Dsfphone%0D%0Ac%3DIN%20IP4%20192.168.1.11%0D%0At%3D0%200%0D%0Am%3DAudio%2030882%20RTP/AVP%200%0D%0Aa%3Drtmpmap%3A0%20PCMU/8000%0D%0A
variable_uuid: 81273088-c31f-4469-85a6-c878e42210e5
variable_write_codec: PCMU
variable_write_rate: 8000

CHANNEL_ANSWER - inbound example

Answer-State: answered
Call-Direction: inbound
Caller-ANI: 100
Caller-Callee-ID-Name: Outbound%20Call
Caller-Callee-ID-Number: 1000

Caller-Caller-ID-Name: 100
Caller-Caller-ID-Number: 100
Caller-Channel-Answered-Time: 1358091528773430
Caller-Channel-Bridged-Time: 0
Caller-Channel-Created-Time: 1358091527413417
Caller-Channel-Hangup-Time: 0
Caller-Channel-Hold-Accum: 0
Caller-Channel-Last-Hold: 0
Caller-Channel-Name: sofia/internal/100%40192.168.1.11
Caller-Channel-Progress-Media-Time: 1358091527453440
Caller-Channel-Progress-Time: 1358091527433428
Caller-Channel-Resurrect-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Context: default
Caller-Destination-Number: 1000
Caller-Dialplan: XML
Caller-Direction: inbound
Caller-Network-Addr: 192.168.1.11
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
Caller-Profile-Created-Time: 1358091527413417
Caller-Profile-Index: 1
Caller-Screen-Bit: true
Caller-Source: mod_sofia
Caller-Unique-ID: c9bbde8b-379b-45d4-b193-3f761a44f3e2
Caller-Username: 100
Channel-Call-State: ACTIVE
Channel-Call-UUID: c9bbde8b-379b-45d4-b193-3f761a44f3e2
Channel-HIT-Dialplan: true
Channel-Name: sofia/internal/100%40192.168.1.11
Channel-Presence-ID: 100%40192.168.1.11
Channel-Read-Codec-Bit-Rate: 64000
Channel-Read-Codec-Name: PCMU
Channel-Read-Codec-Rate: 8000
Channel-State: CS_EXECUTE
Channel-State-Number: 4
Channel-Write-Codec-Bit-Rate: 64000
Channel-Write-Codec-Name: PCMU
Channel-Write-Codec-Rate: 8000
Core-UUID: 347c8e76-2a34-423a-8199-50860933a276
Event-Calling-File: switch_channel.c
Event-Calling-Function: switch_channel_perform_mark_answered
Event-Calling-Line-Number: 3397
Event-Date-GMT: Sun,%2013%20Jan%202013%2015%3A38%3A48%20GMT
Event-Date-Local: 2013-01-13%2010%3A38%3A48
Event-Date-Timestamp: 1358091528773430
Event-Name: CHANNEL_ANSWER
Event-Sequence: 6730
FreeSWITCH-Hostname: aztrock-home
FreeSWITCH-IPv4: 192.168.1.11
FreeSWITCH-IPv6: %3A%3A1
FreeSWITCH-Switchname: aztrock-home
Presence-Call-Direction: inbound
Unique-ID: c9bbde8b-379b-45d4-b193-3f761a44f3e2
variable_DIALSTATUS: INVALIDARGS
variable_DP_MATCH: ARRAY%3A%3A1000%7C%3A1000
variable_RFC2822_DATE: Sun,%2013%20Jan%202013%2010%3A38%3A47%20-0500
variable_accountcode: 100
variable_advertised_media_ip: 192.168.1.11
variable_call_timeout: 30
variable_call_uuid: c9bbde8b-379b-45d4-b193-3f761a44f3e2
variable_called_party_callgroup: techsupport
variable_callgroup: techsupport
variable_channel_name: sofia/internal/100%40192.168.1.11
variable_continue_on_fail: true
variable_current_application: bridge
variable_current_application_data: user/1000%40192.168.1.11
variable_default_areacode: 918
variable_default_gateway: example.com
variable_dialed_domain: 192.168.1.11
variable_dialed_extension: 1000

variable_dialed_user: 1000
variable_direction: inbound
variable_domain_name: 192.168.1.11
variable_dtmf_type: info
variable_effective_caller_id_name: Extension%20100
variable_effective_caller_id_number: 100
variable_endpoint_disposition: EARLY%20MEDIA
variable_ep_codec_string: PCMU%408000h%4020i%4064000b,PCMA%408000h%4020i%4064000b
variable_export_vars: RFC2822_DATE,dialed_extension
variable_hangup_after_bridge: true
variable_inherit_codec: true
variable_local_media_ip: 192.168.1.11
variable_local_media_port: 25992
variable_max_forwards: 70
variable_number_alias: 100
variable_originate_disposition: failure
variable_originate_signal_bond: 81273088-c31f-4469-85a6-c878e42210e5
variable_originated_legs: 81273088-c31f-4469-85a6-c878e42210e5%3BOutbound%20Call%3B1000
variable_outbound_caller_id_name: FreeSWITCH
variable_outbound_caller_id_number: 0000000000
variable_presence_id: 100%40192.168.1.11
variable_read_codec: PCMU
variable_read_rate: 8000
variable_record_stereo: true
variable_recovery_profile_name: internal, variable_remote_media_ip: 192.168.1.11,
variable_remote_media_port: 32770, variable_ringback: %25(2000,4000,440,480), variable_rtp_use_ssrc:
3371543935, variable_session_id: 65, variable_sip_audio_recv_pt: 0, variable_sip_auth_realm: 192.168.1.11,
variable_sip_auth_username: 100, variable_sip_authorized: true, variable_sip_call_id: 137c98dc-bc0d-4cb0-
891c-585ec8b6226f, variable_sip_contact_host: 192.168.1.11, variable_sip_contact_port: 5062,
variable_sip_contact_uri: 100%40192.168.1.11%3A5062, variable_sip_contact_user: 100, variable_sip_from_host:
192.168.1.11, variable_sip_from_tag: 35a4c26c-4960-4cf1-8368-9e1aa2c65b48, variable_sip_from_uri: 100%
40192.168.1.11, variable_sip_from_user: 100, variable_sip_from_user_stripped: 100, variable_sip_full_from: %
3Csip%3A100%40192.168.1.11%3E%3Btag%3D35a4c26c-4960-4cf1-8368-9e1aa2c65b48, variable_sip_full_to: %3Csip%
3A100%40192.168.1.11%3E, variable_sip_full_via: SIP/2.0/UDP%20192.168.1.11%3A5062%3Btransport%3D5062%3Bbranch%
3Dz9hG4bKPje320db2f-e7a2-4ee1-8013-017337e5cab3, variable_sip_local_network_addr: 181.133.83.254
variable_sip_local_sdp_str: v%3D0%0A%3DFreesWITCH%201358065535%20IN%20IP4%20192.168.1.11%0A%
3DFreesWITCH%0Ac%3DIN%20IP4%20192.168.1.11%0At%3D0%200%0Am%3Daudio%2025992%20RTP/AVP%200%0A%3Drtpmap%3A0%20PCMU
/8000%0A%3DsilenceSupp%3Aoff%20-%20-%20-%20-%0A%3Dptime%3A20%0A%3Dsendrecv%0A
variable_sip_network_ip: 192.168.1.11
variable_sip_network_port: 5062
variable_sip_number_alias: 100
variable_sip_received_ip: 192.168.1.11
variable_sip_received_port: 5062
variable_sip_req_host: 192.168.1.11
variable_sip_req_uri: 1000%40192.168.1.11
variable_sip_req_user: 1000
variable_sip_to_host: 192.168.1.11
variable_sip_to_uri: 1000%40192.168.1.11
variable_sip_to_user: 1000
variable_sip_use_codec_name: PCMU
variable_sip_use_codec_ptime: 20
variable_sip_use_codec_rate: 8000
variable_sip_use_pt: 0
variable_sip_via_host: 192.168.1.11
variable_sip_via_port: 5062
variable_sip_via_protocol: udp
variable_sip_via_rport: 5062
variable_sofia_profile_name: internal
variable_switch_m_sdp: v%3D0%0D%0A%3Daztrock-home%203567080327%201%20IN%20IP4%20192.168.1.11%0D%0A%
3Dsflphone%0D%0Ac%3DIN%20IP4%20192.168.1.11%0D%0At%3D0%200%0D%0Am%3Daudio%2030882%20RTP/AVP%200%0D%0A%3Drtpmap%
3A0%20PCMU/8000%0D%0A
variable_switch_r_sdp: v%3D0%0D%0A%3Daztrock-home%203567080327%200%20IN%20IP4%20192.168.1.11%0D%0A%
3Dsflphone%0D%0Ac%3DIN%20IP4%20192.168.1.11%0D%0At%3D0%200%0D%0Am%3Daudio%2032770%20RTP/AVP%200%203%208%209%
20110%20111%20112%0D%0A%3Drtpmap%3A0%20PCMU/8000%0D%0A%3Drtpmap%3A3%20GSM/8000%0D%0A%3Drtpmap%3A8%20PCMA
/8000%0D%0A%3Drtpmap%3A9%20G722/8000%0D%0A%3Drtpmap%3A110%20speex/8000%0D%0A%3Drtpmap%3A111%20speex/16000%0D%
0A%3Drtpmap%3A112%20speex/32000%0D%0A
variable_toll_allow: domestic,international,local
variable_transfer_fallback_extension: operator
variable_transfer_ringback: local_stream%3A//moh
variable_user_context: default
variable_user_name: 100

```
variable_uuid: c9bbde8b-379b-45d4-b193-3f761a44f3e2
variable_write_codec: PCMU
variable_write_rate: 8000
```

1.6 CHANNEL_HANGUP event

One of the users has hangup.

TODO

How do we know which one?

CHANNEL_HANGUP example

```
Hangup-Cause: NORMAL_CLEARING
Channel-Read-Codec-Name: PCMU
Channel-Read-Codec-Rate: 8000
Channel-Write-Codec-Name: PCMU
Channel-Write-Codec-Rate: 8000
Caller-Username: jonas
Caller-Dialplan: XML
Caller-Caller-ID-Name: jonas
Caller-Caller-ID-Number: jonas
Caller-Network-Addr: 192.168.0.58
Caller-Destination-Number: 541
Caller-Unique-ID: 0dd4e4f7-36ed-a04d-a8f7-7aebb683af50
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/192.168.0.58/jonas%40192.168.0.58%3A5060
Caller-Screen-Bit: yes
Caller-Privacy-Hide-Name: no
Caller-Privacy-Hide-Number: no
Originatee-Username: jonas
Originatee-Dialplan: XML
Originatee-Caller-ID-Name: jonas
Originatee-Caller-ID-Number: jonas
Originatee-Network-Addr: 192.168.0.58
Originatee-Destination-Number: 192.168.0.58/arne%25192.168.0.58
Originatee-Unique-ID: f66e8e31-c9fb-9b41-a9a2-a1586facb97f
Originatee-Source: mod_sofia
Originatee-Context: default
Originatee-Channel-Name: sofia/192.168.0.58/arne
Originatee-Screen-Bit: yes
Originatee-Privacy-Hide-Name: no
Originatee-Privacy-Hide-Number: no
```



Read more about possible [hangup causes](#).

1.7 CHANNEL_HANGUP_COMPLETE event

CHANNEL_HANGUP_COMPLETE example

```
RECV EVENT
Event-Name: CHANNEL_HANGUP_COMPLETE
Core-UUID: 9b0de0b8-f55e-40d8-a2bd-179310b53493
FreeSWITCH-Hostname: myhost
FreeSWITCH-IPv4: 192.168.0.2
FreeSWITCH-IPv6: ::1
Event-Date-Local: 2009-10-09 20:08:26
Event-Date-GMT: Sat, 10 Oct 2009 00:08:26 GMT
Event-Date-Timestamp: 1255133306952270
Event-Calling-File: switch_core_state_machine.c
Event-Calling-Function: switch_core_session_hangup_state
Event-Calling-Line-Number: 503
Hangup-Cause: NORMAL_CLEARING
Channel-State: CS_HANGUP
```

Channel-State-Number: 10
Channel-Name: sofia/internal/1000@192.168.0.2
Unique-ID: e5a82e39-6dc1-4d7d-a300-aa9cd4284073
Call-Direction: inbound
Presence-Call-Direction: inbound
Answer-State: answered
Channel-Read-Codec-Name: GSM
Channel-Read-Codec-Rate: 8000
Channel-Write-Codec-Name: GSM
Channel-Write-Codec-Rate: 8000
Caller-Username: 1000
Caller-Dialplan: XML
Caller-Caller-ID-Name: 1000
Caller-Caller-ID-Number: 1000
Caller-Network-Addr: 192.168.0.104
Caller-Destination-Number: 3030
Caller-Unique-ID: e5a82e39-6dc1-4d7d-a300-aa9cd4284073
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/internal/1000@192.168.0.2
Caller-Profile-Index: 1
Caller-Profile-Created-Time: 1255133286498223
Caller-Channel-Created-Time: 1255133286498223
Caller-Channel-Answered-Time: 1255133286504829
Caller-Channel-Progress-Time: 0
Caller-Channel-Progress-Media-Time: 0
Caller-Channel-Hangup-Time: 1255133306952270
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: true
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
variable_sip_received_ip: 192.168.0.104
variable_sip_received_port: 5060
variable_sip_via_protocol: udp
variable_sip_authorized: true
variable_sip_number_alias: 1000
variable_sip_auth_username: 1000
variable_sip_auth_realm: 192.168.0.2
variable_number_alias: 1000
variable_user_name: 1000
variable_domain_name: 192.168.0.2
variable_toll_allow: domestic,international,local
variable_accountcode: 1000
variable_user_context: default
variable_effective_caller_id_name: Extension 1000
variable_effective_caller_id_number: 1000
variable_outbound_caller_id_name: FreeSWITCH
variable_outbound_caller_id_number: 0000000000
variable_callgroup: techsupport
variable_record_stereo: true
variable_default_gateway: example.com
variable_default_areacode: 918
variable_transfer_fallback_extension: operator
variable_sip_from_params: transport=UDP
variable_sip_from_user: 1000
variable_sip_from_uri: 1000@192.168.0.2
variable_sip_from_host: 192.168.0.2
variable_sip_from_user_stripped: 1000
variable_sip_from_tag: 7bae8202
variable_sofia_profile_name: internal
variable_sip_req_params: transport=UDP
variable_sip_req_user: 3030
variable_sip_req_uri: 3030@192.168.0.2
variable_sip_req_host: 192.168.0.2
variable_sip_to_params: transport=UDP
variable_sip_to_user: 3030
variable_sip_to_uri: 3030@192.168.0.2
variable_sip_to_host: 192.168.0.2
variable_sip_contact_params: transport=UDP
variable_sip_contact_user: 1000
variable_sip_contact_port: 60780

variable_sip_contact_uri: 1000@190.52.138.225:60780
variable_sip_contact_host: 190.52.138.225
variable_channel_name: sofia/internal/1000@192.168.0.2
variable_sip_call_id: ODZhNDk5YzlmZDg3YTExOWU4NDU3NmM2ZmI1MzFmNDU.
variable_sip_via_host: 190.52.138.225
variable_sip_via_port: 60780
variable_sip_via_rport: 5060
variable_max_forwards: 70
variable_presence_id: 1000@192.168.0.2
variable_switch_r_sdp: v=0
o=Z 0 0 IN IP4 190.52.138.225
s=Z
c=IN IP4 190.52.138.225
t=0 0
m=audio 60790 RTP/AVP 3 110 98 8 0 101
a=rtpmap:3 GSM/8000
a=rtpmap:110 speex/8000
a=rtpmap:98 iLBC/8000
a=fmtp:98 mode=30
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

variable_remote_media_ip: 190.52.138.225
variable_remote_media_port: 60790
variable_write_codec: GSM
variable_write_rate: 8000
variable_local_media_ip: 192.168.0.2
variable_local_media_port: 19878
variable_endpoint_disposition: ANSWER
variable_current_application_data: \$1-192.168.0.2@default
variable_current_application: conference
variable_conference_name: \$1-192.168.0.2
variable_sip_term_status: 200
variable_sip_term_cause: 16
variable_sip_user_agent: Zoiper rev.4688
variable_sip_hangup_disposition: recv_bye
variable_read_codec: GSM
variable_read_rate: 8000
variable_hangup_cause: NORMAL_CLEARING
variable_hangup_cause_q850: 16
variable_digits_dialed: none
variable_start_stamp: 2009-10-09 20:08:06
variable_profile_start_stamp: 2009-10-09 20:08:06
variable_answer_stamp: 2009-10-09 20:08:06
variable_end_stamp: 2009-10-09 20:08:26
variable_start_epoch: 1255133286
variable_start_uepoch: 1255133286498223
variable_profile_start_epoch: 1255133286
variable_profile_start_uepoch: 1255133286498223
variable_answer_epoch: 1255133286
variable_answer_uepoch: 1255133286504829
variable_progress_epoch: 0
variable_progress_uepoch: 0
variable_progress_media_epoch: 0
variable_progress_media_uepoch: 0
variable_end_epoch: 1255133306
variable_end_uepoch: 1255133306952270
variable_last_app: conference
variable_last_arg: \$1-192.168.0.2@default
variable_caller_id: "1000" <1000>
variable_duration: 20
variable_billsec: 20
variable_progresssec: 0
variable_answersec: 0
variable_progress_mediasec: 0
variable_flow_billsec: 20
variable_mduration: 20454
variable_billmsec: 20448
variable_progressmsec: 0

```
variable_answermsec: 6
variable_progress_mediamsec: 0
variable_flow_billmsec: 20454
variable_uduration: 20454047
variable_billusec: 20447441
variable_progressusec: 0
variable_answerusec: 6606
variable_progress_mediausec: 0
variable_flow_billusec: 20454047
variable_rtp_audio_in_raw_bytes: 45765
variable_rtp_audio_in_media_bytes: 45630
variable_rtp_audio_in_packet_count: 1017
variable_rtp_audio_in_media_packet_count: 1014
variable_rtp_audio_in_skip_packet_count: 8
variable_rtp_audio_in_jb_packet_count: 0
variable_rtp_audio_in_dtmf_packet_count: 0
variable_rtp_audio_in_cng_packet_count: 0
variable_rtp_audio_in_flush_packet_count: 0
variable_rtp_audio_out_raw_bytes: 44055
variable_rtp_audio_out_media_bytes: 44055
variable_rtp_audio_out_packet_count: 979
variable_rtp_audio_out_media_packet_count: 979
variable_rtp_audio_out_skip_packet_count: 0
variable_rtp_audio_out_dtmf_packet_count: 0
variable_rtp_audio_out_cng_packet_count: 0
```

1.8 CHANNEL_EXECUTE event

This event indicates that the PBX is doing something with the call. (Typically looking in the dial plan).



Document Application* headers

TODO

Found usage examples in [IVR using mod_erlang_event](#), but couldn't find the Application* headers documented anywhere. [mod_event_socket](#)'s `sendmsg` section only mentions the Application-UUID header:

If you would like to correlate the `CHANNEL_EXECUTE` and `CHANNEL_EXECUTE_COMPLETE` events that are generated when the command you send using `sendmsg` is executed you can add an Event-UUID header with a UUID you specify. In the corresponding events, the UUID will be in the Application-UUID header. If you do not specify an Event-UUID, Freeswitch will generate a UUID for the Application-UUID.

Example:

```
Event-UUID: 22075ce5-b67b-4f04-a6dd-1726ec14c8bf
```

The Application* headers seem to be tightly coupled with `CHANNEL_EXECUTE` and `CHANNEL_EXECUTE_COMPLETE` headers:

https://github.com/signalwire/freeswitch/blob/15ad4c23e259c1c2dff58f89e9124e5f36dd2e94/src/switch_core_session.c#L2870

```
    if (switch_event_create(&event, SWITCH_EVENT_CHANNEL_EXECUTE) == SWITCH_STATUS_SUCCESS) {
        switch_channel_event_set_data(session->channel, event);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application",
application_interface->interface_name);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application-Data",
expanded);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application-UUID",
app_uuid);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application-UUID-Name",
app_uuid_name);
        switch_event_fire(&event);
    }
```

https://github.com/signalwire/freeswitch/blob/15ad4c23e259c1c2dff58f89e9124e5f36dd2e94/src/switch_core_session.c#L2893

```
    if (switch_event_create(&event, SWITCH_EVENT_CHANNEL_EXECUTE_COMPLETE) ==
SWITCH_STATUS_SUCCESS) {
        const char *resp = switch_channel_get_variable(session->channel,
SWITCH_CURRENT_APPLICATION_RESPONSE_VARIABLE);
        switch_channel_event_set_data(session->channel, event);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application",
application_interface->interface_name);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application-Data",
expanded);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application-Response", resp
? resp : "_none_");
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application-UUID",
app_uuid);
        switch_event_add_header_string(event, SWITCH_STACK_BOTTOM, "Application-UUID-Name",
app_uuid_name);
        switch_event_fire(&event);
    }
```


CHANNEL_EXECUTE example

```
Channel-Read-Codec-Name: PCMU
Channel-Read-Codec-Rate: 8000
Channel-Write-Codec-Name: PCMU
Channel-Write-Codec-Rate: 8000
Caller-Username: jonas
Caller-Dialplan: XML
Caller-Caller-ID-Name: jonas
Caller-Caller-ID-Number: jonas
Caller-Network-Addr: 192.168.0.58
Caller-Destination-Number: 541
Caller-Unique-ID: 0dd4e4f7-36ed-a04d-a8f7-7aebb683af50
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/192.168.0.58/jonas%40192.168.0.58%3A5060
Caller-Screen-Bit: yes
Caller-Privacy-Hide-Name: no
Caller-Privacy-Hide-Number: no
```

1.9 CHANNEL_EXECUTE_COMPLETE event

This event is emitted when a dialplan application (started with `sendmsg` or `send (?)`) finished running.

TODO

See TODO at section 1.8 CHANNEL_EXECUTE event

CHANNEL_EXECUTE_COMPLETE example

```
RECV EVENT
Event-Name: CHANNEL_EXECUTE_COMPLETE
Core-UUID: 9b0de0b8-f55e-40d8-a2bd-179310b53493
FreeSWITCH-Hostname: myhost
FreeSWITCH-IPv4: 192.168.0.2
FreeSWITCH-IPv6: ::1
Event-Date-Local: 2009-10-09 20:08:26
Event-Date-GMT: Sat, 10 Oct 2009 00:08:26 GMT
Event-Date-Timestamp: 1255133306952270
Event-Calling-File: switch_core_session.c
Event-Calling-Function: switch_core_session_exec
Event-Calling-Line-Number: 1480
Channel-State: CS_HANGUP
Channel-State-Number: 10
Channel-Name: sofia/internal/1000@192.168.0.2
Unique-ID: e5a82e39-6dc1-4d7d-a300-aa9cd4284073
Call-Direction: inbound
Presence-Call-Direction: inbound
Answer-State: answered
Channel-Read-Codec-Name: GSM
Channel-Read-Codec-Rate: 8000
Channel-Write-Codec-Name: GSM
Channel-Write-Codec-Rate: 8000
Caller-Username: 1000
Caller-Dialplan: XML
Caller-Caller-ID-Name: 1000
Caller-Caller-ID-Number: 1000
Caller-Network-Addr: 192.168.0.104
Caller-Destination-Number: 3030
Caller-Unique-ID: e5a82e39-6dc1-4d7d-a300-aa9cd4284073
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/internal/1000@192.168.0.2
Caller-Profile-Index: 1
Caller-Profile-Created-Time: 1255133286498223
Caller-Channel-Created-Time: 1255133286498223
Caller-Channel-Answered-Time: 1255133286504829
Caller-Channel-Progress-Time: 0
```

Caller-Channel-Progress-Media-Time: 0
Caller-Channel-Hangup-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: true
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
variable_sip_received_ip: 192.168.0.104
variable_sip_received_port: 5060
variable_sip_via_protocol: udp
variable_sip_authorized: true
variable_sip_number_alias: 1000
variable_sip_auth_username: 1000
variable_sip_auth_realm: 192.168.0.2
variable_number_alias: 1000
variable_user_name: 1000
variable_domain_name: 192.168.0.2
variable_toll_allow: domestic,international,local
variable_accountcode: 1000
variable_user_context: default
variable_effective_caller_id_name: Extension 1000
variable_effective_caller_id_number: 1000
variable_outbound_caller_id_name: FreeSWITCH
variable_outbound_caller_id_number: 0000000000
variable_callgroup: techsupport
variable_record_stereo: true
variable_default_gateway: example.com
variable_default_areacode: 918
variable_transfer_fallback_extension: operator
variable_sip_from_params: transport=UDP
variable_sip_from_user: 1000
variable_sip_from_uri: 1000@192.168.0.2
variable_sip_from_host: 192.168.0.2
variable_sip_from_user_stripped: 1000
variable_sip_from_tag: 7bae8202
variable_sofia_profile_name: internal
variable_sip_req_params: transport=UDP
variable_sip_req_user: 3030
variable_sip_req_uri: 3030@192.168.0.2
variable_sip_req_host: 192.168.0.2
variable_sip_to_params: transport=UDP
variable_sip_to_user: 3030
variable_sip_to_uri: 3030@192.168.0.2
variable_sip_to_host: 192.168.0.2
variable_sip_contact_params: transport=UDP
variable_sip_contact_user: 1000
variable_sip_contact_port: 60780
variable_sip_contact_uri: 1000@190.52.138.225:60780
variable_sip_contact_host: 190.52.138.225
variable_channel_name: sofia/internal/1000@192.168.0.2
variable_sip_call_id: ODZhNDk5YzlmZDg3YTExOWU4NDU3NmM2ZmI1MzFmNDU.
variable_sip_via_host: 190.52.138.225
variable_sip_via_port: 60780
variable_sip_via_rport: 5060
variable_max_forwards: 70
variable_presence_id: 1000@192.168.0.2
variable_switch_r_sdp: v=0
o=Z 0 0 IN IP4 190.52.138.225
s=Z
c=IN IP4 190.52.138.225
t=0 0
m=audio 60790 RTP/AVP 3 110 98 8 0 101
a=rtpmap:3 GSM/8000
a=rtpmap:110 speex/8000
a=rtpmap:98 iLBC/8000
a=fmtp:98 mode=30
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

variable_remote_media_ip: 190.52.138.225

```
variable_remote_media_port: 60790
variable_write_codec: GSM
variable_write_rate: 8000
variable_local_media_ip: 192.168.0.2
variable_local_media_port: 19878
variable_endpoint_disposition: ANSWER
variable_current_application_data: $1-192.168.0.2@default
variable_current_application: conference
variable_conference_name: $1-192.168.0.2
variable_sip_term_status: 200
variable_sip_term_cause: 16
variable_sip_user_agent: Zoiper rev.4688
variable_sip_hangup_disposition: recv_bye
variable_read_codec: GSM
variable_read_rate: 8000
Application: conference
Application-Data: $1-192.168.0.2@default
Application-Response: _none
```

1.10 CHANNEL_BRIDGE event

A call is being bridged between two endpoints.

CHANNEL_BRIDGE example

```
Event-Name: CHANNEL_BRIDGE
Core-UUID: 17c1c070-8a13-11de-9ab6-91a5c9f91e77
FreeSWITCH-Hostname: jmesquita-dell
FreeSWITCH-IPv4: 186.18.21.203
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2009-08-17%2003%3A20%3A17
Event-Date-GMT: Mon,%2017%20Aug%202009%2006%3A20%3A17%20GMT
Event-Date-Timestamp: 1250490017110617
Event-Calling-File: switch_ivr_bridge.c
Event-Calling-Function: switch_ivr_multi_threaded_bridge
Event-Calling-Line-Number: 847
Channel-State: CS_EXECUTE
Channel-State-Number: 4
Channel-Name: sofia/internal/1001%40192.168.1.100
Unique-ID: 071ed3fa-8af6-11de-9ab6-91a5c9f91e77
Call-Direction: inbound
Presence-Call-Direction: inbound
Answer-State: answered
Channel-Read-Codec-Name: G722
Channel-Read-Codec-Rate: 16000
Channel-Write-Codec-Name: G722
Channel-Write-Codec-Rate: 16000
Caller-Username: 1001
Caller-Dialplan: XML
Caller-Caller-ID-Name: 1001
Caller-Caller-ID-Number: 1001
Caller-Network-Addr: 192.168.1.100
Caller-Destination-Number: 1000
Caller-Unique-ID: 071ed3fa-8af6-11de-9ab6-91a5c9f91e77
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/internal/1001%40192.168.1.100
Caller-Profile-Index: 1
Caller-Profile-Created-Time: 1250490015373695
Caller-Channel-Created-Time: 1250490015373695
Caller-Channel-Answered-Time: 1250490017110617
Caller-Channel-Progress-Time: 1250490015498382
Caller-Channel-Progress-Media-Time: 1250490015453696
Caller-Channel-Hangup-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: true
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
```

Other-Leg-Username: 1001
Other-Leg-Dialplan: XML
Other-Leg-Caller-ID-Name: Extension%201001
Other-Leg-Caller-ID-Number: 1001
Other-Leg-Network-Addr: 192.168.1.101
Other-Leg-Destination-Number: sip%3A1000%40192.168.1.101%3Bline%3D23857
Other-Leg-Unique-ID: 072a3ec0-8af6-11de-9ab6-91a5c9f91e77
Other-Leg-Source: mod_sofia
Other-Leg-Context: default
Other-Leg-Channel-Name: sofia/internal/sip%3A1000%40192.168.1.101
Other-Leg-Screen-Bit: true
Other-Leg-Privacy-Hide-Name: false
Other-Leg-Privacy-Hide-Number: false
variable_sip_received_ip: 192.168.1.100
variable_sip_received_port: 46078
variable_sip_via_protocol: udp
variable_sip_authorized: true
variable_sip_number_alias: 1001
variable_sip_auth_username: 1001
variable_sip_auth_realm: 192.168.1.100
variable_number_alias: 1001
variable_user_name: 1001
variable_domain_name: 192.168.1.100
variable_toll_allow: domestic,international,local
variable_accountcode: 1001
variable_user_context: default
variable_effective_caller_id_name: Extension%201001
variable_effective_caller_id_number: 1001
variable_outbound_caller_id_name: FreeSWITCH
variable_outbound_caller_id_number: 0000000000
variable_callgroup: techsupport
variable_record_stereo: true
variable_default_gateway: example.com
variable_default_areacode: 918
variable_transfer_fallback_extension: operator
variable_sip_from_user: 1001
variable_sip_from_uri: 1001%40192.168.1.100
variable_sip_from_host: 192.168.1.100
variable_sip_from_user_stripped: 1001
variable_sip_from_tag: ulbLuyOsz-Cyq3aAMLbhy8E07medSwoc
variable_sofia_profile_name: internal
variable_sip_req_user: 1000
variable_sip_req_uri: 1000%40192.168.1.100
variable_sip_req_host: 192.168.1.100
variable_sip_to_user: 1000
variable_sip_to_uri: 1000%40192.168.1.100
variable_sip_to_host: 192.168.1.100
variable_sip_contact_params: transport%3DUDP
variable_sip_contact_user: 1001
variable_sip_contact_port: 46078
variable_sip_contact_uri: 1001%40192.168.1.100%3A46078
variable_sip_contact_host: 192.168.1.100
variable_channel_name: sofia/internal/1001%40192.168.1.100
variable_sip_call_id: pbjcbq1MU4CLZCKII650iTblCSeVuEtzU
variable_sip_user_agent: LightPhone%20v1.0.0
variable_sip_via_host: 186.18.21.203
variable_sip_via_port: 46078
variable_sip_via_rport: 46078
variable_max_forwards: 70
variable_presence_id: 1001%40192.168.1.100
variable_switch_r_sdp: v%3D0%0D%0A%3D-%203459478815%203459478815%20IN%20IP4%20186.18.21.203%0D%0A%3Dpjmedia%0D%0Ac%3DIN%20IP4%20186.18.21.203%0D%0A%3D%200%0D%0A%3DX-nat%3A0%0D%0Am%3DAudio%204004%20RTP/AVP%209%208%200%203%20113%20103%20102%20104%20101%0D%0A%3Drtpmap%3A9%20G722/8000%0D%0A%3Drtpmap%3A8%20PCMA/8000%0D%0A%3Drtpmap%3A0%20PCMU/8000%0D%0A%3Drtpmap%3A3%20GSM/8000%0D%0A%3Drtpmap%3A113%20iLBC/8000%0D%0A%3Dfmt%3A113%20mode%3D30%0D%0A%3Drtpmap%3A103%20speex/16000%0D%0A%3Drtpmap%3A102%20speex/8000%0D%0A%3Drtpmap%3A104%20speex/32000%0D%0A%3Drtpmap%3A101%20telephone-event/8000%0D%0A%3Dfmp%3A101%200-15%0D%0A%3Drtpcp%3A4005%20IN%20IP4%20186.18.21.203%0D%0A
variable_remote_media_ip: 186.18.21.203
variable_remote_media_port: 4004
variable_read_codec: G722
variable_read_rate: 16000

```
variable_write_codec: G722
variable_write_rate: 16000
variable_dialed_extension: 1000
variable_export_vars: dialed_extension
variable_ringback: %25(2000,4000,440.0,480.0)
variable_transfer_ringback: local_stream%3A//moh
variable_call_timeout: 30
variable_hangup_after_bridge: true
variable_continue_on_fail: true
variable_called_party_callgroup: techsupport
variable_current_application_data: user/1000%40192.168.1.100
variable_current_application: bridge
variable_dialed_user: 1000
variable_dialed_domain: 192.168.1.100
variable_local_media_ip: 186.18.21.203
variable_local_media_port: 31492
variable_switch_m_sdp: v%3D0%0D%0Ao%3D1000%20316775754%20316775754%20IN%20IP4%20201.250.54.13%0D%0As%3D-%0D%0Ac%
3DIN%20IP4%20201.250.54.13%0D%0At%3D0%200%0D%0Aa%3Dsendrecv%0D%0Am%3Daudio%205022%20RTP/AVP%200%208%20101%0D%
0Aa%3Drtmpmap%3A0%20PCMU/8000%0D%0Aa%3Drtmpmap%3A8%20PCMA/8000%0D%0Aa%3Drtmpmap%3A101%20telephone-event/8000%0D%
0Aa%3Dfmt%3A101%200-15%0D%0Aa%3Drtcp%3A5023%0D%0A
variable_endpoint_disposition: ANSWER
variable_signal_bond: 072a3ec0-8af6-11de-9ab6-91a5c9f91e77
variable_originate_disposition: SUCCESS
```

1.11 CHANNEL_UNBRIDGE event

A bridge has been terminated. The call itself will most probably be terminated since bridges exist during a call's lifespan.

TODO

Check the example below for validity (for example, semicolons should be colons).

CHANNEL_UNBRIDGE example

```
Channel-Read-Codec-Name; PCMU
Channel-Read-Codec-Rate; 8000
Channel-Write-Codec-Name; PCMU
Channel-Write-Codec-Rate; 8000
Caller-Username; jonas
Caller-Dialplan; XML
Caller-Caller-ID-Name; jonas
Caller-Caller-ID-Number; jonas
Caller-Network-Addr; 192.168.0.58
Caller-Destination-Number; 541
Caller-Unique-ID; 0dd4e4f7-36ed-a04d-a8f7-7aebb683af50
Caller-Source; mod_sofia
Caller-Context; default
Caller-Channel-Name; sofia/192.168.0.58/jonas@192.168.0.58:5060
Caller-Screen-Bit; yes
Caller-Privacy-Hide-Name; no
Caller-Privacy-Hide-Number; no
Originatee-Username; jonas
Originatee-Dialplan; XML
Originatee-Caller-ID-Name; jonas
Originatee-Caller-ID-Number; jonas
Originatee-Network-Addr; 192.168.0.58
Originatee-Destination-Number; 192.168.0.58/arne%192.168.0.58
Originatee-Unique-ID; f66e8e31-c9fb-9b41-a9a2-a1586facb97f
Originatee-Source; mod_sofia
Originatee-Context; default
Originatee-Channel-Name; sofia/192.168.0.58/arne
Originatee-Screen-Bit; yes
Originatee-Privacy-Hide-Name; no
Originatee-Privacy-Hide-Number; no
```

1.12 CHANNEL_PROGRESS event

For outbound calls, the other party is in the alerting state; for inbound calls this party is alerting.

1.13 CHANNEL_PROGRESS_MEDIA event

See 1.12 CHANNEL_PROGRESS event section.

1.14 CHANNEL_OUTGOING event

An outgoing call is created.

1.15 CHANNEL_PARK event

A call is being parked in the PBX.

1.16 CHANNEL_UNPARK event

A call is being unparked.

1.17 CHANNEL_APPLICATION event

This event is generated by `mod_dptools: event`:

```
<action application='event' data='Event-Subclass=channel_state_change,State=checking_voicemail' />
```

You can use this to trap some transitions happening in your calls.

CHANNEL_APPLICATION example

```
Content-Length: 1586
Content-Type: text/event-plain

Event-Subclass: channel_state_change
Event-Name: CHANNEL_APPLICATION
Core-UUID: d5cdc6a2-ec00-46fe-97b0-8bbb734bb1fa
FreeSWITCH-Hostname: centos53_02005
FreeSWITCH-IPv4: 192.168.2.5
FreeSWITCH-IPv6: ::1
Event-Date-Local: 2010-02-23 00:15:37
Event-Date-GMT: Mon, 22 Feb 2010 15:15:37 GMT
Event-Date-Timestamp: 1266851737846113
Event-Calling-File: mod_dptools.c
Event-Calling-Function: event_function
Event-Calling-Line-Number: 981
State: checking_voicemail.
Channel-State: CS_EXECUTE
Channel-State-Number: 4
Channel-Name: sofia/internal/23702@domain23702.com
Unique-ID: 482c78ba-a2bf-4324-bf09-388b7b5fbb54
Call-Direction: inbound
Presence-Call-Direction: inbound
Answer-State: ringing
Channel-Read-Codec-Name: PCMU
Channel-Read-Codec-Rate: 8000
Channel-Write-Codec-Name: PCMU
Channel-Write-Codec-Rate: 8000
Caller-Username: 23702
Caller-Dialplan: XML
Caller-Caller-ID-Name: 23702
Caller-Caller-ID-Number: 23702
Caller-Network-Addr: 192.168.2.5
Caller-ANI: 23702
Caller-Destination-Number: 2000
Caller-Unique-ID: 482c78ba-a2bf-4324-bf09-388b7b5fbb54
Caller-Source: mod_sofia
Caller-Context: internal
Caller-Channel-Name: sofia/internal/23702@domain23702.com
Caller-Profile-Index: 1
Caller-Profile-Created-Time: 1266851737825925
Caller-Channel-Created-Time: 1266851737825925
Caller-Channel-Answered-Time: 0
Caller-Channel-Progress-Time: 0
Caller-Channel-Progress-Media-Time: 0
Caller-Channel-Hangup-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: true
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
```

1.18 CHANNEL_HOLD event

Triggers when a channel is put on hold either by using `uuid_hold` (see [mod_commands](#)) or receiving SDP with `a=readonly`.

CHANNEL_HOLD example

```
Event-Name: CHANNEL_HOLD
.
.
Channel-Call-State: HELD
.
.
```

1.19 CHANNEL_UNHOLD event

triggers after `uuid_hold` off `<uuid>` or receiving INVITE SDP with `a=sendrecv`

CHANNEL_UNHOLD example

```
Event-Name: CHANNEL_UNHOLD
.
.
Channel-Call-State: ACTIVE
.
.
```

1.20 CHANNEL_ORIGINATE event

Channel originate events are fired as soon as an originate (or bridge) completes.

1.21 CHANNEL_UUID event

This event indicates the `Unique-ID` of a channel has changed. The original ID will be reported by `Old-Unique-ID`.

This event will happen when you use the `origination_uuid` parameter of commands `originate` and `bridge` (see [mod_commands](#)).

CHANNEL_UUID example

```
Content-Length: 1533
Content-Type: text/event-plain
Event-Name: CHANNEL_UUID
Core-UUID: 4611b345-99a3-4db4-b6aa-1a7886cb5474
FreeSWITCH-Hostname: centos53_02005
FreeSWITCH-IPv4: 192.168.2.5
FreeSWITCH-IPv6: ::1
Event-Date-Local: 2009-12-17 14:26:23
Event-Date-GMT: Thu, 17 Dec 2009 05:26:23 GMT
Event-Date-Timestamp: 1261027583770715
Event-Calling-File: switch_core_session.c
Event-Calling-Function: switch_core_session_set_uuid
Event-Calling-Line-Number: 1240
Old-Unique-ID: a720de78-b931-440b-8536-d4310d42dbf5
Channel-State: CS_INIT
Channel-State-Number: 1
Channel-Name: sofia/internal/1234@192.168.4.6
Unique-ID: 93fc891f-911f-42c5-9d22-226b27598f79
Call-Direction: outbound
Presence-Call-Direction: outbound
Answer-State: ringing
Caller-Caller-ID-Name: FreeSWITCH
Caller-Caller-ID-Number: 0000000000
Caller-Destination-Number: 1234
Caller-Unique-ID: a720de78-b931-440b-8536-d4310d42dbf5
Caller-Source: src/switch_ivr_originate.c
Caller-Context: default
Caller-Channel-Name: sofia/internal/1234@192.168.4.6
Caller-Profile-Index: 1
Caller-Profile-Created-Time: 1261027583770715
Caller-Channel-Created-Time: 1261027583770715
Caller-Channel-Answered-Time: 0
Caller-Channel-Progress-Time: 0
Caller-Channel-Progress-Media-Time: 0
Caller-Channel-Hangup-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: true
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
variable_sip_profile_name: internal
variable_channel_name: sofia/internal/1234@192.168.4.6
variable_sip_destination_url: sip:1234@192.168.4.6
variable_is_outbound: true
```

2. System events

SHUTDOWN

Raised when FreeSWITCH started shutdown sequence.

```
Content-Length: 464
Content-Type: text/event-plain

Event-Info: System Shutting Down
Event-Name: SHUTDOWN
Core-UUID: 596ab2fd-14c5-44b5-a02b-93ffb7cd5dd6
FreeSWITCH-Hostname: *****
FreeSWITCH-IPv4: *****
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2008-01-23%2013%3A48%3A13
Event-Date-GMT: Wed,%2023%20Jan%202008%2018%3A48%3A13%20GMT
Event-Date-timestamp: 1201114093012795
Event-Calling-File: switch_core.c
Event-Calling-Function: switch_core_destroy
Event-Calling-Line-Number: 1046
```

MODULE_LOAD

Raised when module was load.

Content-Length: 480

Content-Type: text/event-plain

```
type: codec
name: LPC-10%202.4kbps
Event-Name: MODULE_LOAD
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A24%3A56
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A24%3A56%20GMT
Event-Date-timestamp: 1197865496783828
Event-Calling-File: switch_loadable_module.c
Event-Calling-Function: switch_loadable_module_process
Event-Calling-Line-Number: 174
```

MODULE_UNLOAD

Raised when module was unload.

```
type: application
name: lua
description: Launch%20LUA%20ivr
syntax: %3Cscript%3E
Event-Name: MODULE_UNLOAD
Core-UUID: ab0feafa-a9b0-4d77-b0a8-341d6b100b4f
FreeSWITCH-Hostname: vertux
FreeSWITCH-IPv4: 192.168.77.248
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2008-12-11%2013%3A14%3A23
Event-Date-GMT: Thu,%2011%20Dec%202008%2012%3A14%3A23%20GMT
Event-Date-timestamp: 1228997663531389
Event-Calling-File: switch_loadable_module.c
Event-Calling-Function: switch_loadable_module_unprocess
Event-Calling-Line-Number: 524
```

RELOADXML

Raised when the xml configuration has been reloaded.

```
Event-Name: RELOADXML
Core-UUID: 6c6def18-9562-de11-a8e0-001fc6ab49e2
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2009-06-26%2017%3A06%3A33
Event-Date-GMT: Fri,%2026%20Jun%202009%2021%3A06%3A33%20GMT
Event-Date-Timestamp: 1246050393884782
Event-Calling-File: switch_xml.c
Event-Calling-Function: switch_xml_open_root
Event-Calling-Line-Number: 1917
```

NOTIFY

SEND_MESSAGE

RECV_MESSAGE

REQUEST_PARAMS

CHANNEL_DATA

GENERAL

COMMAND

SESSION_HEARTBEAT

```
RECV EVENT
Event-Name: SESSION_HEARTBEAT
Core-UUID: 9b0de0b8-f55e-40d8-a2bd-179310b53493
FreeSWITCH-Hostname: myhost
```

FreeSWITCH-IPv4: 192.168.0.2
FreeSWITCH-IPv6: ::1
Event-Date-Local: 2009-10-09 20:08:26
Event-Date-GMT: Sat, 10 Oct 2009 00:08:26 GMT
Event-Date-Timestamp: 1255133306752006
Event-Calling-File: switch_core_io.c
Event-Calling-Function: switch_core_session_read_frame
Event-Calling-Line-Number: 146
Channel-State: CS_EXECUTE
Channel-State-Number: 4
Channel-Name: sofia/internal/1000@192.168.0.2
Unique-ID: e5a82e39-6dc1-4d7d-a300-aa9cd4284073
Call-Direction: inbound
Presence-Call-Direction: inbound
Answer-State: answered
Channel-Read-Codec-Name: L16
Channel-Read-Codec-Rate: 8000
Channel-Write-Codec-Name: GSM
Channel-Write-Codec-Rate: 8000
Caller-Username: 1000
Caller-Dialplan: XML
Caller-Caller-ID-Name: 1000
Caller-Caller-ID-Number: 1000
Caller-Network-Addr: 192.168.0.104
Caller-Destination-Number: 3030
Caller-Unique-ID: e5a82e39-6dc1-4d7d-a300-aa9cd4284073
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/internal/1000@192.168.0.2
Caller-Profile-Index: 1
Caller-Profile-Created-Time: 1255133286498223
Caller-Channel-Created-Time: 1255133286498223
Caller-Channel-Answered-Time: 1255133286504829
Caller-Channel-Progress-Time: 0
Caller-Channel-Progress-Media-Time: 0
Caller-Channel-Hangup-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: true
Caller-Privacy-Hide-Name: false
Caller-Privacy-Hide-Number: false
variable_sip_received_ip: 192.168.0.104
variable_sip_received_port: 5060
variable_sip_via_protocol: udp
variable_sip_authorized: true
variable_sip_number_alias: 1000
variable_sip_auth_username: 1000
variable_sip_auth_realm: 192.168.0.2
variable_number_alias: 1000
variable_user_name: 1000
variable_domain_name: 192.168.0.2
variable_toll_allow: domestic,international,local
variable_accountcode: 1000
variable_user_context: default
variable_effective_caller_id_name: Extension 1000
variable_effective_caller_id_number: 1000
variable_outbound_caller_id_name: FreeSWITCH
variable_outbound_caller_id_number: 0000000000
variable_callgroup: techsupport
variable_record_stereo: true
variable_default_gateway: example.com
variable_default_areacode: 918
variable_transfer_fallback_extension: operator
variable_sip_from_params: transport=UDP
variable_sip_from_user: 1000
variable_sip_from_uri: 1000@192.168.0.2
variable_sip_from_host: 192.168.0.2
variable_sip_from_user_stripped: 1000
variable_sip_from_tag: 7bae8202
variable_sofia_profile_name: internal
variable_sip_req_params: transport=UDP
variable_sip_req_user: 3030
variable_sip_req_uri: 3030@192.168.0.2
variable_sip_req_host: 192.168.0.2
variable_sip_to_params: transport=UDP
variable_sip_to_user: 3030
variable_sip_to_uri: 3030@192.168.0.2
variable_sip_to_host: 192.168.0.2
variable_sip_contact_params: transport=UDP
variable_sip_contact_user: 1000
variable_sip_contact_port: 60780
variable_sip_contact_uri: 1000@190.52.138.225:60780
variable_sip_contact_host: 190.52.138.225
variable_channel_name: sofia/internal/1000@192.168.0.2
variable_sip_call_id: ODZhNDk5YzlmZDg3YTExOWU4NDU3NmM2ZmI1MzFmNDU.

```
variable_sip_user_agent: Zoiper rev.4688
variable_sip_via_host: 190.52.138.225
variable_sip_via_port: 60780
variable_sip_via_rport: 5060
variable_max_forwards: 70
variable_presence_id: 1000@192.168.0.2
variable_switch_r_sdp: v=0
o=Z 0 0 IN IP4 190.52.138.225
s=Z
c=IN IP4 190.52.138.225
t=0 0
m=audio 60790 RTP/AVP 3 110 98 8 0 101
a=rtpmap:3 GSM/8000
a=rtpmap:110 speex/8000
a=rtpmap:98 iLBC/8000
a=fmtp:98 mode=30
a=rtpmap:8 PCMA/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:101 telephone-event/8000
a=fmtp:101 0-15

variable_remote_media_ip: 190.52.138.225
variable_remote_media_port: 60790
variable_write_codec: GSM
variable_write_rate: 8000
variable_local_media_ip: 192.168.0.2
variable_local_media_port: 19878
variable_endpoint_disposition: ANSWER
variable_current_application_data: $1-192.168.0.2@default
variable_current_application: conference
variable_conference_name: $1-192.168.0.2
variable_read_codec: L16
variable_read_rate: 8000
```

CLIENT_DISCONNECTED

SERVER_DISCONNECTED

SEND_INFO

RECV_INFO

CALL_SECURE

NAT

RECORD_START

RECORD_STOP

PLAYBACK_START

Received everytime a new playback starts. If multiple files has been set when calling the playback application, a PLAYBACK_START and PLAYBACK_STOP event will be received for each file being played.

Also check out http://wiki.freemwitch.org/wiki/Misc._Dialplan_Tools_playback#Example_for_specific_playback_variables for information about how to set specific variables that will follow the events.

PLAYBACK_STOP

See PLAYBACK_START.

CALL_UPDATE

Tells us to which UUID this channel was bridged to, through the "Bridged-To" header.

```
Event-Name: CALL_UPDATE
...
Unique-ID: f3ebca6c-d9cd-4f89-ae12-748e6c479dda
Bridged-To: ada7f3de-2374-4144-9b1d-eade29df0779
Direction: SEND
Channel-State: CS_EXCHANGE_MEDIA
Channel-Call-State: ACTIVE
Channel-Name: sofia/internal/sip:9998@192.168.56.1:56454
Call-Direction: outbound
Presence-Call-Direction: outbound
Channel-Presence-ID: 9998@192.168.56.2
Channel-Call-UUID: ada7f3de-2374-4144-9b1d-eade29df0779
Answer-State: answered
...
```

3. Other events

API

An API function has been invoked.

Api command documentation can be found in the [mod_commands](#) section.

```
Event-Name: API
Core-UUID: f3c23231-f251-49d8-bbf6-fe5c52af3762
FreeSWITCH-Hostname: fstest
FreeSWITCH-Switchname: fstest
FreeSWITCH-IPv4: 192.168.20.73
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2013-04-12%2012%3A01%3A31
Event-Date-GMT: Fri,%2012%20Apr%202013%2010%3A01%3A31%20GMT
Event-Date-Timestamp: 1365760891105542
Event-Calling-File: switch_loadable_module.c
Event-Calling-Function: switch_api_execute
Event-Calling-Line-Number: 2282
Event-Sequence: 2311
API-Command: version
```

BACKGROUND_JOB

Use this to receive an event when a job started with the bgapi call finishes. The BACKGROUND_JOB event will contain a Job-UUID that matches up with Job-UUID returned by the server when bgapi is called.

The following examples are in the context of an [mod_event_socket](#) client.

Listening for events

```
event plain BACKGROUND_JOB
```

Calling bgapi

```
bgapi originate sofia/mydomain.com/foo@bar.com &park()
```

Server response

```
Content-Type: command/reply
Reply-Text: +OK Job-UUID: e3054f48-151e-11dc-842a-d3a3942d3d63
```

Upon job completion, server response

```
Content-Length: 625
Content-Type: text/event-plain

Job-UUID: 7f4db78a-17d7-11dd-b7a0-db4edd065621
Job-Command: originate
Job-Command-Arg: sofia/default/1005%20'%26park'
Event-Name: BACKGROUND_JOB
Core-UUID: 42bdf272-16e6-11dd-b7a0-db4edd065621
FreeSWITCH-Hostname: ser
FreeSWITCH-IPv4: 192.168.1.104
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2008-05-02%2007%3A37%3A03
Event-Date-GMT: Thu,%2001%20May%202008%2023%3A37%3A03%20GMT
Event-Date-timestamp: 1209685023894968
Event-Calling-File: mod_event_socket.c
Event-Calling-Function: api_exec
Event-Calling-Line-Number: 609
Content-Length: 41
```

```
+OK 7f4de4bc-17d7-11dd-b7a0-db4edd065621
```

It should be noted that the second Content-Length in the Background Job event indicates the length of the job uuid which is returned as a body within the event.

CUSTOM

See **2.2 Subclasses (or CUSTOM events)** section.

RE_SCHEDULE

Reschedule a task in the PBX.

Event specific key/values:

```
Task-ID: 1
Task-Desc: heartbeat
Task-Group: core
Task-Runtime: 1178646608
```

HEARTBEAT

Status information for FreeSWITCH triggered by FreeSWITCH's heartbeat every 20 seconds.

Event specific information:

```
Content-Length: 605
Content-Type: text/event-plain

Event-Info: System Ready
Up-Time: 0 years, 0 days, 0 hours, 0 minutes, 40 seconds, 0 milliseconds, 0 microseconds
Session-Count: 0
Session-Per-Sec: 500
Event-Name: HEARTBEAT
Core-UUID: 596ab2fd-14c5-44b5-a02b-93ffb7cd5dd6
FreeSWITCH-Hostname: *****
FreeSWITCH-IPv4: *****
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2008-01-23%2013%3A39%3A06
Event-Date-GMT: Wed,%2023%20Jan%202008%2018%3A39%3A06%20GMT
Event-Date-timestamp: 1201113546203319
Event-Calling-File: switch_core.c
Event-Calling-Function: send_heartbeat
Event-Calling-Line-Number: 74
```

DETECTED_TONE

Event sent when a tone detected.

Example when for event generated by `<action application="fax_detect"/>` when a fax tone detected:

```
Detected-Tone: fax
Event-Name: DETECTED_TONE
Core-UUID: 5859d2de-ccec-11dc-aab0-69b2875ec123
FreeSWITCH-Hostname: abacus
FreeSWITCH-IPv4: <myip>
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2008-01-27%2017%3A19%3A30
Event-Date-GMT: Sun,%2027%20Jan%202008%2016%3A19%3A30%20GMT
Event-Date-timestamp: 1201450770979522
Event-Calling-File: switch_ivr_async.c
Event-Calling-Function: tone_detect_callback
Event-Calling-Line-Number: 1098
```

ALL

Will show all events, including custom events. There is no such event like ALL. This is just like macro when specifying which events to receive.

6. Undocumented events

LOG

INBOUND_CHAN

OUTBOUND_CHAN

STARTUP

PUBLISH

UNPUBLISH

TALK

Triggered when speech is detected on channel. Needs parameter "vad" to be set in the sip profile. e.g:

```
<param name="vad" value="both" />
```

You also need to set some channel variables to make this work:

```
<action application="export" data="fire_talk_events=true"/>
<action application="export" data="fire_not_talk_events=true"/>
```

```
Event-Name: TALK
Core-UUID: da0f9ecb-5e56-4be6-891d-a6c7b86c98f6
FreeSWITCH-Hostname: fstest
FreeSWITCH-Switchname: fstest
FreeSWITCH-IPv4: 192.168.20.73
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2013-04-12%2012%3A10%3A36
Event-Date-GMT: Fri,%2012%20Apr%202013%2010%3A10%3A36%20GMT
Event-Date-Timestamp: 1365761436805557
Event-Calling-File: switch_rtp.c
Event-Calling-Function: rtp_common_write
Event-Calling-Line-Number: 5329
Event-Sequence: 532
```

NOTALK

triggered when speech is off for the channel.

```
Event-Name: NOTALK
Core-UUID: da0f9ecb-5e56-4be6-891d-a6c7b86c98f6
FreeSWITCH-Hostname: fstest
FreeSWITCH-Switchname: fstest
FreeSWITCH-IPv4: 192.168.20.73
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2013-04-12%2012%3A10%3A36
Event-Date-GMT: Fri,%2012%20Apr%202013%2010%3A10%3A36%20GMT
Event-Date-Timestamp: 1365761436805557
Event-Calling-File: switch_rtp.c
Event-Calling-Function: rtp_common_write
Event-Calling-Line-Number: 5329
Event-Sequence: 532
```

SESSION_CRASH

DTMF

Content-Length: 3419

Content-Type: text/event-plain

Channel-State: CS_EXECUTE
Channel-State-Number: 4
Channel-Name: sofia/default/1006%4010.0.1.250%3A5060
Unique-ID: 8dcbb29e-b349-462a-84ca-b0ec73681284
Call-Direction: inbound
Answer-State: answered
Channel-Read-Codec-Name: G722
Channel-Read-Codec-Rate: 16000
Channel-Write-Codec-Name: G722
Channel-Write-Codec-Rate: 16000
Caller-Username: 1006
Caller-Dialplan: XML
Caller-Caller-ID-Name: Brian%20West
Caller-Caller-ID-Number: 1006
Caller-Network-Addr: 10.0.1.240
Caller-Destination-Number: 9999
Caller-Unique-ID: 8dcbb29e-b349-462a-84ca-b0ec73681284
Caller-Source: mod_sofia
Caller-Context: default
Caller-Channel-Name: sofia/default/1006%4010.0.1.250%3A5060
Caller-Channel-Created-Time: 1197864491030187
Caller-Channel-Answered-Time: 1197864491080700
Caller-Channel-Hangup-Time: 0
Caller-Channel-Transfer-Time: 0
Caller-Screen-Bit: yes
Caller-Privacy-Hide-Name: no
Caller-Privacy-Hide-Number: no
variable_sip_authorized: true
variable_sip_mailbox: 1006
variable_sip_auth_username: 1006
variable_sip_auth_realm: 10.0.1.250
variable_mailbox: 1006
variable_accountcode: 1006
variable_presence_id: 1006%4010.0.1.250
variable_user_context: default
variable_effective_caller_id_name: Extension%201006
variable_effective_caller_id_number: 1006
variable_sip_from_user: 1006
variable_sip_from_port: 5060
variable_sip_from_uri: 1006%4010.0.1.250%3A5060
variable_sip_from_host: 10.0.1.250
variable_sip_from_user_stripped: 1006
variable_sofia_profile_name: default
variable_sip_req_user: 9999
variable_sip_req_port: 5060
variable_sip_req_uri: 9999%4010.0.1.250%3A5060
variable_sip_req_host: 10.0.1.250
variable_sip_to_user: 9999
variable_sip_to_port: 5060
variable_sip_to_uri: 9999%4010.0.1.250%3A5060
variable_sip_to_host: 10.0.1.250
variable_sip_contact_user: 1006
variable_sip_contact_port: 5060
variable_sip_contact_uri: 1006%4010.0.1.240%3A5060
variable_sip_contact_host: 10.0.1.240
variable_channel_name: sofia/default/1006%4010.0.1.250%3A5060
variable_sip_call_id: 7f5751d4-f37ede8d-6a4498be%4010.0.1.240
variable_sip_via_host: 10.0.1.240
variable_sip_via_port: 5060
variable_max_forwards: 70
variable_switch_r_sdp: v%3D0%0D%0A%3D-%201197864004%201197864004%20IN%20IP4%2010.0.1.240%0D%0A%3DPolycom%20IP%20Phone%0D%0Ac%3DIN%20IP4%2010.0.1.240%0D%0A%3Dsendrecv%0D%0Am%3Daudio%202230%20RTP/AVP%209%200%208%2018%20101%0D%0A%3Drtpmap%3A9%20G722/8000%0D%0A%3Drtpmap%3A0%20PCMU/8000%0D%0A%3Drtpmap%3A8%20PCMA/8000%0D%0A%3Drtpmap%3A18%20G729/8000%0D%0A%3Drtpmap%3A101%20telephone-event/8000%0D%0A
variable_remote_media_ip: 10.0.1.240
variable_remote_media_port: 2230
variable_read_codec: G722
variable_read_rate: 16000
variable_write_codec: G722
variable_write_rate: 16000
variable_use_profile: nat
variable_numbering_plan: US
variable_default_gateway: asterlink.com
variable_default_area_code: 918
variable_user_name: default
variable_domain_name: 10.0.1.250
variable_local_media_ip: 10.0.1.250
variable_local_media_port: 2230

variable_endpoint_disposition: ANSWER
DTMF-Digit: 1
DTMF-Duration: 2000
Event-Name: DTMF
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A27%3A42
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A27%3A42%20GMT
Event-Date-timestamp: 1197865662745906
Event-Calling-File: switch_channel.c
Event-Calling-Function: switch_channel_dequeue_dtmf
Event-Calling-Line-Number: 269

MESSAGE

Contains the composed text of the message much like an email.

Content-Length: 699
Content-Type: text/event-plain

sip_mailbox: 1006
sip_auth_username: 1006
sip_auth_realm: 10.0.1.250
mailbox: 1006
user_name: 1006
domain_name: 10.0.1.250
accountcode: 1006
presence_id: 1006%4010.0.1.250
user_context: default
effective_caller_id_name: Extension%201006
effective_caller_id_number: 1006
Event-Name: MESSAGE
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A28%3A29
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A28%3A29%20GMT
Event-Date-timestamp: 1197865709262950
Event-Calling-File: sofia_reg.c
Event-Calling-Function: sofia_reg_handle_sip_i_register
Event-Calling-Line-Number: 636

PRESENCE_IN

Content-Length: 559
Content-Type: text/event-plain

proto: sip
login: sip%3Amod_sofia%4010.0.1.250%3A5060
rpid: unknown
from: 1006%4010.0.1.250
status: Registered
event_type: presence
Event-Name: PRESENCE_IN
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A30%3A59
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A30%3A59%20GMT
Event-Date-timestamp: 1197865859556025
Event-Calling-File: sofia_reg.c
Event-Calling-Function: sofia_reg_handle_register
Event-Calling-Line-Number: 532

[PRESENCE_IN event example](#)

PRESENCE_OUT

PRESENCE_PROBE

Content-Length: 613
Content-Type: text/event-plain

proto: sip
login: sip%3Amod_sofia%4010.0.1.250%3A5060
from: 1009%4010.0.1.250
status: Available
event_type: presence
event_subtype: probe
proto-specific-event-name: dialog
Event-Name: PRESENCE_PROBE
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A31%3A16
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A31%3A16%20GMT
Event-Date-timestamp: 1197865876565022
Event-Calling-File: sofia_presence.c
Event-Calling-Function: sofia_presence_sub_reg_callback
Event-Calling-Line-Number: 484

MESSAGE_WAITING

Contains the protocol specific MWI data.

sendevent MESSAGE_WAITING
MWI-Messages-Waiting: yes
MWI-Message-Account: jonas@gauffin.com
MWI-Voice-Message: 2/1 (1/1)

Voice messages: total_new_messages / total_saved_messages (total_new_urgent_messages / total_saved_urgent_messages)

MESSAGE_QUERY

Content-Length: 470
Content-Type: text/event-plain

Message-Account: sip%3A1006%4010.0.1.250
Event-Name: MESSAGE_QUERY
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A29%3A59
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A29%3A59%20GMT
Event-Date-timestamp: 1197865799573052
Event-Calling-File: sofia_reg.c
Event-Calling-Function: sofia_reg_handle_register
Event-Calling-Line-Number: 603

ROSTER

Content-Length: 457
Content-Type: text/event-plain

proto: sip
from: 1006%4010.0.1.250
Event-Name: ROSTER
Core-UUID: 2130a7d1-clf7-44cd-8fae-8ed5946f3cec
FreeSWITCH-Hostname: localhost.localdomain
FreeSWITCH-IPv4: 10.0.1.250
FreeSWITCH-IPv6: 127.0.0.1
Event-Date-Local: 2007-12-16%2022%3A32%3A29
Event-Date-GMT: Mon,%2017%20Dec%202007%2004%3A32%3A29%20GMT
Event-Date-timestamp: 1197865949889095
Event-Calling-File: sofia_reg.c
Event-Calling-Function: sofia_reg_handle_register
Event-Calling-Line-Number: 585

REC_V_RTCP_MESSAGE

Content-Length: 711
Content-Type: text/event-plain

Event-Name: RECV_RTCP_MESSAGE
Core-UUID: f852daae-6da9-4979-8dc8-fall651a7891
FreeSWITCH-Hostname: test
FreeSWITCH-IPv4: 1.2.3.4
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2010-12-21%2014%3A22%3A02
Event-Date-GMT: Tue,%2021%20Dec%202010%2013%3A22%3A02%20GMT
Event-Date-Timestamp: 1292937722267655
Event-Calling-File: mod_sofia.c
Event-Calling-Function: sofia_read_frame
Event-Calling-Line-Number: 928
Unique-ID: 3c93d73c-586a-4ef8-8ca4-fb5blccc26b7
SSRC: bdf97c8c
NTP-Most-Significant-Word: 3501926523
NTP-Least-Significant-Word: 3607772280
RTP-Timestamp: 3882139760
Sender-Packet-Count: 1222
Octect-Packet-Count: 210184
Last-RTP-Timestamp: 3882139760
RTP-Rate: 8000
Capture-Time: 1292937722267748

CODEC

DETECTED_SPEECH

```
Speech-Type: detected-speech
Event-Name: DETECTED_SPEECH
Core-UUID: aac0f73e-b822-e54c-a02a-06a839ca3e5a
FreeSWITCH-Hostname: AMONROY
FreeSWITCH-IPv4: 192.168.1.220
FreeSWITCH-IPv6: ::1
Event-Date-Local: 2009-01-26 16:07:24
Event-Date-GMT: Mon, 26 Jan 2009 22:07:24 GMT
Event-Date-Timestamp: 1233007644906250
Event-Calling-File: switch_ivr_async.c
Event-Calling-Function: speech_thread
Event-Calling-Line-Number: 1758
Content-Length: 435

<result grammar="<request1@form-level.store>#nombres">
  <interpretation grammar="<request1@form-level.store>#nombres" confidence="0.494643">
    <instance confidence="0.494643">
      arturo monroy
    </instance>
    <input mode="speech" confidence="0.494643">
      <input confidence="0.313102">
        arturo
      </input>
      <input confidence="0.618854">
        monroy
      </input>
    </input>
  </interpretation>
</result>
```

PRIVATE_COMMAND

TRAP

generic event that can be used to indicate a severe error

ADD_SCHEDULE

generated when using sched__api command

Event-Name: ADD_SCHEDULE
Core-UUID: f3c23231-f251-49d8-bbf6-fe5c52af3762
FreeSWITCH-Hostname: fstest
FreeSWITCH-Switchname: fstest
FreeSWITCH-IPv4: 192.168.20.73
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2013-04-12%2011%3A56%3A24
Event-Date-GMT: Fri,%2012%20Apr%202013%2009%3A56%3A24%20GMT
Event-Date-Timestamp: 1365760584365548
Event-Calling-File: switch_scheduler.c
Event-Calling-Function: switch_scheduler_add_task
Event-Calling-Line-Number: 222
Event-Sequence: 2252
Task-ID: 4
Task-Desc: sched_api_function
Task-Group: none
Task-Runtime: 1365760589

DEL_SCHEDULE

generated when using sched_del or an scheduled task is finished

Event-Name: DEL_SCHEDULE
Core-UUID: f3c23231-f251-49d8-bbf6-fe5c52af3762
FreeSWITCH-Hostname: fstest
FreeSWITCH-Switchname: fstest
FreeSWITCH-IPv4: 192.168.20.73
FreeSWITCH-IPv6: %3A%3A1
Event-Date-Local: 2013-04-12%2011%3A56%3A29
Event-Date-GMT: Fri,%2012%20Apr%202013%2009%3A56%3A29%20GMT
Event-Date-Timestamp: 1365760589045539
Event-Calling-File: switch_scheduler.c
Event-Calling-Function: switch_scheduler_execute
Event-Calling-Line-Number: 74
Event-Sequence: 2254
Task-ID: 4
Task-Desc: sched_api_function
Task-Group: none
Task-Runtime: 1365760589

EXE_SCHEDULE