- **outbound_caller_name** - Name shown if phones when you make outbound calls
- **outbound_caller_number** - Number shown in phones when you make outbound calls
- **domain** - Domain that users register to (domain is specified in phone configs).
- **external_rtp_ip** and **external_sip_ip** - Safest to use an IP address rather than DNS, in case a device can't resolve the domain.
- **NOTE:** The example below may not be the most up-to-date default version that you will find in your installation.

Related info from the FreeSwitch FAQ:

Q: What is the difference between using a ${var} and $${var} in the configuration files?

A: The ${var} is expanded as its encountered in the dialplan. The $${var} variation is used as a preprocessor variable and is expanded at load or reloadxml. See vars.xml in the conf folder for more information.

```
<!-- Preprocessor Variables
     These are introduced when configuration strings must be consistent across modules.
     NOTICE: YOU CAN NOT COMMENT OUT AN X-PRE-PROCESS line, Remove the line instead.

     WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING

     YOU SHOULD CHANGE THIS default_password value if you don't want to be subject to any
     toll fraud in the future.  It's your responsibility to secure your own system.

     This default config is used to demonstrate the feature set of FreeSWITCH.

     WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING WARNING
-->
<X-PRE-PROCESS cmd="set" data="default_password=1234"/>
<!-- Did you change it yet? -->

<X-PRE-PROCESS cmd="set" data="sound_prefix=$${sounds_dir}/en/us/callie"/>

<!--
    This setting is what sets the default domain FreeSWITCH will use if all else fails.

    FreeSWICH will default to $${local_ip_v4} unless changed.  Changing this setting does
    affect the sip authentication.  Please review conf/directory/default.xml for more
    information on this topic.
-->
<X-PRE-PROCESS cmd="set" data="domain=$${local_ip_v4}"/>
<X-PRE-PROCESS cmd="set" data="domain_name=$${domain}"/>
<X-PRE-PROCESS cmd="set" data="hold_music=local_stream://moh"/>
<X-PRE-PROCESS cmd="set" data="use_profile=internal"/>

<!--
    Enable ZRTP globally you can override this on a per channel basis

    http://wiki.freeswitch.org/wiki/ZRTP (on how to enable zrtp)
-->
<X-PRE-PROCESS cmd="set" data="zrtp_secure_media=true"/>

<!--
     Examples of codec options: (module must be compiled and loaded)

     codecname[@8000h|16000h|32000h[@XXi]]

     XX is the frame size must be multples allowed for the codec
```

```
FreeSWITCH can support 10-120ms on some codecs.
We do not support exceeding the MTU of the RTP packet.


iLBC@30i         - iLBC using mode=30 which will win in all cases.
DVI4@8000h@20i   - IMA ADPCM 8kHz using 20ms ptime. (multiples of 10)
DVI4@16000h@40i  - IMA ADPCM 16kHz using 40ms ptime. (multiples of 10)
speex@8000h@20i  - Speex 8kHz using 20ms ptime.
speex@16000h@20i - Speex 16kHz using 20ms ptime.
speex@32000h@20i - Speex 32kHz using 20ms ptime.
BV16             - BroadVoice 16kb/s narrowband, 8kHz
BV32             - BroadVoice 32kb/s wideband, 16kHz
G7221@16000h     - G722.1 16kHz (aka Siren 7)
G7221@32000h     - G722.1C 32kHz (aka Siren 14)
CELT@32000h      - CELT 32kHz, only 10ms supported
CELT@48000h      - CELT 48kHz, only 10ms supported
GSM@40i          - GSM 8kHz using 40ms ptime. (GSM is done in multiples of 20, Default is
G722             - G722 16kHz using default 20ms ptime. (multiples of 10)
PCMU             - G711 8kHz ulaw using default 20ms ptime. (multiples of 10)
PCMA             - G711 8kHz alaw using default 20ms ptime. (multiples of 10)
G726-16          - G726 16kbit adpcm using default 20ms ptime. (multiples of 10)
G726-24          - G726 24kbit adpcm using default 20ms ptime. (multiples of 10)
G726-32          - G726 32kbit adpcm using default 20ms ptime. (multiples of 10)
G726-40          - G726 40kbit adpcm using default 20ms ptime. (multiples of 10)
AAL2-G726-16     - Same as G726-16 but using AAL2 packing. (multiples of 10)
AAL2-G726-24     - Same as G726-24 but using AAL2 packing. (multiples of 10)
AAL2-G726-32     - Same as G726-32 but using AAL2 packing. (multiples of 10)
AAL2-G726-40     - Same as G726-40 but using AAL2 packing. (multiples of 10)
LPC              - LPC10 using 90ms ptime (only supports 90ms at this time in FreeSWITCH)
L16              - L16 isn't recommended for VoIP but you can do it. L16 can exceed the MT

These are the passthru audio codecs:

G729             - G729 in passthru mode. (mod_g729)
G723             - G723.1 in passthru mode. (mod_g723_1)
AMR              - AMR in passthru mode. (mod_amr)

These are the passthru video codecs: (mod_h26x)

H261             - H.261 Video
H263             - H.263 Video
H263-1998        - H.263-1998 Video
H263-2000        - H.263-2000 Video
H264             - H.264 Video

RTP Dynamic Payload Numbers currently used in FreeSWITCH and what for.

96  - AMR
97  - iLBC (30)
98  - iLBC (20)
99  - Speex 8kHz, 16kHz, 32kHz
100 -
101 - telephone-event
102 -
103 -
104 -
105 -
106 - BV16
107 - G722.1 (16kHz)
108 -
109 -
110 -
```

```
     111 -
     112 -
     113 -
     114 - CELT 32kHz, 48kHz
     115 - G722.1C (32kHz)
     116 -
     117 - SILK 8kHz
     118 - SILK 12kHz
     119 - SILK 16kHz
     120 - SILK 24kHz
     121 - AAL2-G726-40 && G726-40
     122 - AAL2-G726-32 && G726-32
     123 - AAL2-G726-24 && G726-24
     124 - AAL2-G726-16 && G726-16
     125 -
     126 -
     127 - BV32

-->
<X-PRE-PROCESS cmd="set" data="global_codec_prefs=G7221@32000h,G7221@16000h,G722,PCMU,PCMA,GSM"
<X-PRE-PROCESS cmd="set" data="outbound_codec_prefs=PCMU,PCMA,GSM"/>

<!--
    xmpp_client_profile and xmpp_server_profile
    xmpp_client_profile can be any string.
    xmpp_server_profile is appended to "dingaling_" to form the database name
    containing the "subscriptions" table.
    used by: dingaling.conf.xml enum.conf.xml
-->

<X-PRE-PROCESS cmd="set" data="xmpp_client_profile=xmppc"/>
<X-PRE-PROCESS cmd="set" data="xmpp_server_profile=xmpps"/>
<!--
     THIS IS ONLY USED FOR DINGALING

     bind_server_ip

     Can be an ip address, a dns name, or "auto".
     This determines an ip address available on this host to bind.
     If you are separating RTP and SIP traffic, you will want to have
     use different addresses where this variable appears.
     Used by: dingaling.conf.xml
-->
<X-PRE-PROCESS cmd="set" data="bind_server_ip=auto"/>

<!-- NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE

     If you're going to load test FreeSWITCH please input real IP addresses
     for external_rtp_ip and external_sip_ip
-->

<!-- external_rtp_ip
     Can be an one of:
         ip address: "12.34.56.78"
         a stun server lookup: "stun:stun.server.com"
         a DNS name: "host:host.server.com"
     where fs.mydomain.com is a DNS A record-useful when fs is on
     a dynamic IP address, and uses a dynamic DNS updater.
     If unspecified, the bind_server_ip value is used.
     Used by: sofia.conf.xml dingaling.conf.xml
-->
<X-PRE-PROCESS cmd="set" data="external_rtp_ip=stun:stun.freeswitch.org"/>
```

```
<!-- external_sip_ip
    Used as the public IP address for SDP.
     Can be an one of:
         ip address: "12.34.56.78"
         a stun server lookup: "stun:stun.server.com"
         a DNS name: "host:host.server.com"
     where fs.mydomain.com is a DNS A record-useful when fs is on
     a dynamic IP address, and uses a dynamic DNS updater.
     If unspecified, the bind_server_ip value is used.
     Used by: sofia.conf.xml dingaling.conf.xml
-->
<X-PRE-PROCESS cmd="set" data="external_sip_ip=stun:stun.freeswitch.org"/>

<!-- unroll-loops
     Used to turn on sip loopback unrolling.
-->
<X-PRE-PROCESS cmd="set" data="unroll_loops=true"/>

<!-- outbound_caller_id and outbound_caller_name
     The caller ID telephone number we should use when calling out.
     Used by: conference.conf.xml and user directory for default
     outbound callerid name and number.
-->
<X-PRE-PROCESS cmd="set" data="outbound_caller_name=FreeSWITCH"/>
<X-PRE-PROCESS cmd="set" data="outbound_caller_id=0000000000"/>

<!-- various debug and defaults -->
<X-PRE-PROCESS cmd="set" data="call_debug=false"/>
<X-PRE-PROCESS cmd="set" data="console_loglevel=info"/>
<X-PRE-PROCESS cmd="set" data="default_areacode=918"/>
<X-PRE-PROCESS cmd="set" data="default_country=US"/>

<X-PRE-PROCESS cmd="set" data="uk-ring=%(400,200,400,450);%(400,2200,400,450)"/>
<X-PRE-PROCESS cmd="set" data="us-ring=%(2000,4000,440.0,480.0)"/>
<X-PRE-PROCESS cmd="set" data="fr-ring=%(1500,3500,440.0,0.0)"/>
<X-PRE-PROCESS cmd="set" data="rs-ring=%(1000,4000,425.0,0.0)"/>
<X-PRE-PROCESS cmd="set" data="ru-ring=%(800,3200,425,0)"/>
<X-PRE-PROCESS cmd="set" data="bong-ring=v=-7;%(100,0,941.0,1477.0);v=-7;>=2;+=.1;%(1400,0,350,
<X-PRE-PROCESS cmd="set" data="sit=%(274,0,913.8);%(274,0,1370.6);%(380,0,1776.7)"/>
<!--
    Setting up your default sip provider is easy.
    Below are some values that should work in most cases.

    These are for conf/directory/default/example.com.xml
-->
<X-PRE-PROCESS cmd="set" data="default_provider=example.com"/>
<X-PRE-PROCESS cmd="set" data="default_provider_username=joeuser"/>
<X-PRE-PROCESS cmd="set" data="default_provider_password=password"/>
<X-PRE-PROCESS cmd="set" data="default_provider_from_domain=example.com"/>
<!-- true or false -->
<X-PRE-PROCESS cmd="set" data="default_provider_register=false"/>
<X-PRE-PROCESS cmd="set" data="default_provider_contact=5000"/>

<!--
    SIP and TLS settings. http://wiki.freeswitch.org/wiki/Tls
-->
<X-PRE-PROCESS cmd="set" data="sip_tls_version=tlsv1"/>

<!-- Internal SIP Profile -->
<X-PRE-PROCESS cmd="set" data="internal_auth_calls=true"/>
<X-PRE-PROCESS cmd="set" data="internal_sip_port=5060"/>
```

```
<X-PRE-PROCESS cmd="set" data="internal_tls_port=5061"/>
<X-PRE-PROCESS cmd="set" data="internal_ssl_enable=false"/>
<X-PRE-PROCESS cmd="set" data="internal_ssl_dir=$${base_dir}/conf/ssl"/>

<!-- External SIP Profile -->
<X-PRE-PROCESS cmd="set" data="external_auth_calls=false"/>
<X-PRE-PROCESS cmd="set" data="external_sip_port=5080"/>
<X-PRE-PROCESS cmd="set" data="external_tls_port=5081"/>
<X-PRE-PROCESS cmd="set" data="external_ssl_enable=false"/>
<X-PRE-PROCESS cmd="set" data="external_ssl_dir=$${base_dir}/conf/ssl"/>
```

See Also:

- Default Configuration