**Provider Broadvoice (USA)**

Last update: 17 November 2010

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**Broadvoice.com**

**Dialplan Codec Selection**

- Incoming and Outgoing calls work with UDP only.
- As of 12 February 2008 Broadvoice is not RFC 3261 compliant. Broadvoice does not support the usage of TCP within their SIP stack. This means you have to set the `absolute_codec_string channel variable` to PCMU.
- **Chris** 11:24, 31 January 2008 (EST) It was brought up on the IRC channel, Broadvoice apparently isn't following the SIP specifications for MTU packet sizes.
  - You will receive a `4xx Request Failure Responses` message unless you trim down the number of codecs contained in the UDP packets. By setting the `absolute_codec_string channel variable` to PCMU, you will play by their rules.
  - `originate {absolute_codec_string=PCMU} sofia/gateway/broadvoice/12221231234 15551231234`

**DNS SRV and Broadvoice**

Broadvoice uses DNS SRV records to provide failover to redundant geographically disparate SIP proxy servers located across the US. FreeSWITCH supports DNS SRV records.

The use of DNS SRV for failover seems to occur many times during the course of each day, presumably as part of a load balancing function within the Broadvoice network. Having initially attempted to follow the DNS "fix" documented below I kept getting registration errors at regular intervals each time broadvoice failover mechanism kicked in.

The following configuration seems to work reliably. The proxy should use the nearest broadvoice server to you:

- `proxy-nyc.broadvoice.com`
- `proxy-bos.broadvoice.com`
- `proxy-dca.broadvoice.com`
- `proxy-atl.broadvoice.com`
- `proxy-chi.broadvoice.com`
- `proxy-mia.broadvoice.com`
- `proxy-lax.broadvoice.com`

Note that you MUST use the SRV record which contain a dash within the host name. These DNS SRV records are not directly "pingable" but can be resolved by performing an "nslookup" with a "set type = SRV" first.

```
<include>
<gateway name="broadvoice">
  <param name="username" value="5555551234"/>
  <param name="realm" value="sip.broadvoice.com"/>
  <param name="from-domain" value="sip.broadvoice.com"/>
  <param name="password" value="hackmybroadvoiceaccount"/>
  <param name="extension" value="5555551234"/>
  <param name="proxy" value="proxy-nyc.broadvoice.com"/> <!-- example using the broadvoice DNS SRV record for New York City. -->
  <param name="expire-seconds" value="60"/>
  <param name="register" value="true"/>
  <param name="retry-seconds" value="60"/>
</gateway>
</include>
```

**Alternative DNS method**

- The following method is suggested IF you experience difficulty using DNS SRV. It is a work around that seems to cause frequent registration errors.
- Broadvoice has a funny DNS situation, use the following fix. (Broadvoice kept on returning 403 Forbidden messages until I modified my DNS entries within the hosts file)
This is according to the directions on broadvoice.com[1]

Ping the following, and choose the best time.
proxy.lax.broadvoice.com
proxy.dca.broadvoice.com
proxy.mia.broadvoice.com
proxy.atl.broadvoice.com
proxy.chi.broadvoice.com
proxy.bos.broadvoice.com
proxy.nyc.broadvoice.com

Modify your hosts (*nix world: /etc/hosts, windows: C:\Windows\System32\drivers\etc\hosts) file with the correct IP address as follows:
(ip) sip.broadvoice.com

```xml
<include>
  <gateway name="broadvoice">
    <param name="username" value="5555551234"/>
    <param name="realm" value="BroadWorks"/>
    <param name="from-domain" value="sip.broadvoice.com"/>
    <param name="password" value="hackmybroadvoiceaccount"/>
    <param name="extension" value="5555551234"/>
    <param name="proxy" value="sip.broadvoice.com"/>
    <param name="expire-seconds" value="3600"/>
    <param name="register" value="true"/>
    <param name="retry-seconds" value="3600"/>
  </gateway>
</include>
```