```
wait_for_silence <silence_thresh> <silence_hits> <listen_hits> <timeout_ms> [<file>]
```

Description

Pause dialplan execution while waiting for a certain length of silence on the channel. When silence is detected, or when the timeout period has expired, dialplan processing will continue.

"Silence" is determined by a combination of the <silence_thresh> value and the <silence_hits> value.

- The silence_thresh value is the silence threshold. The lower the value, the "quieter" the channel must be in order to be considered in a silent state. the numbers have to be *bigger* not smaller to make it harder to detect silence
- The silence_hits value represents the number of consecutive frames received with an "energy level" below the silence_thresh value that must be seen before the channel is considered in a silent state. The higher this value, the longer the channel must be in a "silent" state before silence is detected.
- The <listen_hits> value represents the number of frames of non-silence to be counted on the channel prior to engaging the silence detection. The higher this value, the more "noisy" frames that must be seen before silence detection begins.
- The <timeout_ms> value represents the number of milliseconds that the wait_for_silence app will attempt to detect silence before giving up and moving on with the dialplan processing.
- <file> is an optional sound file that can be read and analyzed for silence detection.

Dialplan Example

```
<action application="wait_for_silence" data="200 15 10 5000"/>
```

The above example will do the following:
Wait for 10 "noisy" frames to be heard, then
Wait for 15 consecutive "silent" frames (energy score less than 200) to be heard, then
Continue w/ dialplan processing

To emulate the behavior of the Asterisk WaitForSilence, which allows one to specify the number of iterations of the wait for silence process, simply stack as many wait_for_silence calls as desired. The following dialplan snippet will generally do a good job of waiting for an answering machine to finish its outgoing message before continuing:

```
<action application="wait_for_silence" data="200 15 15 5000"/>
<action application="sleep" data="1000"/>
<action application="wait_for_silence" data="200 15 15 5000"/>
<action application="sleep" data="1000"/>
<action application="wait_for_silence" data="200 15 15 5000"/>
<action application="sleep" data="1000"/>
```

(TODO: follow up w/ Tony to see about setting a channel variable like ${waitstatus} or somesuch)