Speech Control for VR Plugin Settings

Recognition Settings

| Recognition Settings Google Cloud Speech API key | [?] | |
|-----------------------------------------------------------------------------|-----|--|
| Paste your Google Cloud Speech API key here, for more info press [?] button | | |
| Max Alternatives Trim Silence | 10 | |

Google Cloud Speech API key

Plugin uses Google Cloud Speech API for speech recognition.

At first, you need to setup Google Cloud Speech API key:

- 1. Sign up for a Google Cloud Platform account.
- 2. Sign up for Google Cloud Speech API.
- 3. Once you have been granted access to Google Cloud Speech API, refer to the documentation for instructions on generating an API key

Max Alternatives

Indicates the number of alternative transcriptions to provide in the response. By default, the Speech API provides one primary transcription. If you wish to evaluate different alternatives, set *Max Alternatives* to a higher value. Note that the Speech API will only return alternatives if the recognizer determines alternatives to be of sufficient quality.

Trim Silence

Reduces recognition time, but decrease accuracy.

Check this box on if you record long audio. Otherwise for best result use this box unchecked.

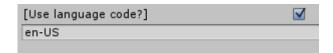
Language

You can select language for speech recognition in two ways:

1. From predefined languages

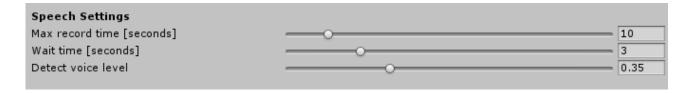


2. Using Language Codes (copy and paste selected language code in text field)



* You can switch between this two ways by check/uncheck "Use language code?" checkbox

Speech Settings



Max record time

Time limit for recording.

Record will be automatically stopped after a specified time.

Record time bounds: min 3 sec, max 60 secs, default 10 secs

Max silence time

Time limit for input voice threshold.

Record will automatically stoped if voice is not detected in a specified time.

Wait time bounds: min 1 sec, max 10 secs, default 3

Voice detection level

If voice level more or equal this param, it mean player says something, silence time will be reset. You can check voice level on Dashboard panel in runtime



Detect voice level bounds: silence 0, min 0.05 for quiet, max 1 for loud, default 0.35

Dashboard

| Dashboard | | |
|-----------|----------------|--|
| Status: | WAITING | |
| | Voice level: 0 | |

Status

Display control current status. There are 3 available options:

- 1. WAITING wait for recording start
- 2. RECORDING –start record and checking player's voice level
- 3. TRANSLATING speech recognition works in Google Cloud

Voice level

Indicate player current voice level in runtime (oly if record start)

```
Status: RECORDING

Voice level: 0.58
```

Scripting API

Get SpeechControl component via code and add necessary event listeners

```
speechControl = GetComponent<SpeechControl>();
speechControl.OnRecordStart += onRecordStart;
speechControl.OnRecordComplete += onRecordComplete;
speechControl.OnTranslateStart += onTranslateStart;
speechControl.OnTranslateComplete += onTranslateComplete;
```

OnRecordStart and OnRecordComplete just notify about event happens (without params)

OnTranslateStart contain language code as param:

```
public delegate void TranslateStart(string languageCode);
```

OnTranslateComplete contain final result as param:

```
public delegate void TranslateComplete(string result);
```

After translating you can parse result data by yourself or using ResponseData class for automatically parsing:

```
ResponseData response = new ResponseData(result);
```

Main result can be getting by line:

```
string transcript = response.Data[0].transcript;
float confidence = response.Data[0].confidence;
```