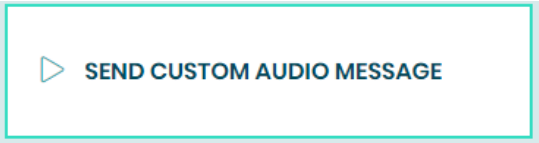
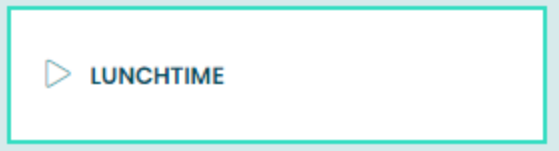
Raspberry Pi (RPi) Text to Speech

Bash Cheat Sheet

Topic	Documentation
	Use Case Script Integration Into Cimitra Script Contents - Copy/Paste Download Scripts (HTTP) GIT **git clone https://github.com/cimitrasoftware/bash_scripts.git**
 **(PRE-CONFIGURED MESSAGE)**	Use Case Script Integration Into Cimitra Script Contents - Copy/Paste Download Scripts (HTTP) GIT **git clone https://github.com/cimitrasoftware/bash_scripts.git**

SEND CUSTOM AUDIO MESSAGE

Use Case

A school has RPi devices deployed in every room and even on the outside of the building. All RPi devices are hooked to speakers. Office personnel are able to quickly send a short custom

message to any one of the RPi devices for announcements such as "***Mrs. Jones please send Johnny to the front office***".

Technical Overview

Most of this Bash script was harvested off of the Internet. It basically takes all command-line arguments sent into the script and sends them to a free Google Text to Speech API. If you intend to use Google's Text to Speech API all that much, it is probably best to officially register with Google. But this script in its current form does not require registration. It is limited to 200 characters.

Bash Script - Copy/Paste

```
#!/bin/bash
echo "-------------------------"
echo "[ Your Message is Below ]"
echo ""
echo $@
echo ""
echo "[ Message Delievered! ]"
echo "-----------------------"
say() { local IFS=+;/usr/bin/mplayer -ao alsa -really-quiet
-noconsolecontrols 1> /dev/null 2>/dev/null
"http://translate.google.com/translate_tts?ie=UTF-8&client=t
w-ob&q=$*&tl=en"; } 1> /dev/null 2> /dev/null
say $* 1> /dev/null 2> /dev/null
```

Script Integration Into Cimitra

This assumes that you have already created a Cimitra server deployed a Cimitra Agent etc. to the Raspberry Pi where the **`speech.sh`** script exists.

Create a new **Cimitra App** object and fill in the following properties as follows:

CIMITRA APP PROPERTIES

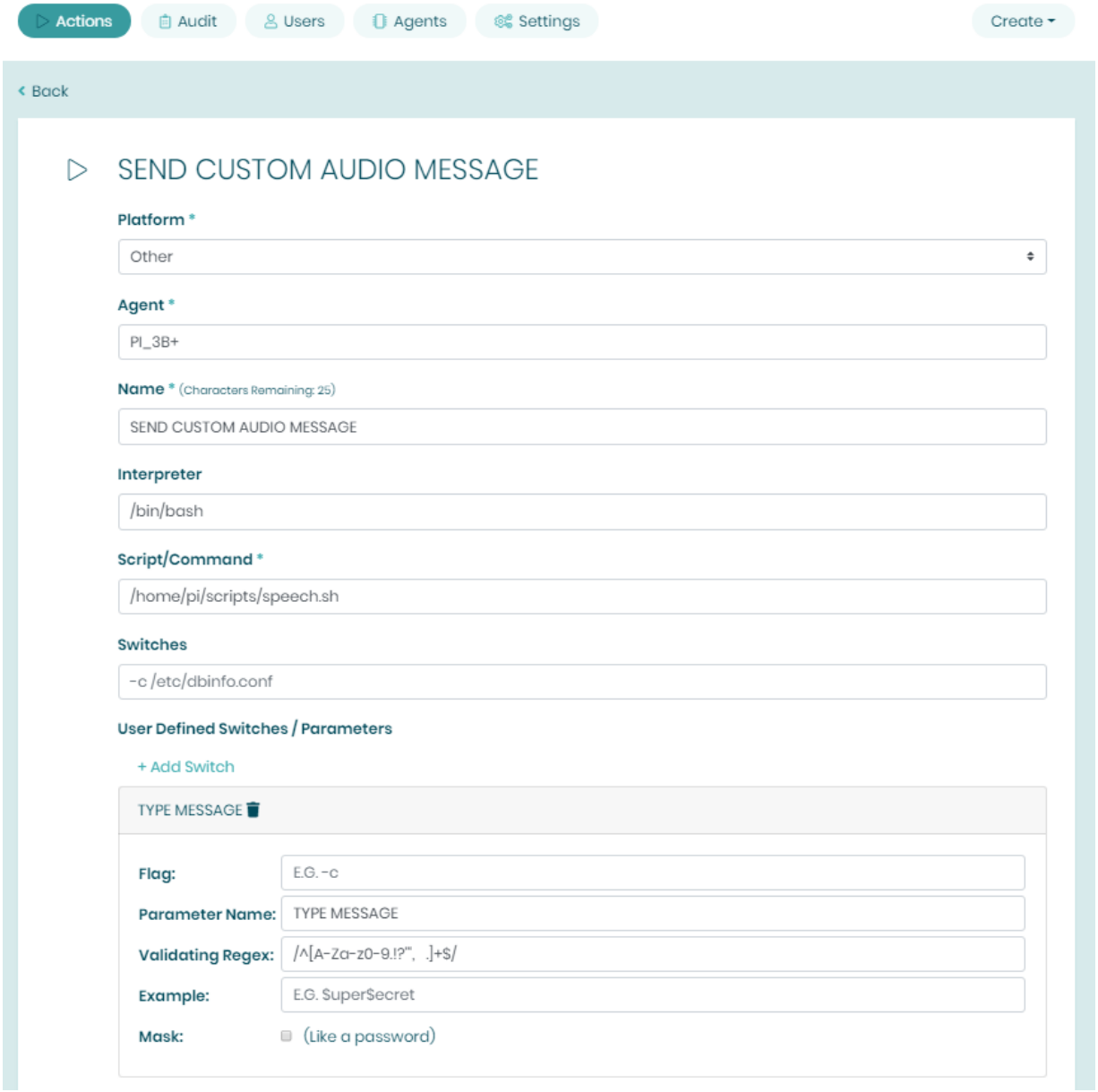
Property	Value
Platform	**Other**
Agent	<The Cimitra Agent deployed to the Raspberry Pi device>
Name	**SEND CUSTOM AUDIO MESSAGE**
Interpreter	**/bin/bash**
Script/Command	<Path to the Cimitra Script> Example: **/home/pi/scripts/speech.sh**
User Defined Switches/Parameters	Click the "**+Add Switch**" option. There will be one switch as shown below.

SEND MESSAGE SWITCH

Flag:	200 character limit, limited punctuation support
Parameter Name:	**SEND MESSAGE**
Validating Regex: Allow: Letters, Numbers, spaces, and some punctuation marks.	**/^[A-Za-z0-9.!?'", .]+$/**

INFORMATION FIELD

NOTE: Send a 200 character audio message. Stay away from punctuation. Apostrophes do not work.



LUNCHTIME - (PRECONFIGURED MESSAGE)

Use Case

A school has RPi devices deployed in every room and even on the outside of the building. All RPi devices are hooked to speakers. Office personnel are able to quickly send a preconfigured message to anyone of the RPi devices for announcements such as "***Lunchtime***".

Technical Overview

Most of this Bash script was harvested off of the Internet. It basically takes all command-line arguments sent into the script and sends them to a free Google Text to Speech API. If you intend to use Google's Text to Speech API all that much, it is probably best to officially register with Google. But this script in its current form does not require registration. It is limited to 200 characters.

The way this script is integrated into Cimitra in this example, the text "**Lunch Time**" is simply being passed to the Bash script. Any number of Cimitra Apps with pre-configured messages can be made in exactly this same manner.

Bash Script - Copy/Paste

```
#!/bin/bash
echo "-------------------------"
echo "[ Your Message is Below ]"
echo ""
echo $@
echo ""
echo "[ Message Delievered! ]"
echo "-------------------------"
say() { local IFS=+;/usr/bin/mplayer -ao alsa -really-quiet
-noconsolecontrols 1> /dev/null 2>/dev/null
"http://translate.google.com/translate_tts?ie=UTF-8&client=t
w-ob&q=$*&tl=en"; } 1> /dev/null 2> /dev/null
say $* 1> /dev/null 2> /dev/null
```

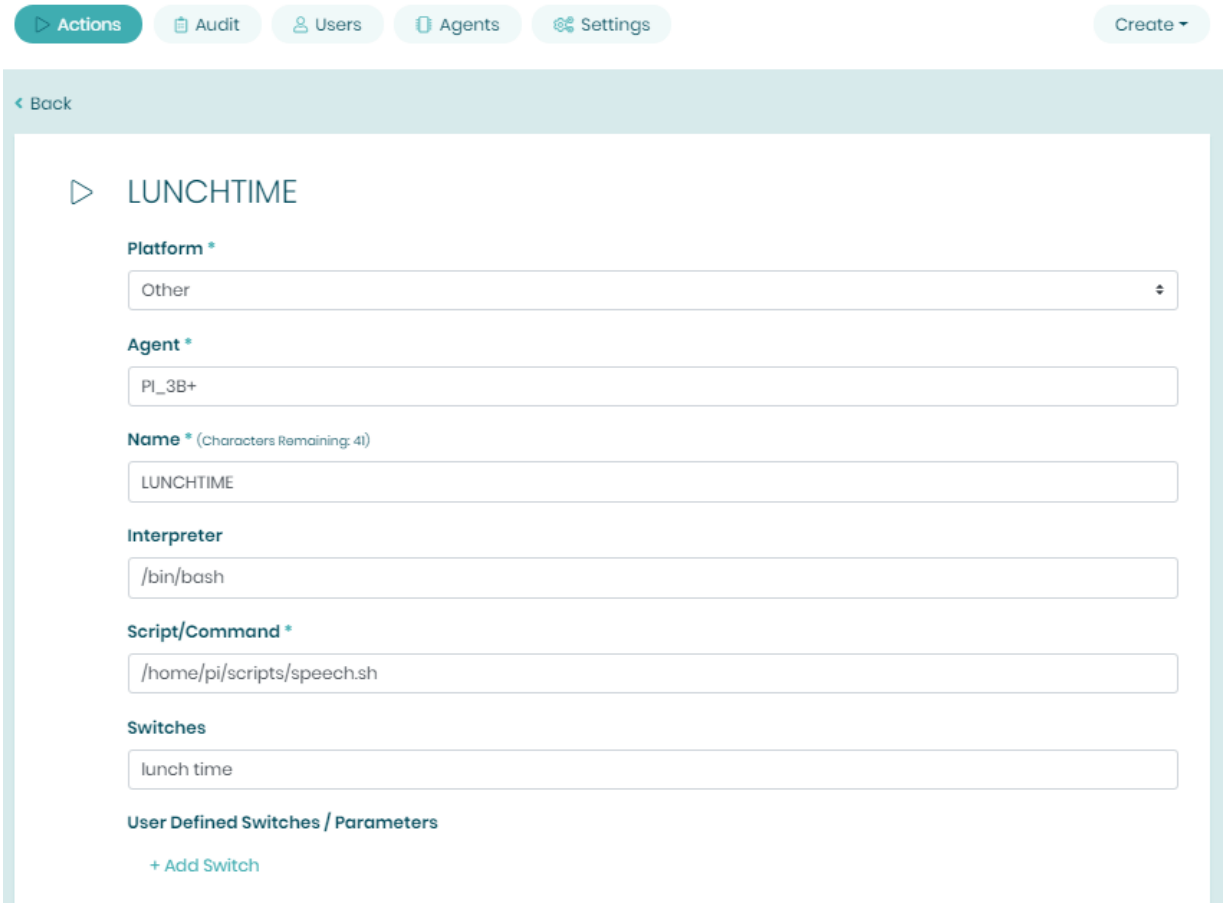
Script Integration Into Cimitra

This assumes that you have already created a Cimitra server deployed a Cimitra Agent etc. to a Raspberry Pi where the **`speech.sh`** script exists.

Create a new **Cimitra App** object and fill in the following properties as follows:

CIMITRA APP PROPERTIES

Property	Value
Platform	**Other**
Agent	<The Cimitra Agent deployed to the Raspberry Pi device>
Name	**SEND CUSTOM AUDIO MESSAGE**
Interpreter	**/bin/bash**
Script/Command	<Path to the Cimitra Script> Example: **/home/pi/scripts/speech.sh**
Switches	**lunch time**


Actions
Audit
Users
Agents
Settings
Create
Back
LUNCHTIME
Platform *
Other
Agent *
PI_3B+
Name * (Characters Remaining: 41)
LUNCHTIME
Interpreter
/bin/bash
Script/Command *
/home/pi/scripts/speech.sh
Switches
lunch time
User Defined Switches / Parameters
+ Add Switch