
TuxEatPi Common Documentation

Release 0.1

TuxEatPi Team

Sep 20, 2017

Contents:

1	tuxeatpi_common	1
1.1	tuxeatpi_common package	1
2	Indices and tables	7
	Python Module Index	9

1.1 tuxeatpi_common package

1.1.1 Submodules

tuxeatpi_common.cli module

TuxEatPi Base Main module

`tuxeatpi_common.cli.cli` (*daemon_class=<class 'tuxeatpi_common.daemon.TepBaseDaemon'>*)
Main function to call the cli

`tuxeatpi_common.cli.set_daemon_class` (*class_object*)
Set DAEMON_CLASS global variable
This variable is used in CliTemplate fonction

tuxeatpi_common.daemon module

Module defining Base Daemon for TuxEatPi daemons

class `tuxeatpi_common.daemon.TepBaseDaemon` (*name, workdir, intents_folder, dialog_folder, logging_level=20*)

Bases: `object`

Base Daemon for TuxEatPi

get_dialog (*key, **kwargs*)
Get dialog and render it

help_ ()
Return help for this daemon

main_loop ()
Main loop

Could be ReImplemented for advanced component

publish (*message, override_topic=None, qos=0*)

Publish message to MQTT

reload ()

Reload the daemon

set_config (*config*)

Save the configuration and reload the daemon

Returns:

- True if the configuration looks good
- False otherwise

shutdown ()

Shutdown the daemon form mqtt message

signal_handler (*signal_, frame*)

Signal handler

start ()

Startup function for main loop

wait_for_speaking (*timeout=30*)

Wait for start and end speech

tuxeatpi_common.dialogs module

Module defining Dialog handler for voice

class tuxeatpi_common.dialogs.DialogsHandler (*dialog_folder, component_name*)

Bases: `object`

Class getting dialog for voice

get_dialog (*language, key, **kwargs*)

Return one sentente related to a key and a language

load ()

Load dialogs from dialog folder

tuxeatpi_common.error module

Module defining TuxEatPi errors

exception tuxeatpi_common.error.TuxEatPiError

Bases: `Exception`

Base class for base exceptions

tuxeatpi_common.etcd_client module

Module defintion function to get etcd client

class tuxeatpi_common.etcd_client.EtcdWrapper (*host=None, port=None*)

Bases: `object`

Etcd Wrapper class to handle sync and async requests

async_read (*key*, *wait=False*)
Async Etcd read operation

delete (*key*, *recursive=False*)
Sync Etcd delete operation

eternal_watch (*key*, *recursive=False*)
Sync Etcd watch operation

read (*key*, *recursive=False*, *wait=False*, *timeout=60*)
Sync Etcd read operation

write (*key*, *value*, *serialize=True*)
Sync Etcd write operation

tuxeatpi_common.initializer module

Module defining the init process for TuxEatPi component

class tuxeatpi_common.initializer.**Initializer** (*component*, *skip_dialogs=False*,
skip_intents=False, *skip_settings=False*)
Bases: `object`
Initializer class to run init action for a component

run ()
Run initialization

tuxeatpi_common.intents module

Module defining how to handle intents

class tuxeatpi_common.intents.**IntentHandler** (*intent_folder*, *component_name*,
etcd_wrapper)
Bases: `object`
Intents handler class

eternal_watch (*nlu_engine*, *recursive=True*)
Watch for changes in etcd

read (*nlu_engine*, *recursive=True*, *wait=True*, *timeout=30*)
Read intent in etcd

save (*nlu_engine*)
Save intent in etcd

tuxeatpi_common.memory module

Module to handle key/value memory in Etcd

class tuxeatpi_common.memory.**MemoryHandler** (*component_name*, *etcd_wrapper*)
Bases: `object`
Memory handler class

delete (*key*)
Delete something in memory

read (*key*)
Read something in memory

save (*key, value*)
Save something in memory

tuxeatpi_common.message module

Module defining TuxEatPi Messages

class tuxeatpi_common.message.**Message** (*topic, data, context='general', source=None*)
Bases: `object`
MQTT Message class

serialize ()
Serialize message content

class tuxeatpi_common.message.**MqttClient** (*component*)
Bases: `paho.mqtt.client.Client`
MQTT client class

on_connect (*client, userdata, flags, rc*)
Callback on server connect

on_message (*mqttc, obj, msg*)
Callback on receive message

on_publish (*client, userdata, mid*)
Callback on message publish

on_subscribe (*client, userdata, mid, granted_qos*)
Callback on topic subscribing

run ()
Run MQTT client

stop ()
Stop MQTT client

class tuxeatpi_common.message.**MqttSender** (*component*)
Bases: `paho.mqtt.client.Client`
MQTT client class

run ()
Run MQTT client

stop ()
Stop MQTT client

tuxeatpi_common.message.**is_mqtt_topic** (*topic_name*)
Add a method as a MQTT topic

tuxeatpi_common.registry module

Module to handle registry in Etcd


```
class tuxeatpi_common.registry.RegistryHandler (component_name, component_version,  
                                              etcd_wrapper)  
    Bases: object  
    Registry handler class  
  
    clear ()  
        Remove all entries in the registry  
  
    ping (state='ALIVE')  
        Send ping data to etcd  
  
    read ()  
        Get all component states  
  
    set_notalive (data)  
        Set component not alive in the registry
```

tuxeatpi_common.settings module

Module defining how to handle component settings

```
class tuxeatpi_common.settings.SettingsHandler (component)  
    Bases: object  
    Settings handler class  
  
    delete (key=None)  
        Delete settings from etcd  
  
    read (watch=False)  
        Watch for component settings change in etcd  
        This is done by the subtaskers  
  
    read_global (watch=False)  
        Watch for global settings change in etcd  
        This is done by the subtaskers  
  
    save (value, key=None)  
        Serialize (json) value and save it in etcd  
  
    stop ()  
        Stop waiting for settings
```

tuxeatpi_common.subtasker module

Module defining Base Daemon for TuxEatPi daemons

```
class tuxeatpi_common.subtasker.SubTasker (component)  
    Bases: threading.Thread  
    Base Daemon for TuxEatPi  
  
    run ()  
        Startup function for main loop  
  
    stop ()  
        Stop subtasker
```


CHAPTER 2

Indices and tables

- `genindex`
- `modindex`
- `search`

t

- tuxeatpi_common, 1
 - tuxeatpi_common.cli, 1
 - tuxeatpi_common.daemon, 1
 - tuxeatpi_common.dialogs, 2
 - tuxeatpi_common.error, 2
 - tuxeatpi_common.etcd_client, 2
 - tuxeatpi_common.initializer, 3
 - tuxeatpi_common.intents, 3
 - tuxeatpi_common.memory, 3
 - tuxeatpi_common.message, 4
 - tuxeatpi_common.registry, 4
 - tuxeatpi_common.settings, 5
 - tuxeatpi_common.subtasker, 5

A

`async_read()` (tuxeatpi_common.etcd_client.EtcdWrapper method), 2

C

`clear()` (tuxeatpi_common.registry.RegistryHandler method), 5

`cli()` (in module tuxeatpi_common.cli), 1

D

`delete()` (tuxeatpi_common.etcd_client.EtcdWrapper method), 3

`delete()` (tuxeatpi_common.memory.MemoryHandler method), 3

`delete()` (tuxeatpi_common.settings.SettingsHandler method), 5

`DialogsHandler` (class in tuxeatpi_common.dialogs), 2

E

`EtcdWrapper` (class in tuxeatpi_common.etcd_client), 2

`eternal_watch()` (tuxeatpi_common.etcd_client.EtcdWrapper method), 3

`eternal_watch()` (tuxeatpi_common.intents.IntentsHandler method), 3

G

`get_dialog()` (tuxeatpi_common.daemon.TepBaseDaemon method), 1

`get_dialog()` (tuxeatpi_common.dialogs.DialogsHandler method), 2

H

`help()` (tuxeatpi_common.daemon.TepBaseDaemon method), 1

I

`Initializer` (class in tuxeatpi_common.initializer), 3

`IntentsHandler` (class in tuxeatpi_common.intents), 3

`is_mqtt_topic()` (in module tuxeatpi_common.message), 4

L

`load()` (tuxeatpi_common.dialogs.DialogsHandler method), 2

M

`main_loop()` (tuxeatpi_common.daemon.TepBaseDaemon method), 1

`MemoryHandler` (class in tuxeatpi_common.memory), 3

`Message` (class in tuxeatpi_common.message), 4

`MqttClient` (class in tuxeatpi_common.message), 4

`MqttSender` (class in tuxeatpi_common.message), 4

O

`on_connect()` (tuxeatpi_common.message.MqttClient method), 4

`on_message()` (tuxeatpi_common.message.MqttClient method), 4

`on_publish()` (tuxeatpi_common.message.MqttClient method), 4

`on_subscribe()` (tuxeatpi_common.message.MqttClient method), 4

P

`ping()` (tuxeatpi_common.registry.RegistryHandler method), 5

`publish()` (tuxeatpi_common.daemon.TepBaseDaemon method), 2

R

`read()` (tuxeatpi_common.etcd_client.EtcdWrapper method), 3

`read()` (tuxeatpi_common.intents.IntentsHandler method), 3

`read()` (tuxeatpi_common.memory.MemoryHandler method), 3

`read()` (tuxeatpi_common.registry.RegistryHandler method), 5

`read()` (tuxeatpi_common.settings.SettingsHandler method), 5

read_global() (tuxeatpi_common.settings.SettingsHandler method), 5

RegistryHandler (class in tuxeatpi_common.registry), 4

reload() (tuxeatpi_common.daemon.TepBaseDaemon method), 2

run() (tuxeatpi_common.initializer.Initializer method), 3

run() (tuxeatpi_common.message.MqttClient method), 4

run() (tuxeatpi_common.message.MqttSender method), 4

run() (tuxeatpi_common.subtasker.SubTasker method), 5

S

save() (tuxeatpi_common.intents.IntentsHandler method), 3

save() (tuxeatpi_common.memory.MemoryHandler method), 4

save() (tuxeatpi_common.settings.SettingsHandler method), 5

serialize() (tuxeatpi_common.message.Message method), 4

set_config() (tuxeatpi_common.daemon.TepBaseDaemon method), 2

set_daemon_class() (in module tuxeatpi_common.cli), 1

set_notalive() (tuxeatpi_common.registry.RegistryHandler method), 5

SettingsHandler (class in tuxeatpi_common.settings), 5

shutdown() (tuxeatpi_common.daemon.TepBaseDaemon method), 2

signal_handler() (tuxeatpi_common.daemon.TepBaseDaemon method), 2

start() (tuxeatpi_common.daemon.TepBaseDaemon method), 2

stop() (tuxeatpi_common.message.MqttClient method), 4

stop() (tuxeatpi_common.message.MqttSender method), 4

stop() (tuxeatpi_common.settings.SettingsHandler method), 5

stop() (tuxeatpi_common.subtasker.SubTasker method), 5

SubTasker (class in tuxeatpi_common.subtasker), 5

T

TepBaseDaemon (class in tuxeatpi_common.daemon), 1

tuxeatpi_common (module), 1

tuxeatpi_common.cli (module), 1

tuxeatpi_common.daemon (module), 1

tuxeatpi_common.dialogs (module), 2

tuxeatpi_common.error (module), 2

tuxeatpi_common.etcd_client (module), 2

tuxeatpi_common.initializer (module), 3

tuxeatpi_common.intents (module), 3

tuxeatpi_common.memory (module), 3

tuxeatpi_common.message (module), 4

tuxeatpi_common.registry (module), 4

tuxeatpi_common.settings (module), 5

tuxeatpi_common.subtasker (module), 5

TuxEatPiError, 2

W

wait_forSpeaking() (tuxeatpi_common.daemon.TepBaseDaemon method), 2

write() (tuxeatpi_common.etcd_client.EtcdWrapper method), 3