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# **gen\_unix\_domain\_socket**

## **Documentation**

*Release*

***[https://github.com/vroncevic/gen\\_unix\\_domain\\_socket/releases](https://github.com/vroncevic/gen_unix_domain_socket/releases)***

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**Jun 29, 2021**



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**gen\_unix\_domain\_socket** is framework for generation Unix Domain Socket modules.

Developed in [python](#) code: **100%**.

The README is used to introduce the modules and provide instructions on how to install the modules, any machine dependencies it may have and any other information that should be provided before the modules are installed.



# CHAPTER 1

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## gen\_unix\_domain\_socket

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### 1.1 gen\_unix\_domain\_socket package

#### 1.1.1 Subpackages

##### 1.1.1.1 gen\_unix\_domain\_socket.pro package

###### Subpackages

###### gen\_unix\_domain\_socket.pro.config package

###### Submodules

###### gen\_unix\_domain\_socket.pro.config.pro\_name module

###### Module pro\_name.py

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**Info** Defined class ProName with attribute(s) and method(s). Defined API for project name with preparations for generation.

**class** gen\_unix\_domain\_socket.pro.config.pro\_name.**ProName** (*verbose=False*)

Defined class ProName with attribute(s) and method(s). Defined API for project name with preparations for generation. It defines:

### attributes

GEN\_VERBOSE - console text indicator for process-phase.  
\_\_verbose - enable/disable verbose option.  
\_\_pro\_name - project name.

### methods

\_\_init\_\_ - initial constructor.  
pro\_name - property methods for set/get operations.  
is\_pro\_name\_ok - checking is project name ok.  
\_\_str\_\_ - dunder method for ProName.

**GEN\_VERBOSE** = 'GEN\_UNIX\_DOMAIN\_SOCKET::PRO::CONFIG::PRO\_NAME'

**is\_pro\_name\_ok()**

Checking is project name ok.

**Returns** boolean status, True (not None) | False.

**Return type** <bool>

**Exceptions** None

**pro\_name**

Property method for getting project name.

**Returns** formatted project name | None.

**Return type** <str> | <NoneType>

**Exceptions** None

## gen\_unix\_domain\_socket.pro.config.template\_dir module

**Module** template\_dir.py

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**Info** Defined class TemplateDir with attribute(s) and method(s). Defined API for template directory for generation.

**class** gen\_unix\_domain\_socket.pro.config.template\_dir.TEMPLATE\_DIR(*verbose=False*)  
Defined class TemplateDir with attribute(s) and method(s). Defined API for template directory for generation.  
It defines:

### attributes

GEN\_VERBOSE - console text indicator for process-phase.  
\_\_verbose - enable/disable verbose option.  
\_\_template\_dir - project template dir.

### methods

\_\_init\_\_ - initial constructor.  
template\_dir - property methods for set/get operations.

is\_template\_dir\_ok - checking is template dir ok.  
\_\_str\_\_ - dunder method for TemplateDir.

**GEN\_VERBOSE** = 'GEN\_UNIX\_DOMAIN\_SOCKET::PRO::CONFIG::TEMPLATE\_DIR'

**is\_template\_dir\_ok()**

Checking is project template dir ok.

**Returns** boolean status, True (not None) | False.

**Return type** <bool>

**Exceptions** None

**template\_dir**

Property method for getting template dir.

**Returns** formatted template dir | None.

**Return type** <str> | <NoneType>

**Exceptions** None

## Module contents

### Module \_\_init\_\_.py

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**Info** Defined class ProConfig with attribute(s) and method(s). Defined project configuration container.

**class** gen\_unix\_domain\_socket.pro.config.**ProConfig**(verbose=False)

Defined class ProConfig with attribute(s) and method(s). Defined project configuration container. It defines:

#### attributes

GEN\_VERBOSE - console text indicator for process-phase.  
TEMPLATES - templates key.  
MODULES - modules key.  
FORMAT - format for template file.  
\_\_verbose - enable/disable verbose option.  
\_\_config - configuration dictionary.

#### methods

\_\_init\_\_ - initial constructor.  
pro\_name - property methods for set/get operations.  
is\_config\_ok - checking is project configuration ok.  
\_\_str\_\_ - dunder method for ProConfig.

**FORMAT** = 'template'

**GEN\_VERBOSE** = 'GEN\_UNIX\_DOMAIN\_SOCKET::PRO::CONFIG::PRO\_CONFIG'

**MODULES** = 'modules'

```
TEMPLATES = 'templates'

config
    Property method for getting project configuration.

        Returns formatted project configuration | None.

        Return type <dict> | <NoneType>

        Exceptions None

is_config_ok()
    Checking is project configuration ok.

        Returns boolean status, True (ok) | False.

        Return type <bool>

        Exceptions None
```

## Submodules

### gen\_unix\_domain\_socket.pro.read\_template module

#### Module read\_template.py

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**Info** Defined class ReadTemplate with attribute(s) and method(s). Created API for read a template file and return a content.

```
class gen_unix_domain_socket.pro.read_template.ReadTemplate (verbose=False)
    Bases:                                         ats_utilities.config_io.base_check.FileChecking,
    gen_unix_domain_socket.pro.config.template_dir.TemplateDir
```

Defined class ReadTemplate with attribute(s) and method(s). Created API for read a template file and return a content. It defines:

#### attributes

GEN\_VERBOSE - console text indicator for process-phase.  
TEMPLATE\_DIR - template dir path.  
\_\_template\_dir - absolute file path of template dir.

#### methods

\_\_init\_\_ - initial constructor.  
read - read a template and return a string representation.  
\_\_str\_\_ - dunder method for ReadTemplate.

```
GEN_VERBOSE = 'GEN_UNIX_DOMAIN_SOCKET::PRO::READ_TEMPLATE'
TEMPLATE_DIR = '/.../conf/template/'
VERBOSE = 'ATS_UTILITIES'
```

**read** (*config*, *uds\_type*, *verbose=False*)  
Read a templates and return a content.

#### Parameters

- **config** (<dict>) – parameter file name.
- **uds\_type** (<str>) – parameter UDS type.
- **verbose** (<bool>) – enable/disable verbose option.

**Returns** template content list | empty list.

**Return type** <list>

**Exceptions** ATSTypeError | ATSBadCallError

## gen\_unix\_domain\_socket.pro.write\_template module

**Module** write\_template.py

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**Info** Defined class WriteTemplate with attribute(s) and method(s). Created API for write operation of template content.

**class** gen\_unix\_domain\_socket.pro.write\_template.**WriteTemplate** (*verbose=False*)  
Bases: ats\_utilities.config\_io.base\_check.FileChecking

Defined class WriteTemplate with attribute(s) and method(s). Created API for write operation of template content. It defines:

#### attributes

GEN\_VERBOSE - console text indicator for process-phase.

#### methods

- \_\_init\_\_ - initial constructor.
- write - write setup content to files.
- \_\_str\_\_ - dunder method for WriteTemplate.

**GEN\_VERBOSE** = 'GEN\_UNIX\_DOMAIN\_SOCKET::PRO::WRITE\_TEMPLATE'

**VERBOSE** = 'ATS\_UTILITIES'

**write** (*templates*, *pro\_name*, *verbose=False*)

Write setup content to files.

#### Parameters

- **templates** (<list>) – templates and contents.
- **pro\_name** (<str>) – project name.
- **verbose** (<bool>) – enable/disable verbose option.

**Returns** boolean status, True (success) | False.

**Return type** <bool>

**Exception** ATSTypeError | ATSBadCallError

## Module contents

### Module \_\_init\_\_.py

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**Info** Defined class UnixDomainSocket with attribute(s) and method(s). Generate module file generator\_test.py by template and parameters.

```
class gen_unix_domain_socket.pro.UnixDomainSocket(verbose=False)
    Bases:                                     ats_utilities.config_io.base_check.FileChecking,
                                                gen_unix_domain_socket.pro.config.ProConfig,   gen_unix_domain_socket.pro.
                                                config.pro_name.ProName
```

Defined class UnixDomainSocket with attribute(s) and method(s). Generate module file generator\_test.py by template and parameters. It defines:

#### attributes

- GEN\_VERBOSE - console text indicator for process-phase.
- PRO\_STRUCTURE - project setup (template, module).
- \_\_reader - reader API.
- \_\_writer - writer API.

#### methods

- \_\_init\_\_ - initial constructor.
- get\_reader - getter for template reader.
- get\_writer - getter for template writer.
- gen\_setup - generate module file setup.py.
- \_\_str\_\_ - dunder method for UnixDomainSocket.

```
GEN_VERBOSE = 'GEN_UNIX_DOMAIN_SOCKET::PRO::GEN_SETUP'
PRO_STRUCTURE = '/.../conf/project.yaml'
VERBOSE = 'ATS_UTILITIES'

gen_setup(pro_name, verbose=False)
    Generate module generator_test.py.
```

#### Parameters

- **pro\_name** (<str>) – project name.
- **verbose** (<bool>) – enable/disable verbose option.

**Returns** boolean status, True (success) | False.

**Return type** <bool>

**Exceptions** ATSTypeError | ATSBadCallError

**get\_reader()**

Getter for template reader.

**Returns** template reader object.

**Return type** <ReadTemplate>

**Exceptions** None

**get\_writer()**

Getter for template writer.

**Returns** template writer object.

**Return type** <WriteTemplate>

**Exceptions** None

**select\_pro\_type( verbose=False )**

Select project type.

**Parameters** **verbose** (<bool>) – enable/disable verbose option.

**Returns** template type | None.

**Return type** <str> | <NoneType>

**Exceptions** None

## 1.1.2 Module contents

### Module \_\_init\_\_.py

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**Info** Defined class GenUnixDomainSocket with attribute(s) and method(s). Load a base info, create an CLI interface and run operation(s).

**class** `gen_unix_domain_socket.GenUnixDomainSocket( verbose=False )`  
Bases: `ats_utilities.cli.cfg_cli.CfgCLI`

Defined class GenUnixDomainSocket with attribute(s) and method(s). Load a base info, create an CLI interface and run operation(s). It defines:

#### attributes

`__metaclass__` - setting cooperative metaclasses.

`GEN_VERBOSE` - console text indicator for process-phase.

`CONFIG` - tool info file path.

`LOG` - tool log file path.

`OPS` - list of tool options.

`logger` - logger object API.

#### methods

```
__init__ - initial constructor.  
process - process and run operation.  
__str__ - dunder method for GenUnixDomainSocket.  
  
CONFIG = '/conf/gen_unix_domain_socket.cfg'  
GEN_VERBOSE = 'GEN_UNIX_DOMAIN_SOCKET'  
LOG = '/log/gen_unix_domain_socket.log'  
OPS = ['-g', '--gen', '-v', '--verbose', '--version']  
VERBOSE = 'ATS_UTILITIES'  
  
process (verbose=False)  
    Process and run operation.  
  
    Parameters verbose (<bool>) – enable/disable verbose option.  
    Returns boolean status, True (success) | False.  
    Return type <bool>  
    Exceptions None
```

# CHAPTER 2

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## Installation

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Navigate to release [page](#) download and extract release archive.

To install package type the following:

```
tar xvzf gen_unix_domain_socket-x.y.z.tar.gz
cd gen_unix_domain_socket-x.y.z/
# python2
pip install -r requirements.txt
python setup.py install_lib
python setup.py install_data
python setup.py install_egg_info
# python3
pip3 install -r requirements.txt
python3 setup.py install_lib
python3 setup.py install_data
python3 setup.py install_egg_info
```

You can use Docker to create image/container, or You can use pip to install:

```
# python2
pip install gen-unix-domain-socket
# python3
pip3 install gen-unix-domain-socket
```



# CHAPTER 3

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## Dependencies

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**gen\_unix\_domain\_socket** requires next modules and libraries:

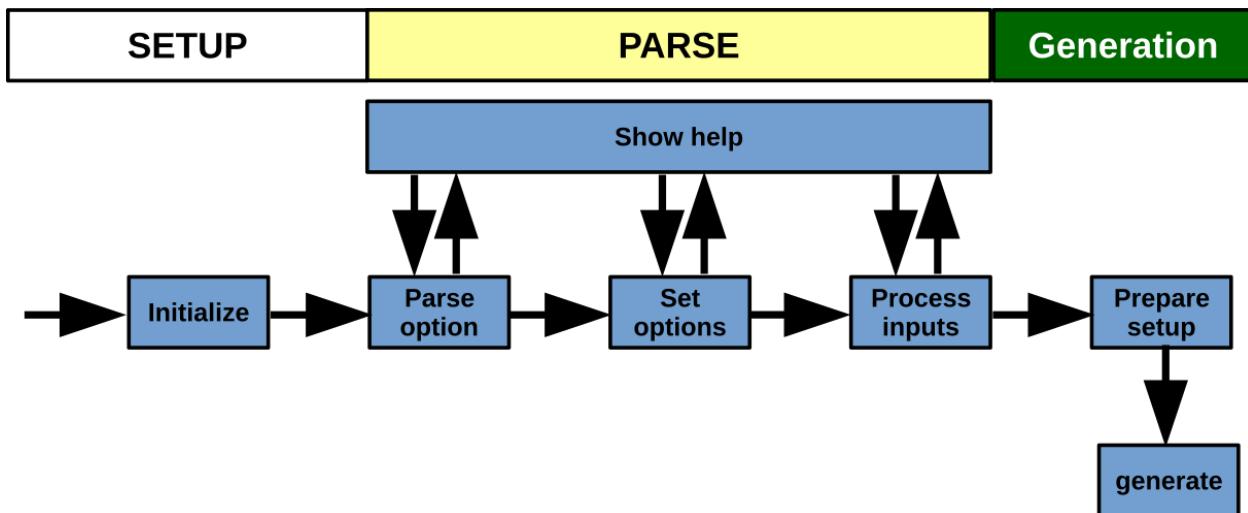
- ats-utilities - Python App/Tool/Script Utilities



# CHAPTER 4

## Framework structure

`gen_unix_domain_socket` is based on OOP:



Framework structure:

```
gen_unix_domain_socket/
  conf/
    gen_unix_domain_socket.cfg
    gen_unix_domain_socket_util.cfg
    project.yaml
    template/
      posix/
        uds_accept.template
        uds_bind.template
        uds_connect.template
        uds_fatal_error.template
        uds_listen.template
```

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# CHAPTER 5

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## Copyright and licence

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Lets help and support PSF.





# CHAPTER 6

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## Indices and tables

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