
Watson - Filesystem

Release 1.0.1

July 27, 2016

1	Build Status	3
2	Installation	5
3	Testing	7
4	Contributing	9
5	Table of Contents	11
5.1	Usage	11
5.2	Reference Library	11
	Python Module Index	15

Manage multiple filesystems through a convenient API.

Build Status

Installation

```
pip install watson-filesystem
```

Testing

Watson can be tested with `pytest`. Simply activate your virtualenv and run `python setup.py test`.

Contributing

If you would like to contribute to Watson, please feel free to issue a pull request via Github with the associated tests for your code. Your name will be added to the AUTHORS file under contributors.

Table of Contents

5.1 Usage

Using the filesystem module is easily initialized by the following:

```
from watson.filesystem import Filesystem, backends

fs = Filesystem(backends.Local())
print(fs.read('path/to/file')) # contents of file
```

In order to maintain a simplistic API, all the backends can be imported from `watson.filesystem.backends.NAME_OF_BACKEND`.

For more information regarding the various API methods available, please see the reference library.

5.2 Reference Library

5.2.1 `watson.filesystem.api`

class `watson.filesystem.api.Filesystem` (*backend*)

The abstracted api that the user will interface with when dealing with different types of filesystems.

Example:

```
from watson import filesystem

fs = filesystem.Filesystem(filesystem.backends.Local())
content = fs.read('/path/to/file')
print(content)
```

append (*file, content, options=None*)

Appends specific content to a file.

Similar function to `write()`, except that any content will be appended to the end of the file.

Parameters

- **file** (*string*) – The file to write to
- **content** (*mixed*) – The content to write to the file.
- **options** (*dict*) – A dict of args that will be passed to `open()`

copy (*path, new_path*)

Copies a file/directory to a new location.

Parameters

- **path** (*string*) – The path to copy to
- **new_path** (*string*) – The new location for the file/directory

create (*path, is_dir=False*)

Creates a new file/directory.

If any parent directories in the path do not exist they will be created.

Parameters

- **path** (*string*) – The path to create
- **is_dir** (*boolean*) – Whether or not to create the path as a directory

delete (*path*)

Deletes a path from the filesystem.

If a directory is specified, its contents will also be removed.

Parameters **path** (*string*) – The path to delete

exists (*path*)

Verifies if a path exists.

Parameters **path** (*string*) – The path to verify

Returns Boolean based on whether or not it exists.

move (*path, new_path*)

Moves a file/directory to a new location.

Parameters

- **path** (*string*) – The path to move to
- **new_path** (*string*) – The new location for the file/directory

read (*file, options=None*)

Reads a file (and then closes it).

Parameters

- **file** (*string*) – The file to read
- **options** (*dict*) – A dict of args that will be passed to open()

write (*file, content, options=None*)

Writes some specific content to a file.

Performing this call will overwrite any content that exists within the file. If the file does not exist (or the path), it will be created.

Parameters

- **file** (*string*) – The file to write to
- **content** (*mixed*) – The content to write to the file.
- **options** (*dict*) – A dict of args that will be passed to open()

5.2.2 `watson.filesystem.backends.local`

5.2.3 `watson.filesystem.backends.s3`

W

`watson.filesystem.api`, [11](#)

A

append() (watson.filesystem.api.Filesystem method), 11

C

copy() (watson.filesystem.api.Filesystem method), 11

create() (watson.filesystem.api.Filesystem method), 12

D

delete() (watson.filesystem.api.Filesystem method), 12

E

exists() (watson.filesystem.api.Filesystem method), 12

F

Filesystem (class in watson.filesystem.api), 11

M

move() (watson.filesystem.api.Filesystem method), 12

R

read() (watson.filesystem.api.Filesystem method), 12

W

watson.filesystem.api (module), 11

write() (watson.filesystem.api.Filesystem method), 12