

# Unittest for caching

January 14, 2021

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## 1 Test Information

### 1.1 Test Candidate Information

The Module `caching` is designed to store information in `json` or `pickle` files to support them much faster then generating them from the original source file. For more Information read the documentation.

---

#### Library Information

|                        |                                  |
|------------------------|----------------------------------|
| Name                   | caching                          |
| State                  | Released                         |
| Supported Interpreters | python2, python3                 |
| Version                | 6c187a02e86ab5fee81eb4f34f61602b |

---

#### Dependencies

---

### 1.2 Unittest Information

---

#### Unittest Information

|               |   |
|---------------|---|
| Version       | e113c3759194c81e7df9e29b1debe00d            |
| Testruns with | python 2.7.18 (final), python 3.8.5 (final) |

---

### 1.3 Test System Information

---

#### System Information

|              |   |
|--------------|---|
| Architecture | 64bit   |
| Distribution | Linux Mint 20.1 ulyssa  |
| Hostname     | ahorn   |
| Kernel       | 5.4.0-60-generic (#67-Ubuntu SMP Tue Jan 5 18:31:36 UTC 2021) |
| Machine      | x86_64  |
| Path         | /user_data/data/dirk/prj/unittest/caching/unittest            |
| System       | Linux   |
| Username     | dirk  |

---

## 2 Statistic

### 2.1 Test-Statistic for testrun with python 2.7.18 (final)

---

|                                 |           |
|---------------------------------|-----------|
| Number of tests                 | <b>20</b> |
| Number of successfull tests     | <b>16</b> |
| Number of possibly failed tests | <b>4</b>  |
| Number of failed tests          | <b>0</b>  |

---

|                  |                               |
|------------------|-------------------------------|
| Executionlevel   | Full Test (all defined tests) |
| Time consumption | 0.063s                        |

---

## 2.2 Test-Statistic for testrun with python 3.8.5 (final)

---

|                                 |    |
|---------------------------------|----|
| Number of tests                 | 20 |
| Number of successfull tests     | 20 |
| Number of possibly failed tests | 0  |
| Number of failed tests          | 0  |

---

|                  |                               |
|------------------|-------------------------------|
| Executionlevel   | Full Test (all defined tests) |
| Time consumption | 0.058s                        |

---

## 2.3 Coverage Statistic

---

| Module- or Filename | Line-Coverage | Branch-Coverage |
|---------------------|---------------|-----------------|
| caching             | 100.0%        | 100.0%          |
| caching.__init__.py | 100.0%        |                 |

---

### 3 Testcases with no corresponding Requirement

#### 3.1 Summary for testrun with python 2.7.18 (final)

##### 3.1.1 caching.property\_cache\_json: Test cached data (full init)

###### Testresult

This test was passed with the state: **Warning**. See also full trace in section A.1.3!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (31) |
| Start-Time:      | 2021-01-14 00:51:41,573   |
| Finished-Time:   | 2021-01-14 00:51:41,575   |
| Time-Consumption | 0.002s  |

---

**Testsummary:**

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising property_cache_json (load_all_on_init=True).          |
| <b>Info</b>    | Collecting data from cache instance.                               |
| <b>Warning</b> | Cached data is NOT correct. See detailed log for more information. |

---

##### 3.1.2 caching.property\_cache\_json: Test cached data (partially init)

###### Testresult

This test was passed with the state: **Warning**. See also full trace in section A.1.4!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (32) |
| Start-Time:      | 2021-01-14 00:51:41,575   |
| Finished-Time:   | 2021-01-14 00:51:41,577   |
| Time-Consumption | 0.002s  |

---

**Testsummary:**

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising property_cache_json (load_all_on_init=True).          |
| <b>Info</b>    | Collecting data from cache instance.                               |
| <b>Warning</b> | Cached data is NOT correct. See detailed log for more information. |

---

##### 3.1.3 caching.property\_cache\_json: Test execution of save callback (full init)

###### Testresult

This test was passed with the state: **Success**. See also full trace in section A.2.5!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (37) |
| Start-Time:      | 2021-01-14 00:51:41,597   |
| Finished-Time:   | 2021-01-14 00:51:41,598   |
| Time-Consumption | 0.001s  |

---



**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Installing save_callback, which sets a variable to True on execution.                 |
| <b>Success</b> | Save callback execution variable is correct (Content True and Type is <type 'bool'>). |

---

**3.1.4 caching.property\_cache\_json: Test full initialised JSON-Cache-Object**

**Testresult**

This test was passed with the state: **Warning**. See also full trace in section A.1.1!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (29) |
| Start-Time:      | 2021-01-14 00:51:41,569   |
| Finished-Time:   | 2021-01-14 00:51:41,571   |
| Time-Consumption | 0.002s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_json (load_all_on_init=True).           |
| <b>Info</b>    | Extracting storage object from property_cache_json for comparison.  |
| <b>Warning</b> | Cache object is NOT correct. See detailed log for more information. |

---

**3.1.5 caching.property\_cache\_json: Test get from source caused by changed uid (full init)**

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.3!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (35) |
| Start-Time:      | 2021-01-14 00:51:41,584   |
| Finished-Time:   | 2021-01-14 00:51:41,590   |
| Time-Consumption | 0.006s  |

---

**Testsummary:**

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising property_cache_json (load_all_on_init=True).  |
| <b>Success</b> | Instance data after changing uid is correct (Content {'unicode': u'__unicode__', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '__string__', 'integer': 34} and Type is <type 'dict'>). |

---

**3.1.6 caching.property\_cache\_json: Test get from source caused by changed uid (partially init)**

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.4!

---

|                |   |
|----------------|---|
| Testrun:       | python 2.7.18 (final)   |
| Caller:        | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (36) |
| Start-Time:    | 2021-01-14 00:51:41,590   |
| Finished-Time: | 2021-01-14 00:51:41,596   |

---

Time-Consumption 0.006s

---

**Testsummary:**

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).  
**Success** Instance data after changing uid is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

### 3.1.7 caching.property\_cache.json: Test get from source caused by increased data version (full init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.1!

---

Testrun: python 2.7.18 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_\_init\_\_.py (33)  
 Start-Time: 2021-01-14 00:51:41,577  
 Finished-Time: 2021-01-14 00:51:41,579  
 Time-Consumption 0.002s

---

**Testsummary:**

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).  
**Success** Instance data after increasing data\_version is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

### 3.1.8 caching.property\_cache.json: Test get from source caused by increased data version (partially init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.2!

---

Testrun: python 2.7.18 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_\_init\_\_.py (34)  
 Start-Time: 2021-01-14 00:51:41,580  
 Finished-Time: 2021-01-14 00:51:41,584  
 Time-Consumption 0.004s

---

**Testsummary:**

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).  
**Success** Instance data after increasing data\_version is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

### 3.1.9 caching.property\_cache.json: Test internal key usage

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.6!

---

Testrun: python 2.7.18 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (38)  
 Start-Time: 2021-01-14 00:51:41,598  
 Finished-Time: 2021-01-14 00:51:41,600  
 Time-Consumption 0.003s

---

**Testsummary:**

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).  
**Info** Extracting storage object from property\_cache.json for comparison.  
**Success** Cache is correct (Content {u'\_\_property\_cache\_data\_version\_': u'no data version', u'\_\_property\_cache\_data\_version\_': u'no second data version', u'\_\_property\_cache\_uid\_': u'no uid', u'\_\_property\_cache\_uid\_': u'no second uid'}) and Type is <type 'dict'>).  
**Success** Keyfilter returnvalue for 5 (<type 'int'>) is correct (Content 5 and Type is <type 'int'>).

---

### 3.1.10 caching.property\_cache\_json: Test partially initialisation of JSON-Cache-Object

**Testresult**

This test was passed with the state: **Warning**. See also full trace in section A.1.2!

---

Testrun: python 2.7.18 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (30)  
 Start-Time: 2021-01-14 00:51:41,571  
 Finished-Time: 2021-01-14 00:51:41,573  
 Time-Consumption 0.002s

---

**Testsummary:**

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=False).  
**Info** Partially initialising cache object by requesting some information.  
**Info** Extracting storage object from property\_cache.json for comparison.  
**Warning** Cache object is NOT correct. See detailed log for more information.

---

### 3.1.11 caching.property\_cache\_pickle: Test cached data (full init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.9!

---

Testrun: python 2.7.18 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (44)  
 Start-Time: 2021-01-14 00:51:41,611  
 Finished-Time: 2021-01-14 00:51:41,616  
 Time-Consumption 0.005s

---

**Testsummary:**

---

**Info** Initialising property\_cache.pickle (load\_all\_on\_init=True).  
**Info** Collecting data from cache instance.

---

**Success** Cached data is correct (Content {'uncached': 'uncached\_data\_of\_class', 'unicode': u'unicode', 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '3': '3', '2': 'two', '4': 4}, 'str': 'string', 'integer': 17} and Type is <type 'dict'>).

---

### 3.1.12 caching.property\_cache\_pickle: Test cached data (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section A.2.10!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (45) |
| Start-Time:      | 2021-01-14 00:51:41,617   |
| Finished-Time:   | 2021-01-14 00:51:41,622   |
| Time-Consumption | 0.005s  |

---

#### Testsummary:

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=True).   |
| <b>Info</b>    | Collecting data from cache instance.  |
| <b>Success</b> | Cached data is correct (Content {'uncached': 'uncached_data_of_class', 'unicode': u'unicode', 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '3': '3', '2': 'two', '4': 4}, 'str': 'string', 'integer': 17} and Type is <type 'dict'>). |

---

### 3.1.13 caching.property\_cache\_pickle: Test execution of save callback (full init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section A.2.15!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (50) |
| Start-Time:      | 2021-01-14 00:51:41,635   |
| Finished-Time:   | 2021-01-14 00:51:41,636   |
| Time-Consumption | 0.000s  |

---

#### Testsummary:

|                |   |
|----------------|---|
| <b>Info</b>    | Installing save_callback, which sets a variable to True on execution.                 |
| <b>Success</b> | Save callback execution variable is correct (Content True and Type is <type 'bool'>). |

---

### 3.1.14 caching.property\_cache\_pickle: Test full initialised PICKLE-Cache-Object

#### Testresult

This test was passed with the state: **Success**. See also full trace in section A.2.7!

---

|                |   |
|----------------|---|
| Testrun:       | python 2.7.18 (final)   |
| Caller:        | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (42) |
| Start-Time:    | 2021-01-14 00:51:41,601   |
| Finished-Time: | 2021-01-14 00:51:41,607   |

Time-Consumption 0.007s

---

**Testsummary:**

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).  
**Info** Extracting storage object from property\_cache\_pickle for comparison.  
**Success** Cache object is correct (Content {'str': 'string', 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '3': '3', '2': 'two', '4': 4}, 'unicode': u'unicode', 'integer': 17} and Type is <type 'dict'>).

---

### 3.1.15 caching.property\_cache\_pickle: Test get from source caused by changed uid (full init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.13!

---

Testrun: python 2.7.18 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (48)  
 Start-Time: 2021-01-14 00:51:41,631  
 Finished-Time: 2021-01-14 00:51:41,632  
 Time-Consumption 0.002s

---

**Testsummary:**

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).  
**Success** Instance data after changing uid is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

### 3.1.16 caching.property\_cache\_pickle: Test get from source caused by changed uid (partially init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.14!

---

Testrun: python 2.7.18 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (49)  
 Start-Time: 2021-01-14 00:51:41,632  
 Finished-Time: 2021-01-14 00:51:41,635  
 Time-Consumption 0.003s

---

**Testsummary:**

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).  
**Success** Instance data after changing uid is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

### 3.1.17 caching.property\_cache\_pickle: Test get from source caused by increased data version (full init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section A.2.11!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (46) |
| Start-Time:      | 2021-01-14 00:51:41,622   |
| Finished-Time:   | 2021-01-14 00:51:41,626   |
| Time-Consumption | 0.004s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=True).   |
| <b>Success</b> | Instance data after increasing data_version is correct (Content {'unicode': u'__unicode__', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '__string__', 'integer': 34} and Type is <type 'dict'>). |

---

### 3.1.18 caching.property\_cache\_pickle: Test get from source caused by increased data version (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section A.2.12!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (47) |
| Start-Time:      | 2021-01-14 00:51:41,626   |
| Finished-Time:   | 2021-01-14 00:51:41,630   |
| Time-Consumption | 0.004s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=True).   |
| <b>Success</b> | Instance data after increasing data_version is correct (Content {'unicode': u'__unicode__', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '__string__', 'integer': 34} and Type is <type 'dict'>). |

---

### 3.1.19 caching.property\_cache\_pickle: Test internal key usage

#### Testresult

This test was passed with the state: **Success**. See also full trace in section A.2.16!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (51) |
| Start-Time:      | 2021-01-14 00:51:41,636   |
| Finished-Time:   | 2021-01-14 00:51:41,637   |
| Time-Consumption | 0.001s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=True).   |
| <b>Info</b>    | Extracting storage object from property_cache_pickle for comparison.  |
| <b>Success</b> | Cache is correct (Content {'__property_cache_data_version_': u'no data version', '__property_cache_data_version_': u'no second data version', '__property_cache_uid_': u'no uid', '__property_cache_uid_': u'no second uid'}) and Type is <type 'dict'>). |
| <b>Success</b> | Keyfilter returnvalue for 5 (<type 'int'>) is correct (Content 5 and Type is <type 'int'>).   |

---

### 3.1.20 `caching.property_cache_pickle`: Test partially initialised PICKLE-Cache-Object

#### Testresult

This test was passed with the state: **Success**. See also full trace in section A.2.8!

---

|                  |   |
|------------------|---|
| Testrun:         | python 2.7.18 (final)   |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (43) |
| Start-Time:      | 2021-01-14 00:51:41,607   |
| Finished-Time:   | 2021-01-14 00:51:41,611   |
| Time-Consumption | 0.004s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising <code>property_cache_pickle</code> ( <code>load_all_on_init=False</code> ).  |
| <b>Info</b>    | Partially initialising cache object by requesting some information.   |
| <b>Info</b>    | Extracting storage object from <code>property_cache_pickle</code> for comparison.   |
| <b>Success</b> | Cache object is correct (Content <code>{'float': 3.14159, 'list': [1, 'two', '3', 4], 'str': 'string'}</code> and Type is <code>&lt;type 'dict'&gt;</code> ). |

---

## 3.2 Summary for testrun with python 3.8.5 (final)

### 3.2.1 `caching.property_cache_json`: Test cached data (full init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.3!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (31) |
| Start-Time:      | 2021-01-14 00:51:42,065   |
| Finished-Time:   | 2021-01-14 00:51:42,066   |
| Time-Consumption | 0.002s  |

---

**Testsummary:**

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising <code>property_cache_json</code> ( <code>load_all_on_init=True</code> ).  |
| <b>Info</b>    | Collecting data from cache instance.   |
| <b>Success</b> | Cached data is correct (Content <code>{'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached_data_of_class'}</code> and Type is <code>&lt;class 'dict'&gt;</code> ). |

---

### 3.2.2 `caching.property_cache_json`: Test cached data (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.4!

---

|                |   |
|----------------|---|
| Testrun:       | python 3.8.5 (final)  |
| Caller:        | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (32) |
| Start-Time:    | 2021-01-14 00:51:42,066   |
| Finished-Time: | 2021-01-14 00:51:42,068   |

Time-Consumption 0.002s

---

**Testsummary:**

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).  
**Info** Collecting data from cache instance.  
**Success** Cached data is correct (Content {'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached\_data\_of\_class'}) and Type is <class 'dict'>).

---

### 3.2.3 caching.property\_cache.json: Test execution of save callback (full init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section B.1.9!

---

Testrun: python 3.8.5 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (37)  
 Start-Time: 2021-01-14 00:51:42,094  
 Finished-Time: 2021-01-14 00:51:42,095  
 Time-Consumption 0.001s

---

**Testsummary:**

**Info** Installing save\_callback, which sets a variable to True on execution.  
**Success** Save callback execution variable is correct (Content True and Type is <class 'bool'>).

---

### 3.2.4 caching.property\_cache.json: Test full initialised JSON-Cache-Object

**Testresult**

This test was passed with the state: **Success**. See also full trace in section B.1.1!

---

Testrun: python 3.8.5 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (29)  
 Start-Time: 2021-01-14 00:51:42,060  
 Finished-Time: 2021-01-14 00:51:42,062  
 Time-Consumption 0.002s

---

**Testsummary:**

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).  
**Info** Extracting storage object from property\_cache.json for comparison.  
**Success** Cache object is correct (Content {'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'float': 3.14159, 'integer': 17, 'list': [1, 'two', '3', 4], 'str': 'string', 'unicode': 'unicode'}) and Type is <class 'dict'>).

---

### 3.2.5 caching.property\_cache.json: Test get from source caused by changed uid (full init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section B.1.7!



---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (35) |
| Start-Time:      | 2021-01-14 00:51:42,081   |
| Finished-Time:   | 2021-01-14 00:51:42,085   |
| Time-Consumption | 0.005s  |

---

**Testsummary:**

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising property_cache.json (load_all_on_init=True).  |
| <b>Success</b> | Instance data after changing uid is correct (Content {'str': '__string__', 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |

---

### 3.2.6 caching.property\_cache.json: Test get from source caused by changed uid (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.8!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (36) |
| Start-Time:      | 2021-01-14 00:51:42,086   |
| Finished-Time:   | 2021-01-14 00:51:42,094   |
| Time-Consumption | 0.008s  |

---

**Testsummary:**

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising property_cache.json (load_all_on_init=True).  |
| <b>Success</b> | Instance data after changing uid is correct (Content {'str': '__string__', 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |

---

### 3.2.7 caching.property\_cache.json: Test get from source caused by increased data version (full init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.5!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (33) |
| Start-Time:      | 2021-01-14 00:51:42,068   |
| Finished-Time:   | 2021-01-14 00:51:42,074   |
| Time-Consumption | 0.006s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache.json (load_all_on_init=True).   |
| <b>Success</b> | Instance data after increasing data_version is correct (Content {'str': '__string__', 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |

---

### 3.2.8 caching.property\_cache\_json: Test get from source caused by increased data version (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.6!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (34) |
| Start-Time:      | 2021-01-14 00:51:42,074   |
| Finished-Time:   | 2021-01-14 00:51:42,080   |
| Time-Consumption | 0.006s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_json (load_all_on_init=True).   |
| <b>Success</b> | Instance data after increasing data_version is correct (Content {'str': 'string_', 'unicode': 'unicode_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |

---

### 3.2.9 caching.property\_cache\_json: Test internal key usage

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.10!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (38) |
| Start-Time:      | 2021-01-14 00:51:42,096   |
| Finished-Time:   | 2021-01-14 00:51:42,099   |
| Time-Consumption | 0.004s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_json (load_all_on_init=True).   |
| <b>Info</b>    | Extracting storage object from property_cache_json for comparison.  |
| <b>Success</b> | Cache is correct (Content {'__property_cache_data_version_': 'no second data version', '__property_cache_uid_': 'no second uid', '__property_cache_data_version_': 'no data version', '__property_cache_uid_': 'no uid'} and Type is <class 'dict'>). |
| <b>Success</b> | Keyfilter returnvalue for 5 (<class 'int'>) is correct (Content 5 and Type is <class 'int'>).   |

---

### 3.2.10 caching.property\_cache\_json: Test partially initialisation of JSON-Cache-Object

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.2!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (30) |
| Start-Time:      | 2021-01-14 00:51:42,062   |
| Finished-Time:   | 2021-01-14 00:51:42,064   |
| Time-Consumption | 0.003s  |

---

**Testsummary:**

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=False).  
**Info** Partially initialising cache object by requesting some information.  
**Info** Extracting storage object from property\_cache.json for comparison.  
**Success** Cache object is correct (Content {'integer': 17, 'str': 'string', 'unicode': 'unicode'} and Type is <class 'dict'>).

---

### 3.2.11 caching.property\_cache\_pickle: Test cached data (full init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.13!

---

Testrun: python 3.8.5 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (44)  
 Start-Time: 2021-01-14 00:51:42,108  
 Finished-Time: 2021-01-14 00:51:42,110  
 Time-Consumption 0.002s

---

#### Testsummary:

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).  
**Info** Collecting data from cache instance.  
**Success** Cached data is correct (Content {'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached\_data\_of\_class'} and Type is <class 'dict'>).

---

### 3.2.12 caching.property\_cache\_pickle: Test cached data (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.14!

---

Testrun: python 3.8.5 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (45)  
 Start-Time: 2021-01-14 00:51:42,110  
 Finished-Time: 2021-01-14 00:51:42,114  
 Time-Consumption 0.003s

---

#### Testsummary:

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).  
**Info** Collecting data from cache instance.  
**Success** Cached data is correct (Content {'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached\_data\_of\_class'} and Type is <class 'dict'>).

---

### 3.2.13 caching.property\_cache\_pickle: Test execution of save callback (full init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.19!

---

Testrun: python 3.8.5 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (50)  
 Start-Time: 2021-01-14 00:51:42,121  
 Finished-Time: 2021-01-14 00:51:42,121  
 Time-Consumption 0.000s

---

**Testsummary:**

**Info** Installing save\_callback, which sets a variable to True on execution.  
**Success** Save callback execution variable is correct (Content True and Type is <class 'bool'>).

---

### 3.2.14 caching.property\_cache\_pickle: Test full initialised PICKLE-Cache-Object

**Testresult**

This test was passed with the state: **Success**. See also full trace in section B.1.11!

---

Testrun: python 3.8.5 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (42)  
 Start-Time: 2021-01-14 00:51:42,099  
 Finished-Time: 2021-01-14 00:51:42,103  
 Time-Consumption 0.004s

---

**Testsummary:**

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).  
**Info** Extracting storage object from property\_cache\_pickle for comparison.  
**Success** Cache object is correct (Content {'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}} and Type is <class 'dict'>).

---

### 3.2.15 caching.property\_cache\_pickle: Test get from source caused by changed uid (full init)

**Testresult**

This test was passed with the state: **Success**. See also full trace in section B.1.17!

---

Testrun: python 3.8.5 (final)  
 Caller: /user\_data/data/dirk/prj/unittest/caching/unittest/src/tests/\_init\_.py (48)  
 Start-Time: 2021-01-14 00:51:42,117  
 Finished-Time: 2021-01-14 00:51:42,119  
 Time-Consumption 0.001s

---

**Testsummary:**

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).  
**Success** Instance data after changing uid is correct (Content {'\_string\_': '\_string\_', 'unicode': '\_unicode\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

### 3.2.16 caching.property\_cache\_pickle: Test get from source caused by changed uid (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.18!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init....py (49) |
| Start-Time:      | 2021-01-14 00:51:42,119   |
| Finished-Time:   | 2021-01-14 00:51:42,121   |
| Time-Consumption | 0.002s  |

---

**Testsummary:**

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=True).  |
| <b>Success</b> | Instance data after changing uid is correct (Content {'str': '__string__', 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |

---

### 3.2.17 caching.property\_cache\_pickle: Test get from source caused by increased data version (full init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.15!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init....py (46) |
| Start-Time:      | 2021-01-14 00:51:42,114   |
| Finished-Time:   | 2021-01-14 00:51:42,115   |
| Time-Consumption | 0.001s  |

---

**Testsummary:**

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=True).   |
| <b>Success</b> | Instance data after increasing data_version is correct (Content {'str': '__string__', 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |

---

### 3.2.18 caching.property\_cache\_pickle: Test get from source caused by increased data version (partially init)

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.16!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init....py (47) |
| Start-Time:      | 2021-01-14 00:51:42,115   |
| Finished-Time:   | 2021-01-14 00:51:42,117   |
| Time-Consumption | 0.002s  |

---

**Testsummary:**

---

|             |   |
|-------------|---|
| <b>Info</b> | Initialising property_cache_pickle (load_all_on_init=True). |
|-------------|---|

---

**Success** Instance data after increasing data\_version is correct (Content {'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

### 3.2.19 caching.property\_cache\_pickle: Test internal key usage

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.20!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (51) |
| Start-Time:      | 2021-01-14 00:51:42,121   |
| Finished-Time:   | 2021-01-14 00:51:42,122   |
| Time-Consumption | 0.001s  |

---

#### Testsummary:

---

|                |   |
|----------------|---|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=True).   |
| <b>Info</b>    | Extracting storage object from property_cache_pickle for comparison.  |
| <b>Success</b> | Cache is correct (Content {'__property_cache_uid_': 'no uid', '___property_cache_uid_': 'no second uid', '__property_cache_data_version_': 'no data version', '___property_cache_data_version_': 'no second data version'} and Type is <class 'dict'>). |
| <b>Success</b> | Keyfilter returnvalue for 5 (<class 'int'>) is correct (Content 5 and Type is <class 'int'>).   |

---

### 3.2.20 caching.property\_cache\_pickle: Test partially initialised PICKLE-Cache-Object

#### Testresult

This test was passed with the state: **Success**. See also full trace in section B.1.12!

---

|                  |   |
|------------------|---|
| Testrun:         | python 3.8.5 (final)  |
| Caller:          | /user_data/data/dirk/prj/unittest/caching/unittest/src/tests/_init_.py (43) |
| Start-Time:      | 2021-01-14 00:51:42,103   |
| Finished-Time:   | 2021-01-14 00:51:42,107   |
| Time-Consumption | 0.004s  |

---

#### Testsummary:

---

|                |  |
|----------------|--|
| <b>Info</b>    | Initialising property_cache_pickle (load_all_on_init=False).   |
| <b>Info</b>    | Partially initialising cache object by requesting some information.  |
| <b>Info</b>    | Extracting storage object from property_cache_pickle for comparison.   |
| <b>Success</b> | Cache object is correct (Content {'str': 'string', 'integer': 17, 'unicode': 'unicode'} and Type is <class 'dict'>). |

---

## A Trace for testrun with python 2.7.18 (final)

### A.1 Tests with status **Warning** (4)

#### A.1.1 caching.property\_cache\_json: Test full initialised JSON-Cache-Object

##### Testresult

This test was passed with the state: **Warning**.

---

**Info** Initialising property\_cache\_json (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↪ /user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/load\_on\_init.json as cache  
 ↪ file.

JsonCache: Cache file does not exists (yet).

JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',  
 ↪ 'list']

JsonCache: cache-file stored

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/load\_on\_init.json)

---

**Info** Extracting storage object from property\_cache\_json for comparison.

---

JsonCache: Loading properties from cache

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/load\_on\_init.json)

Using storage object of cache class for comparison: {u'str': u'string',

↪ u'\_property\_cache\_uid': u'my\_unique\_id', u'float': 3.14159, u'list': [1, u'two', u'3',  
 ↪ 4], u'dict': {u'1': 1, u'3': u'3', u'2': u'two', u'4': 4}, u'unicode': u'unicode',  
 ↪ u'\_property\_cache\_data\_version': 1, u'integer': 17}

Deleting overhead keys: \_property\_cache\_data\_version\_, \_property\_cache\_uid\_

---

**Warning** Cache object is NOT correct. See detailed log for more information.

---

Result (Cache object): { u'str': u'string', u'float': 3.14159, u'list': [ 1, u'two', u'3', 4  
 ↪ ], u'dict': { u'1': 1, u'3': u'3', u'2': u'two', u'4': 4 }, u'unicode': u'unicode',  
 ↪ u'integer': 17 } (<type 'dict'>)

Expectation (Cache object): result = { 'dict': { '1': 1, '3': '3', '2': 'two', '4': 4 },  
 ↪ 'unicode': u'unicode', 'str': 'string', 'integer': 17, 'float': 3.14159, 'list': [ 1,  
 ↪ 'two', '3', 4 ] } (<type 'dict'>)

Type <type 'unicode'> is NOT <type 'str'> for result.str (u'string'). Check for known json  
 ↪ storage type deviation <str> -> <unicode>.

Type <type 'unicode'> is NOT <type 'str'> for test\_variable (u'two').

Content u'two' is incorrect for test\_variable.

Type <type 'unicode'> is NOT <type 'str'> for test\_variable (u'two').

Content u'two' is incorrect for test\_variable.

```
Type <type 'unicode'> is NOT <type 'int'> for test_variable (u'two').
Type <type 'unicode'> is NOT <type 'str'> for result.list[1] (u'two'). Check for known json
↳ storage type deviation <str> -> <unicode>.
Type <type 'unicode'> is NOT <type 'str'> for test_variable (u'3').
Content u'3' is incorrect for test_variable.
Type <type 'unicode'> is NOT <type 'int'> for test_variable (u'3').
Type <type 'unicode'> is NOT <type 'str'> for result.list[2] (u'3'). Check for known json
↳ storage type deviation <str> -> <unicode>.
Type <type 'unicode'> is NOT <type 'str'> for result.dict.3 (u'3'). Check for known json
↳ storage type deviation <str> -> <unicode>.
Type <type 'unicode'> is NOT <type 'str'> for result.dict.2 (u'two'). Check for known json
↳ storage type deviation <str> -> <unicode>.
```

### A.1.2 caching.property\_cache\_json: Test partially initialisation of JSON-Cache-Object

#### Testresult

This test was passed with the state: **Warning**.

---

**Info** Initialising property\_cache\_json (load\_all\_on\_init=False).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

```
↳ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json as
↳ cache file.
```

JsonCache: Cache file does not exists (yet).

JsonCache: cache-file stored

```
↳ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)
```

---

**Info** Partially initialising cache object by requesting some information.

---

JsonCache: Loading property for 'float' from source instance (3.14159)

JsonCache: cache-file stored

```
↳ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)
```

JsonCache: Loading property for 'list' from source instance ([1, 'two', '3', 4])

JsonCache: cache-file stored

```
↳ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)
```

JsonCache: Loading property for 'str' from source instance ('string')

JsonCache: cache-file stored

```
↳ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)
```

---

**Info** Extracting storage object from property\_cache\_json for comparison.

---

JsonCache: Loading properties from cache

```
↳ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)
```



```
Using storage object of cache class for comparison: {u'_property_cache_data_version_': 1,
↪ u'float': 3.14159, u'list': [1, u'two', u'3', 4], u'str': u'string',
↪ u'_property_cache_uid_': u'my_unique_id'}
```

```
Deleting overhead keys: _property_cache_data_version_, _property_cache_uid_
```

---

**Warning** Cache object is NOT correct. See detailed log for more information.

---

```
Result (Cache object): { u'float': 3.14159, u'list': [ 1, u'two', u'3', 4 ], u'str':
↪ u'string' } (<type 'dict'>)
```

```
Expectation (Cache object): result = { 'str': 'string', 'float': 3.14159, 'list': [ 1, 'two',
↪ '3', 4 ] } (<type 'dict'>)
```

```
Type <type 'unicode'> is NOT <type 'str'> for test_variable (u'two').
```

```
Content u'two' is incorrect for test_variable.
```

```
Type <type 'unicode'> is NOT <type 'str'> for test_variable (u'two').
```

```
Content u'two' is incorrect for test_variable.
```

```
Type <type 'unicode'> is NOT <type 'int'> for test_variable (u'two').
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.list[1] (u'two'). Check for known json
↪ storage type deviation <str> -> <unicode>.
```

```
Type <type 'unicode'> is NOT <type 'str'> for test_variable (u'3').
```

```
Content u'3' is incorrect for test_variable.
```

```
Type <type 'unicode'> is NOT <type 'int'> for test_variable (u'3').
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.list[2] (u'3'). Check for known json
↪ storage type deviation <str> -> <unicode>.
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.str (u'string'). Check for known json
↪ storage type deviation <str> -> <unicode>.
```

### A.1.3 caching.property\_cache\_json: Test cached data (full init)

#### Testresult

This test was passed with the state: **Warning**.

---

**Info** Initialising property\_cache\_json (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data_
↪ /cache_data_test_load_on_init.json as cache
↪ file.
```

```
JsonCache: Cache file does not exists (yet).
```

```
JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',
↪ 'list']
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/_
↪ cache_data_test_load_on_init.json)
```

---

**Info** Collecting data from cache instance.

---

```
JsonCache: Key 'uncached' is not in cached_keys. Uncached data will be returned.
```

```
JsonCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/
↳ output_data/cache_data_test_load_on_init.json)
```

```
JsonCache: Providing property for 'dict' from cache ({u'1': 1, u'3': u'3', u'2': u'two',
↳ u'4': 4})
```

```
JsonCache: Providing property for 'unicode' from cache (u'unicode')
```

```
JsonCache: Providing property for 'str' from cache (u'string')
```

```
JsonCache: Providing property for 'integer' from cache (17)
```

```
JsonCache: Providing property for 'float' from cache (3.14159)
```

```
JsonCache: Providing property for 'list' from cache ([1, u'two', u'3', 4])
```

---

**Warning** Cached data is NOT correct. See detailed log for more information.

---

```
Result (Cached data): { 'uncached': 'uncached_data_of_class', 'unicode': u'unicode', 'float':
↳ 3.14159, 'list': [ 1, u'two', u'3', 4 ], 'dict': { u'1': 1, u'3': u'3', u'2': u'two',
↳ u'4': 4 }, 'str': u'string', 'integer': 17 } (<type 'dict'>)
```

```
Expectation (Cached data): result = { 'uncached': 'uncached_data_of_class', 'dict': { '1': 1,
↳ '3': '3', '2': 'two', '4': 4 }, 'unicode': u'unicode', 'str': 'string', 'integer': 17,
↳ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ] } (<type 'dict'>)
```

Type <type 'unicode'> is NOT <type 'str'> for test\_variable (u'two').

Content u'two' is incorrect for test\_variable.

Type <type 'unicode'> is NOT <type 'str'> for test\_variable (u'two').

Content u'two' is incorrect for test\_variable.

Type <type 'unicode'> is NOT <type 'int'> for test\_variable (u'two').

Type <type 'unicode'> is NOT <type 'str'> for result.list[1] (u'two'). Check for known json  
↳ storage type deviation <str> -> <unicode>.

Type <type 'unicode'> is NOT <type 'str'> for test\_variable (u'3').

Content u'3' is incorrect for test\_variable.

Type <type 'unicode'> is NOT <type 'int'> for test\_variable (u'3').

Type <type 'unicode'> is NOT <type 'str'> for result.list[2] (u'3'). Check for known json  
↳ storage type deviation <str> -> <unicode>.

Type <type 'unicode'> is NOT <type 'str'> for result.dict.3 (u'3'). Check for known json  
↳ storage type deviation <str> -> <unicode>.

Type <type 'unicode'> is NOT <type 'str'> for result.dict.2 (u'two'). Check for known json  
↳ storage type deviation <str> -> <unicode>.

Type <type 'unicode'> is NOT <type 'str'> for result.str (u'string'). Check for known json  
↳ storage type deviation <str> -> <unicode>.

#### A.1.4 caching.property\_cache.json: Test cached data (partially init)

##### Testresult

This test was passed with the state: **Warning**.

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

## Unittest for caching

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data_1  
↳ /cache_data_test_no_load_on_init.json as cache  
↳ file.
```

```
JsonCache: Cache file does not exists (yet).
```

```
JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',  
↳ 'list']
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data_1/  
↳ cache_data_test_no_load_on_init.json)
```

---

**Info** Collecting data from cache instance.

---

```
JsonCache: Key 'uncached' is not in cached_keys. Uncached data will be returned.
```

```
JsonCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/_  
↳ output_data/cache_data_test_no_load_on_init.json)
```

```
JsonCache: Providing property for 'dict' from cache ({u'1': 1, u'3': u'3', u'2': u'two',  
↳ u'4': 4})
```

```
JsonCache: Providing property for 'unicode' from cache (u'unicode')
```

```
JsonCache: Providing property for 'str' from cache (u'string')
```

```
JsonCache: Providing property for 'integer' from cache (17)
```

```
JsonCache: Providing property for 'float' from cache (3.14159)
```

```
JsonCache: Providing property for 'list' from cache ([1, u'two', u'3', 4])
```

---

**Warning** Cached data is NOT correct. See detailed log for more information.

---

```
Result (Cached data): { 'uncached': 'uncached_data_of_class', 'unicode': u'unicode', 'float':  
↳ 3.14159, 'list': [ 1, u'two', u'3', 4 ], 'dict': { u'1': 1, u'3': u'3', u'2': u'two',  
↳ u'4': 4 }, 'str': u'string', 'integer': 17 } (<type 'dict'>)
```

```
Expectation (Cached data): result = { 'uncached': 'uncached_data_of_class', 'dict': { '1': 1,  
↳ '3': '3', '2': 'two', '4': 4 }, 'unicode': u'unicode', 'str': 'string', 'integer': 17,  
↳ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ] } (<type 'dict'>)
```

```
Type <type 'unicode'> is NOT <type 'str'> for test_variable (u'two').
```

```
Content u'two' is incorrect for test_variable.
```

```
Type <type 'unicode'> is NOT <type 'str'> for test_variable (u'two').
```

```
Content u'two' is incorrect for test_variable.
```

```
Type <type 'unicode'> is NOT <type 'int'> for test_variable (u'two').
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.list[1] (u'two'). Check for known json  
↳ storage type deviation <str> -> <unicode>.
```

```
Type <type 'unicode'> is NOT <type 'str'> for test_variable (u'3').
```

```
Content u'3' is incorrect for test_variable.
```

```
Type <type 'unicode'> is NOT <type 'int'> for test_variable (u'3').
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.list[2] (u'3'). Check for known json  
↳ storage type deviation <str> -> <unicode>.
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.dict.3 (u'3'). Check for known json  
↳ storage type deviation <str> -> <unicode>.
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.dict.2 (u'two'). Check for known json  
↳ storage type deviation <str> -> <unicode>.
```

```
Type <type 'unicode'> is NOT <type 'str'> for result.str (u'string'). Check for known json  
↳ storage type deviation <str> -> <unicode>.
```

## A.2 Tests with status Info (16)

### A.2.1 caching.property\_cache\_json: Test get from source caused by increased data version (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_json (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with /user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/ ↵  
 ↵ /data\_version\_test\_load\_on\_init.json as cache  
 ↵ file.

JsonCache: Cache file does not exists (yet).

JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float', ↵  
 ↵ 'list']

JsonCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/ ↵  
 ↵ data\_version\_test\_load\_on\_init.json)

---

**Success** Instance data after increasing data\_version is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, ↵  
 ↵ 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and  
 Type is <type 'dict'>).

---

JsonCache: Loading properties from cache (/user\_data/data/dirk/prj/unittest/caching/unittest/ ↵  
 ↵ output\_data/data\_version\_test\_load\_on\_init.json)

JsonCache: Data version increased, ignoring previous cache data

JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float', ↵  
 ↵ 'list']

JsonCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/ ↵  
 ↵ data\_version\_test\_load\_on\_init.json)

JsonCache: Providing property for 'dict' from cache ({'1': '1', '3': 'three', '2': 2, '4': ↵  
 ↵ '4'})

JsonCache: Providing property for 'unicode' from cache (u'\_\_unicode\_\_')

JsonCache: Providing property for 'str' from cache ('\_\_string\_\_')

JsonCache: Providing property for 'integer' from cache (34)

JsonCache: Providing property for 'float' from cache (2.71828)

JsonCache: Providing property for 'list' from cache (['one', 2, 3, '4'])

Result (Instance data after increasing data\_version): { 'unicode': u'\_\_unicode\_\_', 'float': ↵  
 ↵ 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4'  
 ↵ }, 'str': '\_\_string\_\_', 'integer': 34 } (<type 'dict'>)

Expectation (Instance data after increasing data\_version): result = { 'dict': { '1': '1', ↵  
 ↵ '3': 'three', '2': 2, '4': '4' }, 'unicode': u'\_\_unicode\_\_', 'str': '\_\_string\_\_',  
 ↵ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)

## A.2.2 caching.property\_cache\_json: Test get from source caused by increased data version (partially init)

### Testresult

This test was passed with the state: **Success**.

|   |   |
|---|---|
| <b>Info</b>   | Initialising property_cache_json (load_all_on_init=True).   |
| Deleting cache file from filesystem to ensure identical conditions for each test run.   |   |
| Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ /data_version_test_no_load_on_init.json as cache ↪ file. |   |
| JsonCache: Cache file does not exists (yet).  |   |
| JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float', ↪ 'list']  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |
| <b>Success</b>  | Instance data after increasing data_version is correct (Content {'unicode': u'__unicode__', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '__string__', 'integer': 34} and Type is <type 'dict'>). |
| JsonCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/ ↪ output_data/data_version_test_no_load_on_init.json)       |   |
| JsonCache: Data version increased, ignoring previous cache data   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |
| JsonCache: Loading property for 'dict' from source instance ({'1': '1', '3': 'three', '2': 2, ↪ '4': '4'})  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |
| JsonCache: Loading property for 'unicode' from source instance (u'__unicode__')   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |
| JsonCache: Loading property for 'str' from source instance ('__string__')   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |
| JsonCache: Loading property for 'integer' from source instance (34)   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |
| JsonCache: Loading property for 'float' from source instance (2.71828)  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |
| JsonCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/ ↪ data_version_test_no_load_on_init.json)                   |   |

```
Result (Instance data after increasing data_version): { 'unicode': u'__unicode__', 'float':
↳ 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4'
↳ }, 'str': '__string__', 'integer': 34 } (<type 'dict'>)
Expectation (Instance data after increasing data_version): result = { 'dict': { '1': '1',
↳ '3': 'three', '2': 2, '4': '4' }, 'unicode': u'__unicode__', 'str': '__string__',
↳ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)
```

### A.2.3 caching.property\_cache.json: Test get from source caused by changed uid (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

```
↳ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_load_on_init.json
↳ as cache file.
```

JsonCache: Cache file does not exists (yet).

JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',  
↳ 'list']

JsonCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/  
↳ uid\_test\_load\_on\_init.json)

---

**Success** Instance data after changing uid is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

JsonCache: Loading properties from cache (/user\_data/data/dirk/prj/unittest/caching/unittest/  
↳ output\_data/uid\_test\_load\_on\_init.json)

JsonCache: Source uid changed, ignoring previous cache data

JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',  
↳ 'list']

JsonCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/  
↳ uid\_test\_load\_on\_init.json)

JsonCache: Providing property for 'dict' from cache ({'1': '1', '3': 'three', '2': 2, '4':  
↳ '4'})

JsonCache: Providing property for 'unicode' from cache (u'\_\_unicode\_\_')

JsonCache: Providing property for 'str' from cache ('\_\_string\_\_')

JsonCache: Providing property for 'integer' from cache (34)

JsonCache: Providing property for 'float' from cache (2.71828)

JsonCache: Providing property for 'list' from cache (['one', 2, 3, '4'])

```
Result (Instance data after changing uid): { 'unicode': u'__unicode__', 'float': 2.71828,
↳ 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4' },
↳ 'str': '__string__', 'integer': 34 } (<type 'dict'>)
```

```
Expectation (Instance data after changing uid): result = { 'dict': { '1': '1', '3': 'three',
↳ '2': 2, '4': '4' }, 'unicode': u'__unicode__', 'str': '__string__', 'integer': 34,
↳ 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)
```

### A.2.4 caching.property\_cache.json: Test get from source caused by changed uid (partially init)

#### Testresult

This test was passed with the state: **Success**.

|   |   |
|---|---|
| <b>Info</b>   | Initialising property_cache.json (load_all_on_init=True). |
| Deleting cache file from filesystem to ensure identical conditions for each test run.   |   |
| Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json as cache file.  |   |
| JsonCache: Cache file does not exists (yet).  |   |
| JsonCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float', 'list']  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| <b>Success</b> Instance data after changing uid is correct (Content {'unicode': u'__unicode__', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '__string__', 'integer': 34} and Type is <type 'dict'>). |   |
| JsonCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Source uid changed, ignoring previous cache data   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'dict' from source instance ({'1': '1', '3': 'three', '2': 2, '4': '4'})  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'unicode' from source instance (u'__unicode__')   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'str' from source instance ('__string__')   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'integer' from source instance (34)   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'float' from source instance (2.71828)  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |

```
Result (Instance data after changing uid): { 'unicode': u'__unicode__', 'float': 2.71828,
↪ 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4' },
↪ 'str': '__string__', 'integer': 34 } (<type 'dict'>)
```

```
Expectation (Instance data after changing uid): result = { 'dict': { '1': '1', '3': 'three',
↪ '2': 2, '4': '4' }, 'unicode': u'__unicode__', 'str': '__string__', 'integer': 34,
↪ 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)
```

### A.2.5 caching.property\_cache\_json: Test execution of save callback (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Installing save\_callback, which sets a variable to True on execution.

---

**Success** Save callback execution variable is correct (Content True and Type is <type 'bool'>).

---

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ save_callback_load_on_init.json)
```

```
Result (Save callback execution variable): True (<type 'bool'>)
```

```
Expectation (Save callback execution variable): result = True (<type 'bool'>)
```

### A.2.6 caching.property\_cache\_json: Test internal key usage

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_json (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with
```

```
↪ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.json as
↪ cache file.
```

```
JsonCache: Cache file does not exists (yet).
```

```
JsonCache: Loading all data from source - ['__property_cache_data_version_',
↪ '_property_cache_data_version_', '__property_cache_uid_', '_property_cache_uid_']
```

```
JsonCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.json)
```

---

**Info** Extracting storage object from property\_cache\_json for comparison.

---

```
JsonCache: Loading properties from cache
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.json)
```

```
Using storage object of cache class for comparison: {u'__property_cache_data_version_': u'no
↪ data version', u'__property_cache_data_version_': u'no second data version',
↪ u'__property_cache_uid_': u'no uid', u'_property_cache_uid_': u'my_unique_id',
↪ u'_property_cache_data_version_': 1, u'__property_cache_uid_': u'no second uid'}
```



Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache is correct (Content `{u'__property_cache_data_version_': u'no data version', u'__property_cache_data_version_': u'no second data version', u'__property_cache_uid_': u'no uid', u'__property_cache_uid_': u'no second uid'}` and Type is `<type 'dict'>`).

Result (Cache): `{ u'__property_cache_data_version_': u'no data version',  
↪ u'__property_cache_data_version_': u'no second data version', u'__property_cache_uid_':  
↪ u'no uid', u'__property_cache_uid_': u'no second uid' }` (`<type 'dict'>`)

Expectation (Cache): `result = { '__property_cache_data_version_': u'no data version',  
↪ '__property_cache_data_version_': u'no second data version', '__property_cache_uid_':  
↪ u'no uid', '__property_cache_uid_': u'no second uid' }` (`<type 'dict'>`)

**Success** Keyfilter returnvalue for 5 (`<type 'int'>`) is correct (Content 5 and Type is `<type 'int'>`).

Result (Keyfilter returnvalue for 5 (`<type 'int'>`)): 5 (`<type 'int'>`)

Expectation (Keyfilter returnvalue for 5 (`<type 'int'>`)): `result = 5` (`<type 'int'>`)

### A.2.7 `caching.property_cache_pickle`: Test full initialised PICKLE-Cache-Object

#### Testresult

This test was passed with the state: **Success**.

**Info** Initialising `property_cache_pickle` (`load_all_on_init=True`).

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↪ `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.pkl` as cache  
↪ file.

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - [`'dict'`, `'unicode'`, `'str'`, `'integer'`, `'float'`,  
↪ `'list'`]

PickCache: cache-file stored

↪ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.pkl)`

**Info** Extracting storage object from `property_cache_pickle` for comparison.

PickCache: Loading properties from cache

↪ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.pkl)`

Using storage object of cache class for comparison: `{'str': 'string', '_property_cache_uid_':  
↪ 'my_unique_id', 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '3': '3',  
↪ '2': 'two', '4': 4}, 'unicode': u'unicode', '_property_cache_data_version_': 1,  
↪ 'integer': 17}`

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

---

**Success** Cache object is correct (Content {'str': 'string', 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '3': '3', '2': 'two', '4': 4}, 'unicode': u'unicode', 'integer': 17} and Type is <type 'dict'>).

---

```
Result (Cache object): { 'str': 'string', 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ],
↪ 'dict': { '1': 1, '3': '3', '2': 'two', '4': 4 }, 'unicode': u'unicode', 'integer': 17 }
↪ (<type 'dict'>)
```

```
Expectation (Cache object): result = { 'dict': { '1': 1, '3': '3', '2': 'two', '4': 4 },
↪ 'unicode': u'unicode', 'str': 'string', 'integer': 17, 'float': 3.14159, 'list': [ 1,
↪ 'two', '3', 4 ] } (<type 'dict'>)
```

## A.2.8 caching.property\_cache\_pickle: Test partially initialised PICKLE-Cache-Object

### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=False).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

```
↪ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl as
↪ cache file.
```

```
PickCache: Cache file does not exists (yet).
```

PickCache: cache-file stored

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

---

**Info** Partially initialising cache object by requesting some information.

---

```
PickCache: Loading property for 'float' from source instance (3.14159)
```

PickCache: cache-file stored

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

```
PickCache: Loading property for 'list' from source instance ([1, 'two', '3', 4])
```

PickCache: cache-file stored

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

```
PickCache: Loading property for 'str' from source instance ('string')
```

PickCache: cache-file stored

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

---

**Info** Extracting storage object from property\_cache\_pickle for comparison.

---

PickCache: Loading properties from cache

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

Using storage object of cache class for comparison: {'\_property\_cache\_data\_version': 1,

```
↪ 'float': 3.14159, 'list': [1, 'two', '3', 4], 'str': 'string', '_property_cache_uid':
```

```
↪ 'my_unique_id'}
```

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache object is correct (Content `{'float': 3.14159, 'list': [1, 'two', '3', 4], 'str': 'string'}` and Type is `<type 'dict'>`).

Result (Cache object): `{ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'str': 'string' }`  
`↪ (<type 'dict'>)`

Expectation (Cache object): `result = { 'str': 'string', 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ] }` (`<type 'dict'>`)

## A.2.9 `caching.property_cache_pickle`: Test cached data (full init)

### Testresult

This test was passed with the state: **Success**.

**Info** Initialising `property_cache_pickle` (`load_all_on_init=True`).

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ /cache_data_test_load_on_init.pkl` as cache  
`↪ file.`

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - `['dict', 'unicode', 'str', 'integer', 'float', 'list']`

PickCache: cache-file stored (`/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ cache_data_test_load_on_init.pkl`)

**Info** Collecting data from cache instance.

PickCache: Key 'uncached' is not in `cached_keys`. Uncached data will be returned.

PickCache: Loading properties from cache (`/user_data/data/dirk/prj/unittest/caching/unittest/`  
`↪ output_data/cache_data_test_load_on_init.pkl`)

PickCache: Providing property for 'dict' from cache (`{'1': 1, '3': '3', '2': 'two', '4': 4}`)

PickCache: Providing property for 'unicode' from cache (`u'unicode'`)

PickCache: Providing property for 'str' from cache (`'string'`)

PickCache: Providing property for 'integer' from cache (`17`)

PickCache: Providing property for 'float' from cache (`3.14159`)

PickCache: Providing property for 'list' from cache (`[1, 'two', '3', 4]`)

**Success** Cached data is correct (Content `{'uncached': 'uncached_data_of_class', 'unicode': u'unicode', 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '3': '3', '2': 'two', '4': 4}, 'str': 'string', 'integer': 17}` and Type is `<type 'dict'>`).

Result (Cached data): `{ 'uncached': 'uncached_data_of_class', 'unicode': u'unicode', 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '3': '3', '2': 'two', '4': 4 }, 'str': 'string', 'integer': 17 }` (`<type 'dict'>`)

Expectation (Cached data): `result = { 'uncached': 'uncached_data_of_class', 'dict': { '1': 1, '3': '3', '2': 'two', '4': 4 }, 'unicode': u'unicode', 'str': 'string', 'integer': 17, 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ] }` (`<type 'dict'>`)

### A.2.10 `caching.property_cache_pickle`: Test cached data (partially init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising `property_cache_pickle` (`load_all_on_init=True`).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ /cache_data_test_no_load_on_init.pkl` as cache  
`↪ file`.

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - [`'dict'`, `'unicode'`, `'str'`, `'integer'`, `'float'`,  
`↪ 'list'`]

PickCache: cache-file stored (`/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ cache_data_test_no_load_on_init.pkl`)

---

**Info** Collecting data from cache instance.

---

PickCache: Key `'uncached'` is not in `cached_keys`. Uncached data will be returned.

PickCache: Loading properties from cache (`/user_data/data/dirk/prj/unittest/caching/unittest/`  
`↪ output_data/cache_data_test_no_load_on_init.pkl`)

PickCache: Providing property for `'dict'` from cache (`{'1': 1, '3': '3', '2': 'two', '4': 4}`)

PickCache: Providing property for `'unicode'` from cache (`u'unicode'`)

PickCache: Providing property for `'str'` from cache (`'string'`)

PickCache: Providing property for `'integer'` from cache (`17`)

PickCache: Providing property for `'float'` from cache (`3.14159`)

PickCache: Providing property for `'list'` from cache (`[1, 'two', '3', 4]`)

---

**Success** Cached data is correct (Content `{'uncached': 'uncached_data_of_class', 'unicode': u'unicode', 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '3': '3', '2': 'two', '4': 4}, 'str': 'string', 'integer': 17}` and Type is `<type 'dict'>`).

---

Result (Cached data): `{ 'uncached': 'uncached_data_of_class', 'unicode': u'unicode', 'float':`  
`↪ 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '3': '3', '2': 'two', '4': 4 },`  
`↪ 'str': 'string', 'integer': 17 }` (`<type 'dict'>`)

Expectation (Cached data): `result = { 'uncached': 'uncached_data_of_class', 'dict': { '1': 1,`  
`↪ '3': '3', '2': 'two', '4': 4 }, 'unicode': u'unicode', 'str': 'string', 'integer': 17,`  
`↪ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ] }` (`<type 'dict'>`)

---

### A.2.11 `caching.property_cache_pickle`: Test get from source caused by increased data version (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising `property_cache_pickle` (`load_all_on_init=True`).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ /data_version_test_load_on_init.pkl as cache
↳ file.
```

```
PickCache: Cache file does not exists (yet).
```

```
PickCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',
↳ 'list']
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ data_version_test_load_on_init.pkl)
```

---

**Success** Instance data after increasing data\_version is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

```
PickCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/
↳ output_data/data_version_test_load_on_init.pkl)
```

```
PickCache: Data version increased, ignoring previous cache data
```

```
PickCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',
↳ 'list']
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ data_version_test_load_on_init.pkl)
```

```
PickCache: Providing property for 'dict' from cache ({'1': '1', '3': 'three', '2': 2, '4':
↳ '4'})
```

```
PickCache: Providing property for 'unicode' from cache (u'__unicode__')
```

```
PickCache: Providing property for 'str' from cache ('__string__')
```

```
PickCache: Providing property for 'integer' from cache (34)
```

```
PickCache: Providing property for 'float' from cache (2.71828)
```

```
PickCache: Providing property for 'list' from cache (['one', 2, 3, '4'])
```

```
Result (Instance data after increasing data_version): { 'unicode': u'__unicode__', 'float':
↳ 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4'
↳ }, 'str': '__string__', 'integer': 34 } (<type 'dict'>)
```

```
Expectation (Instance data after increasing data_version): result = { 'dict': { '1': '1',
↳ '3': 'three', '2': 2, '4': '4' }, 'unicode': u'__unicode__', 'str': '__string__',
↳ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)
```

### A.2.12 caching.property\_cache\_pickle: Test get from source caused by increased data version (partially init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ /data_version_test_no_load_on_init.pkl as cache
↳ file.
```

## Unittest for caching

```
PickCache: Cache file does not exists (yet).
```

```
PickCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',  
↪ 'list']
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

---

**Success** Instance data after increasing data\_version is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

```
PickCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/  
↪ output_data/data_version_test_no_load_on_init.pkl)
```

```
PickCache: Data version increased, ignoring previous cache data
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'dict' from source instance ({'1': '1', '3': 'three', '2': 2,  
↪ '4': '4'})
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'unicode' from source instance (u'__unicode__')
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'str' from source instance ('__string__')
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'integer' from source instance (34)
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'float' from source instance (2.71828)
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
Result (Instance data after increasing data_version): { 'unicode': u'__unicode__', 'float':  
↪ 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4'  
↪ }, 'str': '__string__', 'integer': 34 } (<type 'dict'>)
```

```
Expectation (Instance data after increasing data_version): result = { 'dict': { '1': '1',  
↪ '3': 'three', '2': 2, '4': '4' }, 'unicode': u'__unicode__', 'str': '__string__',  
↪ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)
```

### A.2.13 caching.property\_cache\_pickle: Test get from source caused by changed uid (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↪ /user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl  
 ↪ as cache file.

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',  
 ↪ 'list']

PickCache: cache-file stored

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl)

---

**Success** Instance data after changing uid is correct (Content {'unicode': u'\_\_unicode\_\_', 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '\_\_string\_\_', 'integer': 34} and Type is <type 'dict'>).

---

PickCache: Loading properties from cache

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl)

PickCache: Source uid changed, ignoring previous cache data

PickCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',  
 ↪ 'list']

PickCache: cache-file stored

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl)

PickCache: Providing property for 'dict' from cache ({'1': '1', '3': 'three', '2': 2, '4':  
 ↪ '4'})

PickCache: Providing property for 'unicode' from cache (u'\_\_unicode\_\_')

PickCache: Providing property for 'str' from cache ('\_\_string\_\_')

PickCache: Providing property for 'integer' from cache (34)

PickCache: Providing property for 'float' from cache (2.71828)

PickCache: Providing property for 'list' from cache (['one', 2, 3, '4'])

Result (Instance data after changing uid): { 'unicode': u'\_\_unicode\_\_', 'float': 2.71828,  
 ↪ 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4' },  
 ↪ 'str': '\_\_string\_\_', 'integer': 34 } (<type 'dict'>)

Expectation (Instance data after changing uid): result = { 'dict': { '1': '1', '3': 'three',  
 ↪ '2': 2, '4': '4' }, 'unicode': u'\_\_unicode\_\_', 'str': '\_\_string\_\_', 'integer': 34,  
 ↪ 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)

#### A.2.14 caching.property\_cache\_pickle: Test get from source caused by changed uid (partially init)

##### Testresult

This test was passed with the state: **Success**.

---

```

Info    Initialising property_cache_pickle (load_all_on_init=True).

```

---

```

Deleting cache file from filesystem to ensure identical conditions for each test run.
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ /uid_test_no_load_on_init.pkl as cache
↪ file.
PickCache: Cache file does not exists (yet).
PickCache: Loading all data from source - ['dict', 'unicode', 'str', 'integer', 'float',
↪ 'list']
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)

```

---

```

Success Instance data after changing uid is correct (Content {'unicode': u'__unicode__', 'float': 2.71828, 'list':
['one', 2, 3, '4'], 'dict': {'1': '1', '3': 'three', '2': 2, '4': '4'}, 'str': '__string__', 'integer': 34} and Type
is <type 'dict'>).

```

---

```

PickCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/
↪ output_data/uid_test_no_load_on_init.pkl)
PickCache: Source uid changed, ignoring previous cache data
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)
PickCache: Loading property for 'dict' from source instance ({'1': '1', '3': 'three', '2': 2,
↪ '4': '4'})
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)
PickCache: Loading property for 'unicode' from source instance (u'__unicode__')
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)
PickCache: Loading property for 'str' from source instance ('__string__')
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)
PickCache: Loading property for 'integer' from source instance (34)
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)
PickCache: Loading property for 'float' from source instance (2.71828)
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)
PickCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ uid_test_no_load_on_init.pkl)

```



```
Result (Instance data after changing uid): { 'unicode': u'__unicode__', 'float': 2.71828,
↪ 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '3': 'three', '2': 2, '4': '4' },
↪ 'str': '__string__', 'integer': 34 } (<type 'dict'>)
```

```
Expectation (Instance data after changing uid): result = { 'dict': { '1': '1', '3': 'three',
↪ '2': 2, '4': '4' }, 'unicode': u'__unicode__', 'str': '__string__', 'integer': 34,
↪ 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ] } (<type 'dict'>)
```

### A.2.15 caching.property\_cache\_pickle: Test execution of save callback (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Installing save\_callback, which sets a variable to True on execution.

---

**Success** Save callback execution variable is correct (Content True and Type is <type 'bool'>).

---

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ save_callback_load_on_init.json)
```

```
Result (Save callback execution variable): True (<type 'bool'>)
```

```
Expectation (Save callback execution variable): result = True (<type 'bool'>)
```

### A.2.16 caching.property\_cache\_pickle: Test internal key usage

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with
```

```
↪ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.pkl as
↪ cache file.
```

```
PickCache: Cache file does not exists (yet).
```

```
PickCache: Loading all data from source - ['__property_cache_data_version_',
↪ '_property_cache_data_version_', '__property_cache_uid_', '_property_cache_uid_']
```

```
PickCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.pkl)
```

---

**Info** Extracting storage object from property\_cache\_pickle for comparison.

---

```
PickCache: Loading properties from cache
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.pkl)
```

```
Using storage object of cache class for comparison: {'__property_cache_data_version_': u'no
↪ data version', '___property_cache_data_version_': u'no second data version',
↪ '__property_cache_uid_': u'no uid', '_property_cache_uid_': 'my_unique_id',
↪ '_property_cache_data_version_': 1, '___property_cache_uid_': u'no second uid'}
```

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache is correct (Content `{'__property_cache_data_version_': u'no data version', '__property_cache_data_version_': u'no second data version', '__property_cache_uid_': u'no uid', '__property_cache_uid_': u'no second uid'}` and Type is `<type 'dict'>`).

Result (Cache): `{ '__property_cache_data_version_': u'no data version',  
↪ '__property_cache_data_version_': u'no second data version', '__property_cache_uid_':  
↪ u'no uid', '__property_cache_uid_': u'no second uid' }` (`<type 'dict'>`)

Expectation (Cache): `result = { '__property_cache_data_version_': u'no data version',  
↪ '__property_cache_data_version_': u'no second data version', '__property_cache_uid_':  
↪ u'no uid', '__property_cache_uid_': u'no second uid' }` (`<type 'dict'>`)

**Success** Keyfilter returnvalue for 5 (`<type 'int'>`) is correct (Content 5 and Type is `<type 'int'>`).

Result (Keyfilter returnvalue for 5 (`<type 'int'>`)): 5 (`<type 'int'>`)

Expectation (Keyfilter returnvalue for 5 (`<type 'int'>`)): `result = 5` (`<type 'int'>`)

## B Trace for testrun with python 3.8.5 (final)

### B.1 Tests with status Info (20)

#### B.1.1 `caching.property_cache.json`: Test full initialised JSON-Cache-Object

##### Testresult

This test was passed with the state: **Success**.

**Info** Initialising `property_cache.json` (`load_all_on_init=True`).

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↪ `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.json` as cache  
↪ file.

JsonCache: Cache file does not exists (yet).

JsonCache: Loading all data from source - [`'str'`, `'unicode'`, `'integer'`, `'float'`, `'list'`,  
↪ `'dict'`]

JsonCache: cache-file stored

↪ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.json)`

**Info** Extracting storage object from `property_cache.json` for comparison.

JsonCache: Loading properties from cache

↪ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.json)`

Using storage object of cache class for comparison: `{'_property_cache_data_version_': 1,  
↪ '_property_cache_uid_': 'my_unique_id', 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4},  
↪ 'float': 3.14159, 'integer': 17, 'list': [1, 'two', '3', 4], 'str': 'string', 'unicode':  
↪ 'unicode'}`

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache object is correct (Content `{'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'float': 3.14159, 'integer': 17, 'list': [1, 'two', '3', 4], 'str': 'string', 'unicode': 'unicode'}` and Type is `<class 'dict'>`).

Result (Cache object): `{ 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 }, 'float': 3.14159, ↵ 'integer': 17, 'list': [ 1, 'two', '3', 4 ], 'str': 'string', 'unicode': 'unicode' } ↵ (<class 'dict'>)`

Expectation (Cache object): `result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17, ↵ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', ↵ '4': 4 } } (<class 'dict'>)`

### B.1.2 `caching.property_cache_json`: Test partially initialisation of JSON-Cache-Object

#### Testresult

This test was passed with the state: **Success**.

**Info** Initialising `property_cache_json` (`load_all_on_init=False`).

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↵ `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json` as  
↵ cache file.

JsonCache: Cache file does not exists (yet).

JsonCache: cache-file stored

↵ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)`

**Info** Partially initialising cache object by requesting some information.

JsonCache: Loading property for 'str' from source instance ('string')

JsonCache: cache-file stored

↵ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)`

JsonCache: Loading property for 'integer' from source instance (17)

JsonCache: cache-file stored

↵ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)`

JsonCache: Loading property for 'unicode' from source instance ('unicode')

JsonCache: cache-file stored

↵ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)`

**Info** Extracting storage object from `property_cache_json` for comparison.

JsonCache: Loading properties from cache

↵ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.json)`

Using storage object of cache class for comparison: `{'_property_cache_data_version_': 1,`

↵ `'_property_cache_uid_': 'my_unique_id', 'integer': 17, 'str': 'string', 'unicode':`

↵ `'unicode'}`

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache object is correct (Content `{'integer': 17, 'str': 'string', 'unicode': 'unicode'}` and Type is `<class 'dict'>`).

Result (Cache object): `{ 'integer': 17, 'str': 'string', 'unicode': 'unicode' }` (`<class 'dict'>`)

Expectation (Cache object): `result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17 }` (`<class 'dict'>`)

### B.1.3 `caching.property_cache_json`: Test cached data (full init)

#### Testresult

This test was passed with the state: **Success**.

**Info** Initialising `property_cache_json` (`load_all_on_init=True`).

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ /cache_data_test_load_on_init.json` as cache  
`↪ file`.

JsonCache: Cache file does not exists (yet).

JsonCache: Loading all data from source - `['str', 'unicode', 'integer', 'float', 'list', 'dict']`

JsonCache: cache-file stored (`/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ cache_data_test_load_on_init.json`)

**Info** Collecting data from cache instance.

JsonCache: Loading properties from cache (`/user_data/data/dirk/prj/unittest/caching/unittest/`  
`↪ output_data/cache_data_test_load_on_init.json`)

JsonCache: Providing property for 'str' from cache ('string')

JsonCache: Providing property for 'unicode' from cache ('unicode')

JsonCache: Providing property for 'integer' from cache (17)

JsonCache: Providing property for 'float' from cache (3.14159)

JsonCache: Providing property for 'list' from cache (`[1, 'two', '3', 4]`)

JsonCache: Providing property for 'dict' from cache (`{'1': 1, '2': 'two', '3': '3', '4': 4}`)

JsonCache: Key 'uncached' is not in `cached_keys`. Uncached data will be returned.

**Success** Cached data is correct (Content `{'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached_data_of_class'}` and Type is `<class 'dict'>`).

Result (Cached data): `{ 'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 }, 'uncached': 'uncached_data_of_class' }` (`<class 'dict'>`)

Expectation (Cached data): `result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 }, 'uncached': 'uncached_data_of_class' }` (`<class 'dict'>`)

### B.1.4 caching.property\_cache.json: Test cached data (partially init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with /user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/ ↵  
 ↵ /cache\_data\_test\_no\_load\_on\_init.json as cache  
 ↵ file.

JsonCache: Cache file does not exists (yet).

JsonCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
 ↵ 'dict']

JsonCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/ ↵  
 ↵ cache\_data\_test\_no\_load\_on\_init.json)

---

**Info** Collecting data from cache instance.

---

JsonCache: Loading properties from cache (/user\_data/data/dirk/prj/unittest/caching/unittest/ ↵  
 ↵ output\_data/cache\_data\_test\_no\_load\_on\_init.json)

JsonCache: Providing property for 'str' from cache ('string')

JsonCache: Providing property for 'unicode' from cache ('unicode')

JsonCache: Providing property for 'integer' from cache (17)

JsonCache: Providing property for 'float' from cache (3.14159)

JsonCache: Providing property for 'list' from cache ([1, 'two', '3', 4])

JsonCache: Providing property for 'dict' from cache ({'1': 1, '2': 'two', '3': '3', '4': 4})

JsonCache: Key 'uncached' is not in cached\_keys. Uncached data will be returned.

---

**Success** Cached data is correct (Content {'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list':  
 [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached\_data\_of\_class'} and  
 Type is <class 'dict'>).

---

Result (Cached data): { 'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float':  
 ↵ 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 },  
 ↵ 'uncached': 'uncached\_data\_of\_class' } (<class 'dict'>)

Expectation (Cached data): result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17,  
 ↵ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3',  
 ↵ '4': 4 }, 'uncached': 'uncached\_data\_of\_class' } (<class 'dict'>)

### B.1.5 caching.property\_cache.json: Test get from source caused by increased data version (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

## Unittest for caching

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ /data_version_test_load_on_init.json as cache
↳ file.
```

```
JsonCache: Cache file does not exists (yet).
```

```
JsonCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',
↳ 'dict']
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ data_version_test_load_on_init.json)
```

---

**Success** Instance data after increasing data\_version is correct (Content {'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

```
JsonCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/
↳ output_data/data_version_test_load_on_init.json)
```

```
JsonCache: Data version increased, ignoring previous cache data
```

```
JsonCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',
↳ 'dict']
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ data_version_test_load_on_init.json)
```

```
JsonCache: Providing property for 'str' from cache ('__string__')
```

```
JsonCache: Providing property for 'unicode' from cache ('__unicode__')
```

```
JsonCache: Providing property for 'integer' from cache (34)
```

```
JsonCache: Providing property for 'float' from cache (2.71828)
```

```
JsonCache: Providing property for 'list' from cache (['one', 2, 3, '4'])
```

```
JsonCache: Providing property for 'dict' from cache ({'1': '1', '2': 2, '3': 'three', '4':
↳ '4'})
```

```
Result (Instance data after increasing data_version): { 'str': '__string__', 'unicode':
↳ '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {
↳ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

```
Expectation (Instance data after increasing data_version): result = { 'str': '__string__',
↳ 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ],
↳ 'dict': { '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

### B.1.6 caching.property\_cache.json: Test get from source caused by increased data version (partially init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache.json (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ /data_version_test_no_load_on_init.json as cache
↳ file.
```

## Unittest for caching

```
JsonCache: Cache file does not exists (yet).
```

```
JsonCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
↪ 'dict']
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

---

**Success** Instance data after increasing data\_version is correct (Content {'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

```
JsonCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/  
↪ output_data/data_version_test_no_load_on_init.json)
```

```
JsonCache: Data version increased, ignoring previous cache data
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

```
JsonCache: Loading property for 'str' from source instance ('__string__')
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

```
JsonCache: Loading property for 'unicode' from source instance ('__unicode__')
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

```
JsonCache: Loading property for 'integer' from source instance (34)
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

```
JsonCache: Loading property for 'float' from source instance (2.71828)
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

```
JsonCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

```
JsonCache: Loading property for 'dict' from source instance ({'1': '1', '2': 2, '3': 'three',  
↪ '4': '4'})
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.json)
```

```
Result (Instance data after increasing data_version): { 'str': '__string__', 'unicode':  
↪ '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {  
↪ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

```
Expectation (Instance data after increasing data_version): result = { 'str': '__string__',  
↪ 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ],  
↪ 'dict': { '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

### B.1.7 caching.property\_cache\_json: Test get from source caused by changed uid (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_json (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↪ /user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.json  
 ↪ as cache file.

JsonCache: Cache file does not exists (yet).

JsonCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
 ↪ 'dict']

JsonCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/  
 ↪ uid\_test\_load\_on\_init.json)

---

**Success** Instance data after changing uid is correct (Content {'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

JsonCache: Loading properties from cache (/user\_data/data/dirk/prj/unittest/caching/unittest/  
 ↪ output\_data/uid\_test\_load\_on\_init.json)

JsonCache: Source uid changed, ignoring previous cache data

JsonCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
 ↪ 'dict']

JsonCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/  
 ↪ uid\_test\_load\_on\_init.json)

JsonCache: Providing property for 'str' from cache ('\_\_string\_\_')

JsonCache: Providing property for 'unicode' from cache ('\_\_unicode\_\_')

JsonCache: Providing property for 'integer' from cache (34)

JsonCache: Providing property for 'float' from cache (2.71828)

JsonCache: Providing property for 'list' from cache (['one', 2, 3, '4'])

JsonCache: Providing property for 'dict' from cache ({'1': '1', '2': 2, '3': 'three', '4':  
 ↪ '4'})

Result (Instance data after changing uid): { 'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_',  
 ↪ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '2':  
 ↪ 2, '3': 'three', '4': '4' } } (<class 'dict'>)

Expectation (Instance data after changing uid): result = { 'str': '\_\_string\_\_', 'unicode':  
 ↪ '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {  
 ↪ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)



### B.1.8 caching.property\_cache\_json: Test get from source caused by changed uid (partially init)

#### Testresult

This test was passed with the state: **Success**.

|   |   |
|---|---|
| <b>Info</b>   | Initialising property_cache_json (load_all_on_init=True). |
| Deleting cache file from filesystem to ensure identical conditions for each test run.   |   |
| Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json as cache file.  |   |
| JsonCache: Cache file does not exists (yet).  |   |
| JsonCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list', 'dict']  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| <b>Success</b> Instance data after changing uid is correct (Content {'str': '__string__', 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |   |
| JsonCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Source uid changed, ignoring previous cache data   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'str' from source instance ('__string__')   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'unicode' from source instance ('__unicode__')  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'integer' from source instance (34)   |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'float' from source instance (2.71828)  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |
| JsonCache: Loading property for 'dict' from source instance ({'1': '1', '2': 2, '3': 'three', '4': '4'})  |   |
| JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.json)   |   |

```
Result (Instance data after changing uid): { 'str': '__string__', 'unicode': '__unicode__',
↪ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '2':
↪ 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

```
Expectation (Instance data after changing uid): result = { 'str': '__string__', 'unicode':
↪ '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {
↪ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

### B.1.9 caching.property\_cache\_json: Test execution of save callback (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Installing save\_callback, which sets a variable to True on execution.

---

**Success** Save callback execution variable is correct (Content True and Type is <class 'bool'>).

---

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ save_callback_load_on_init.json)
```

```
Result (Save callback execution variable): True (<class 'bool'>)
```

```
Expectation (Save callback execution variable): result = True (<class 'bool'>)
```

### B.1.10 caching.property\_cache\_json: Test internal key usage

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_json (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with
```

```
↪ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.json as
↪ cache file.
```

```
JsonCache: Cache file does not exists (yet).
```

```
JsonCache: Loading all data from source - ['_property_cache_uid_', '__property_cache_uid_',
↪ '_property_cache_data_version_', '__property_cache_data_version_']
```

```
JsonCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.json)
```

---

**Info** Extracting storage object from property\_cache\_json for comparison.

---

```
JsonCache: Loading properties from cache
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.json)
```

```
Using storage object of cache class for comparison: {'__property_cache_data_version_': 'no
↪ second data version', '__property_cache_uid_': 'no second uid',
↪ '_property_cache_data_version_': 'no data version', '__property_cache_uid_': 'no uid',
↪ '_property_cache_data_version_': 1, '_property_cache_uid_': 'my_unique_id'}
```

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache is correct (Content `{'__property_cache_data_version_': 'no second data version', '__property_cache_uid_': 'no second uid', '_property_cache_data_version_': 'no data version', '_property_cache_uid_': 'no uid'}` and Type is `<class 'dict'>`).

Result (Cache): `{ '__property_cache_data_version_': 'no second data version',  
↪ '__property_cache_uid_': 'no second uid', '_property_cache_data_version_': 'no data  
↪ version', '_property_cache_uid_': 'no uid' }` (`<class 'dict'>`)

Expectation (Cache): `result = { '__property_cache_uid_': 'no uid', '__property_cache_uid_':  
↪ 'no second uid', '_property_cache_data_version_': 'no data version',  
↪ '__property_cache_data_version_': 'no second data version' }` (`<class 'dict'>`)

**Success** Keyfilter returnvalue for 5 (`<class 'int'>`) is correct (Content 5 and Type is `<class 'int'>`).

Result (Keyfilter returnvalue for 5 (`<class 'int'>`)): 5 (`<class 'int'>`)

Expectation (Keyfilter returnvalue for 5 (`<class 'int'>`)): `result = 5` (`<class 'int'>`)

### B.1.11 `caching.property_cache_pickle`: Test full initialised PICKLE-Cache-Object

#### Testresult

This test was passed with the state: **Success**.

**Info** Initialising `property_cache_pickle` (`load_all_on_init=True`).

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↪ `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.pkl` as cache  
↪ file.

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - `['str', 'unicode', 'integer', 'float', 'list',  
↪ 'dict']`

PickCache: cache-file stored

↪ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.pkl)`

**Info** Extracting storage object from `property_cache_pickle` for comparison.

PickCache: Loading properties from cache

↪ `(/user_data/data/dirk/prj/unittest/caching/unittest/output_data/load_on_init.pkl)`

Using storage object of cache class for comparison: `{'str': 'string', 'unicode': 'unicode',  
↪ 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two',  
↪ '3': '3', '4': 4}, '_property_cache_uid_': 'my_unique_id',  
↪ '_property_cache_data_version_': 1}`

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

---

**Success** Cache object is correct (Content {'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}} and Type is <class 'dict'>).

---

```
Result (Cache object): { 'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float':
↪ 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 } }
↪ (<class 'dict'>)
```

```
Expectation (Cache object): result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17,
↪ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3',
↪ '4': 4 } } (<class 'dict'>)
```

### B.1.12 caching.property\_cache\_pickle: Test partially initialised PICKLE-Cache-Object

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=False).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

```
↪ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl as
↪ cache file.
```

```
PickCache: Cache file does not exists (yet).
```

```
PickCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

---

**Info** Partially initialising cache object by requesting some information.

---

```
PickCache: Loading property for 'str' from source instance ('string')
```

```
PickCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

```
PickCache: Loading property for 'integer' from source instance (17)
```

```
PickCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

```
PickCache: Loading property for 'unicode' from source instance ('unicode')
```

```
PickCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

---

**Info** Extracting storage object from property\_cache\_pickle for comparison.

---

```
PickCache: Loading properties from cache
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/no_load_on_init.pkl)
```

```
Using storage object of cache class for comparison: {'_property_cache_uid': 'my_unique_id',
```

```
↪ '_property_cache_data_version': 1, 'str': 'string', 'integer': 17, 'unicode': 'unicode'}
```

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache object is correct (Content `{'str': 'string', 'integer': 17, 'unicode': 'unicode'}` and Type is `<class 'dict'>`).

Result (Cache object): `{ 'str': 'string', 'integer': 17, 'unicode': 'unicode' }` (`<class 'dict'>`)

Expectation (Cache object): `result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17 }` (`<class 'dict'>`)

### B.1.13 `caching.property_cache_pickle`: Test cached data (full init)

#### Testresult

This test was passed with the state: **Success**.

**Info** Initialising `property_cache_pickle` (`load_all_on_init=True`).

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with `/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ /cache_data_test_load_on_init.pkl` as cache  
`↪ file`.

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - `['str', 'unicode', 'integer', 'float', 'list', 'dict']`

PickCache: cache-file stored (`/user_data/data/dirk/prj/unittest/caching/unittest/output_data/`  
`↪ cache_data_test_load_on_init.pkl`)

**Info** Collecting data from cache instance.

PickCache: Loading properties from cache (`/user_data/data/dirk/prj/unittest/caching/unittest/`  
`↪ output_data/cache_data_test_load_on_init.pkl`)

PickCache: Providing property for 'str' from cache ('string')

PickCache: Providing property for 'unicode' from cache ('unicode')

PickCache: Providing property for 'integer' from cache (17)

PickCache: Providing property for 'float' from cache (3.14159)

PickCache: Providing property for 'list' from cache (`[1, 'two', '3', 4]`)

PickCache: Providing property for 'dict' from cache (`{'1': 1, '2': 'two', '3': '3', '4': 4}`)

PickCache: Key 'uncached' is not in `cached_keys`. Uncached data will be returned.

**Success** Cached data is correct (Content `{'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached_data_of_class'}` and Type is `<class 'dict'>`).

Result (Cached data): `{ 'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 }, 'uncached': 'uncached_data_of_class' }` (`<class 'dict'>`)

Expectation (Cached data): `result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 }, 'uncached': 'uncached_data_of_class' }` (`<class 'dict'>`)

### B.1.14 caching.property\_cache\_pickle: Test cached data (partially init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with /user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/ ↵  
 ↵ /cache\_data\_test\_no\_load\_on\_init.pkl as cache  
 ↵ file.

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
 ↵ 'dict']

PickCache: cache-file stored (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/ ↵  
 ↵ cache\_data\_test\_no\_load\_on\_init.pkl)

---

**Info** Collecting data from cache instance.

---

PickCache: Loading properties from cache (/user\_data/data/dirk/prj/unittest/caching/unittest/ ↵  
 ↵ output\_data/cache\_data\_test\_no\_load\_on\_init.pkl)

PickCache: Providing property for 'str' from cache ('string')

PickCache: Providing property for 'unicode' from cache ('unicode')

PickCache: Providing property for 'integer' from cache (17)

PickCache: Providing property for 'float' from cache (3.14159)

PickCache: Providing property for 'list' from cache ([1, 'two', '3', 4])

PickCache: Providing property for 'dict' from cache ({'1': 1, '2': 'two', '3': '3', '4': 4})

PickCache: Key 'uncached' is not in cached\_keys. Uncached data will be returned.

---

**Success** Cached data is correct (Content {'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float': 3.14159, 'list':  
 [1, 'two', '3', 4], 'dict': {'1': 1, '2': 'two', '3': '3', '4': 4}, 'uncached': 'uncached\_data\_of\_class'} and  
 Type is <class 'dict'>).

---

Result (Cached data): { 'str': 'string', 'unicode': 'unicode', 'integer': 17, 'float':  
 ↵ 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3', '4': 4 },  
 ↵ 'uncached': 'uncached\_data\_of\_class' } (<class 'dict'>)

Expectation (Cached data): result = { 'str': 'string', 'unicode': 'unicode', 'integer': 17,  
 ↵ 'float': 3.14159, 'list': [ 1, 'two', '3', 4 ], 'dict': { '1': 1, '2': 'two', '3': '3',  
 ↵ '4': 4 }, 'uncached': 'uncached\_data\_of\_class' } (<class 'dict'>)

### B.1.15 caching.property\_cache\_pickle: Test get from source caused by increased data version (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

## Unittest for caching

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ /data_version_test_load_on_init.pkl as cache
↳ file.
```

```
PickCache: Cache file does not exists (yet).
```

```
PickCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',
↳ 'dict']
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ data_version_test_load_on_init.pkl)
```

---

**Success** Instance data after increasing data\_version is correct (Content {'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

```
PickCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/
↳ output_data/data_version_test_load_on_init.pkl)
```

```
PickCache: Data version increased, ignoring previous cache data
```

```
PickCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',
↳ 'dict']
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ data_version_test_load_on_init.pkl)
```

```
PickCache: Providing property for 'str' from cache ('__string__')
```

```
PickCache: Providing property for 'unicode' from cache ('__unicode__')
```

```
PickCache: Providing property for 'integer' from cache (34)
```

```
PickCache: Providing property for 'float' from cache (2.71828)
```

```
PickCache: Providing property for 'list' from cache (['one', 2, 3, '4'])
```

```
PickCache: Providing property for 'dict' from cache ({'1': '1', '2': 2, '3': 'three', '4':
↳ '4'})
```

```
Result (Instance data after increasing data_version): { 'str': '__string__', 'unicode':
↳ '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {
↳ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

```
Expectation (Instance data after increasing data_version): result = { 'str': '__string__',
↳ 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ],
↳ 'dict': { '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

### B.1.16 caching.property\_cache\_pickle: Test get from source caused by increased data version (partially init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↳ /data_version_test_no_load_on_init.pkl as cache
↳ file.
```

## Unittest for caching

```
PickCache: Cache file does not exists (yet).
```

```
PickCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
↪ 'dict']
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

---

**Success** Instance data after increasing data\_version is correct (Content {'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

```
PickCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/  
↪ output_data/data_version_test_no_load_on_init.pkl)
```

```
PickCache: Data version increased, ignoring previous cache data
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'str' from source instance ('__string__')
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'unicode' from source instance ('__unicode__')
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'integer' from source instance (34)
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'float' from source instance (2.71828)
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
PickCache: Loading property for 'dict' from source instance ({'1': '1', '2': 2, '3': 'three',  
↪ '4': '4'})
```

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/  
↪ data_version_test_no_load_on_init.pkl)
```

```
Result (Instance data after increasing data_version): { 'str': '__string__', 'unicode':  
↪ '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {  
↪ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

```
Expectation (Instance data after increasing data_version): result = { 'str': '__string__',  
↪ 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ],  
↪ 'dict': { '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```



### B.1.17 caching.property\_cache\_pickle: Test get from source caused by changed uid (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

Deleting cache file from filesystem to ensure identical conditions for each test run.

Initialising cached class with

↪ /user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl  
 ↪ as cache file.

PickCache: Cache file does not exists (yet).

PickCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
 ↪ 'dict']

PickCache: cache-file stored

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl)

---

**Success** Instance data after changing uid is correct (Content {'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>).

---

PickCache: Loading properties from cache

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl)

PickCache: Source uid changed, ignoring previous cache data

PickCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list',  
 ↪ 'dict']

PickCache: cache-file stored

↪ (/user\_data/data/dirk/prj/unittest/caching/unittest/output\_data/uid\_test\_load\_on\_init.pkl)

PickCache: Providing property for 'str' from cache ('\_\_string\_\_')

PickCache: Providing property for 'unicode' from cache ('\_\_unicode\_\_')

PickCache: Providing property for 'integer' from cache (34)

PickCache: Providing property for 'float' from cache (2.71828)

PickCache: Providing property for 'list' from cache (['one', 2, 3, '4'])

PickCache: Providing property for 'dict' from cache ({'1': '1', '2': 2, '3': 'three', '4':  
 ↪ '4'})

Result (Instance data after changing uid): { 'str': '\_\_string\_\_', 'unicode': '\_\_unicode\_\_',  
 ↪ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '2':  
 ↪ 2, '3': 'three', '4': '4' } } (<class 'dict'>)

Expectation (Instance data after changing uid): result = { 'str': '\_\_string\_\_', 'unicode':  
 ↪ '\_\_unicode\_\_', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {  
 ↪ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)

**B.1.18 caching.property\_cache\_pickle: Test get from source caused by changed uid (partially init)**

**Testresult**

This test was passed with the state: **Success**.

|   |   |
|---|---|
| <b>Info</b>   | Initialising property_cache_pickle (load_all_on_init=True). |
| Deleting cache file from filesystem to ensure identical conditions for each test run.   |   |
| Initialising cached class with /user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl as cache<br>↪ file.  |   |
| PickCache: Cache file does not exists (yet).  |   |
| PickCache: Loading all data from source - ['str', 'unicode', 'integer', 'float', 'list', 'dict']<br>↪ 'dict']   |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| <b>Success</b> Instance data after changing uid is correct (Content {'str': '__string__', 'unicode': '__unicode__', 'integer': 34, 'float': 2.71828, 'list': ['one', 2, 3, '4'], 'dict': {'1': '1', '2': 2, '3': 'three', '4': '4'}} and Type is <class 'dict'>). |   |
| PickCache: Loading properties from cache (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| PickCache: Source uid changed, ignoring previous cache data   |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| PickCache: Loading property for 'str' from source instance ('__string__')   |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| PickCache: Loading property for 'unicode' from source instance ('__unicode__')  |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| PickCache: Loading property for 'integer' from source instance (34)   |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| PickCache: Loading property for 'float' from source instance (2.71828)  |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| PickCache: Loading property for 'list' from source instance (['one', 2, 3, '4'])  |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |
| PickCache: Loading property for 'dict' from source instance ({'1': '1', '2': 2, '3': 'three', '4': '4'})<br>↪ '4': '4'})  |   |
| PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/uid_test_no_load_on_init.pkl)  |   |

```
Result (Instance data after changing uid): { 'str': '__string__', 'unicode': '__unicode__',
↪ 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': { '1': '1', '2':
↪ 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

```
Expectation (Instance data after changing uid): result = { 'str': '__string__', 'unicode':
↪ '__unicode__', 'integer': 34, 'float': 2.71828, 'list': [ 'one', 2, 3, '4' ], 'dict': {
↪ '1': '1', '2': 2, '3': 'three', '4': '4' } } (<class 'dict'>)
```

### B.1.19 caching.property\_cache\_pickle: Test execution of save callback (full init)

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Installing save\_callback, which sets a variable to True on execution.

---

**Success** Save callback execution variable is correct (Content True and Type is <class 'bool'>).

---

```
PickCache: cache-file stored (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/
↪ save_callback_load_on_init.json)
```

```
Result (Save callback execution variable): True (<class 'bool'>)
```

```
Expectation (Save callback execution variable): result = True (<class 'bool'>)
```

### B.1.20 caching.property\_cache\_pickle: Test internal key usage

#### Testresult

This test was passed with the state: **Success**.

---

**Info** Initialising property\_cache\_pickle (load\_all\_on\_init=True).

---

```
Deleting cache file from filesystem to ensure identical conditions for each test run.
```

```
Initialising cached class with
```

```
↪ /user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.pkl as
↪ cache file.
```

```
PickCache: Cache file does not exists (yet).
```

```
PickCache: Loading all data from source - ['_property_cache_uid_', '__property_cache_uid_',
↪ '_property_cache_data_version_', '__property_cache_data_version_']
```

```
PickCache: cache-file stored
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.pkl)
```

---

**Info** Extracting storage object from property\_cache\_pickle for comparison.

---

```
PickCache: Loading properties from cache
```

```
↪ (/user_data/data/dirk/prj/unittest/caching/unittest/output_data/internal_keys_test.pkl)
```

```
Using storage object of cache class for comparison: {'__property_cache_uid_': 'no uid',
↪ '___property_cache_uid_': 'no second uid', '__property_cache_data_version_': 'no data
↪ version', '___property_cache_data_version_': 'no second data version',
↪ '_property_cache_uid_': 'my_unique_id', '_property_cache_data_version_': 1}
```

Deleting overhead keys: `_property_cache_data_version_`, `_property_cache_uid_`

**Success** Cache is correct (Content `{'_property_cache_uid_': 'no uid', '___property_cache_uid_': 'no second uid', '_property_cache_data_version_': 'no data version', '___property_cache_data_version_': 'no second data version'}` and Type is `<class 'dict'>`).

Result (Cache): `{ '_property_cache_uid_': 'no uid', '___property_cache_uid_': 'no second uid', '_property_cache_data_version_': 'no data version', '___property_cache_data_version_': 'no second data version' }` (`<class 'dict'>`)

Expectation (Cache): `result = { '_property_cache_uid_': 'no uid', '___property_cache_uid_': 'no second uid', '_property_cache_data_version_': 'no data version', '___property_cache_data_version_': 'no second data version' }` (`<class 'dict'>`)

**Success** Keyfilter returnvalue for 5 (`<class 'int'>`) is correct (Content 5 and Type is `<class 'int'>`).

Result (Keyfilter returnvalue for 5 (`<class 'int'>`)): 5 (`<class 'int'>`)

Expectation (Keyfilter returnvalue for 5 (`<class 'int'>`)): `result = 5` (`<class 'int'>`)

## C Test-Coverage

### C.1 caching

The line coverage for `caching` was 100.0%

The branch coverage for `caching` was 100.0%

#### C.1.1 `caching.__init__.py`

The line coverage for `caching.__init__.py` was 100.0%

The branch coverage for `caching.__init__.py` was 100.0%

```

1 #!/usr/bin/env python
2 # -*- coding: utf-8 -*-
3 #
4 """
5 caching (Caching Module)
6 =====
7
8 **Author:**
9
10 * Dirk Alders <sudo-dirk@mount-mockery.de>
11
12 **Description:**
13
14     This Module supports functions and classes for caching e.g. properties of other instances.
15
16 **Submodules:**
17
18 * :class:`caching.property_cache_json`
19 * :class:`caching.property_cache_pickle`
20
21 **Unittest:**
22
23     See also the :download:`unittest <caching/_testresults_/unittest.pdf>` documentation.
24 """

```

## Unittest for caching

```
25 __DEPENDENCIES__ = []
26
27 import hashlib
28 import hmac
29 import json
30 import logging
31 import os
32 import pickle
33 import sys
34
35 try:
36     from config import APP_NAME as ROOT_LOGGER_NAME
37 except ImportError:
38     ROOT_LOGGER_NAME = 'root'
39 logger = logging.getLogger(ROOT_LOGGER_NAME).getChild(__name__)
40
41 __DESCRIPTION__ = """The Module {\\tt %s} is designed to store information in {\\tt json} or {\\tt
42     tt pickle} files to support them much faster then generating them from the original source
43     file .
44 For more Information read the documentation.""" % __name__.replace('-', '\\-')
45 """The Module Description"""
46 __INTERPRETER__ = (2, 3)
47 """The Tested Interpreter-Versions"""
48
49 class property_cache_pickle(object):
50     """
51     Class to cache properties , which take longer on initialising than reading a file in pickle
52     format .
53
54     :param source_instance: The source instance holding the data
55     :type source_instance: instance
56     :param cache_filename: File name, where the properties are stored as cache
57     :type cache_filename: str
58     :param load_all_on_init: Optionally init behaviour control parameter. True will load all
59     available properties from source on init , False not.
60
61     .. note:: source_instance needs to have at least the following methods: uid(), keys(),
62     data_version(), get()
63
64         * uid(): returns the unique id of the source.
65         * keys(): returns a list of all available keys.
66         * data_version(): returns a version number of the current data (it should be
67     increased , if the get method of the source instance returns improved values or the data
68     structure had been changed).
69         * get(key, default): returns the property for a key. If key does not exists ,
70     default will be returned.
71
72     Reasons for updating the complete data set:
73
74     * UID of source_instance has changed (in comparison to the cached value).
75     * data_version is increased
76
77     **Example:**
78
79     .. literalinclude:: caching/_examples_/property_cache_pickle.py
80
81     Will result on the first execution to the following output (with a long execution time):
82
83     .. literalinclude:: caching/_examples_/property_cache_pickle_1.log
84
85     """
```

## Unittest for caching

```
78 With every following execution (slow for getting "two" which is not cached – see
79 implementation):
80
81 .. literalinclude:: caching/_examples_/property_cache_pickle_2.log
82 """
83 LOG_PREFIX = 'PickCache: '
84 DATA_VERSION_TAG = '_property_cache_data_version_'
85 UID_TAG = '_property_cache_uid_'
86
87 def __init__(self, source_instance, cache_filename, load_all_on_init=False,
88 callback_on_data_storage=None):
89     self._source_instance = source_instance
90     self._cache_filename = cache_filename
91     self._load_all_on_init = load_all_on_init
92     self._callback_on_data_storage = callback_on_data_storage
93     self._cached_props = None
94
95 def get(self, key, default=None):
96     """
97     Method to get the cached property. If key does not exists in cache, the property will be
98     loaded from source_instance and stored in cache (file).
99
100     :param key: key for value to get.
101     :param default: value to be returned, if key does not exists.
102     :returns: value for a given key or default value.
103     """
104     if key in self.keys():
105         if self._cached_props is None:
106             self._init_cache()
107         if self._key_filter(key) not in self._cached_props:
108             val = self._source_instance.get(key, None)
109             logger.debug("%s Loading property for '%s' from source instance (%s)", self.
110 LOG_PREFIX, key, repr(val))
111             self._cached_props[self._key_filter(key)] = val
112             self._save_cache()
113         else:
114             logger.debug("%s Providing property for '%s' from cache (%s)", self.LOG_PREFIX,
115 key, repr(self._cached_props.get(self._key_filter(key), default)))
116             return self._cached_props.get(self._key_filter(key), default)
117         else:
118             logger.info("%s Key '%s' is not in cached_keys. Uncached data will be returned.",
119 self.LOG_PREFIX, key)
120             return self._source_instance.get(key, default)
121
122 def keys(self):
123     """
124     Method to get the available keys (from :data:`source_instance`).
125     """
126     return self._source_instance.keys()
127
128 def _data_version(self):
129     if self._cached_props is None:
130         return None
131     else:
132         return self._cached_props.get(self.DATA_VERSION_TAG, None)
```

## Unittest for caching

```
128 def _init_cache(self):
129     if not self._load_cache() or self._source_instance.uid() != self._uid() or self.
    _source_instance.data_version() > self._data_version():
130         if self._uid() is not None and self._source_instance.uid() != self._uid():
131             logger.debug("%s Source uid changed, ignoring previous cache data", self.
LOG_PREFIX)
132             if self._data_version() is not None and self._source_instance.data_version() > self.
    _data_version():
133                 logger.debug("%s Data version increased, ignoring previous cache data", self.
LOG_PREFIX)
134                 self._cached_props = dict()
135                 if self._load_all_on_init:
136                     self._load_source()
137                 self._cached_props[self.UID_TAG] = self._source_instance.uid()
138                 self._cached_props[self.DATA_VERSION_TAG] = self._source_instance.data_version()
139                 self._save_cache()
140
141 def _load_cache(self):
142     if os.path.exists(self._cache_filename):
143         with open(self._cache_filename, 'rb') as fh:
144             self._cached_props = pickle.load(fh)
145             logger.info('%s Loading properties from cache (%s)', self.LOG_PREFIX, self.
    _cache_filename)
146             return True
147     else:
148         logger.debug('%s Cache file does not exists (yet).', self.LOG_PREFIX)
149         return False
150
151 def _key_filter(self, key):
152     if sys.version_info >= (3, 0):
153         tps = [str]
154     else:
155         tps = [str, unicode]
156     if type(key) in tps:
157         if key.endswith(self.DATA_VERSION_TAG) or key.endswith(self.UID_TAG):
158             return '_' + key
159     return key
160
161 def _load_source(self):
162     logger.debug('%s Loading all data from source - %s', self.LOG_PREFIX, repr(self.
    _source_instance.keys()))
163     for key in self._source_instance.keys():
164         val = self._source_instance.get(key)
165         self._cached_props[self._key_filter(key)] = val
166
167 def _save_cache(self):
168     with open(self._cache_filename, 'wb') as fh:
169         pickle.dump(self._cached_props, fh)
170         logger.info('%s cache-file stored (%s)', self.LOG_PREFIX, self._cache_filename)
171     if self._callback_on_data_storage is not None:
172         self._callback_on_data_storage()
173
174 def _uid(self):
175     if self._cached_props is None:
176         return None
177     else:
178         return self._cached_props.get(self.UID_TAG, None)
179
180
181 class property_cache_json(property_cache_pickle):
```

## Unittest for caching

```
182 """
183 Class to cache properties, which take longer on initialising than reading a file in json
184 format. See also parent :py:class:`property_cache_pickle`
185
186 :param source_instance: The source instance holding the data
187 :type source_instance: instance
188 :param cache_filename: File name, where the properties are stored as cache
189 :type cache_filename: str
190 :param load_all_on_init: Optionally init behaviour control parameter. True will load all
191 available properties from source on init, False not.
192
193 .. warning::
194     * This class uses json. You should only use keys of type string!
195     * Unicode types are transferred to strings
196
197 .. note:: source_instance needs to have at least the following methods: uid(), keys(),
198 data_version(), get()
199
200     * uid(): returns the unique id of the source.
201     * keys(): returns a list of all available keys.
202     * data_version(): returns a version number of the current data (it should be
203 increased, if the get method of the source instance returns improved values or the data
204 structure had been changed).
205     * get(key, default): returns the property for a key. If key does not exists,
206 default will be returned.
207
208 Reasons for updating the complete data set:
209
210 * UID of source_instance has changed (in comparison to the cached value).
211 * data_version is increased
212
213 Example:
214
215 .. literalinclude:: caching/_examples_/property_cache_json.py
216
217 Will result on the first execution to the following output (with a long execution time):
218
219 .. literalinclude:: caching/_examples_/property_cache_json_1.log
220
221 With every following execution (slow for getting "two" which is not cached – see
222 implementation):
223
224 .. literalinclude:: caching/_examples_/property_cache_json_2.log
225 """
226 LOG_PREFIX = 'JsonCache: '
227
228 def _load_cache(self):
229     if os.path.exists(self._cache_filename):
230         with open(self._cache_filename, 'r') as fh:
231             self._cached_props = json.load(fh)
232             logger.info('%s Loading properties from cache (%s)', self.LOG_PREFIX, self._cache_filename)
233             return True
234     else:
235         logger.debug('%s Cache file does not exists (yet).', self.LOG_PREFIX)
236         return False
237
238 def _save_cache(self):
239     with open(self._cache_filename, 'w') as fh:
240         json.dump(self._cached_props, fh, sort_keys=True, indent=4)
241         logger.info('%s cache-file stored (%s)', self.LOG_PREFIX, self._cache_filename)
242     if self._callback_on_data_storage is not None:
243         self._callback_on_data_storage()
```