

Unittest for caching

December 27, 2019

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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	e10fa482d1bae991647206a4d38be6d4

Dependencies	
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1.2 Unittest Information

Unittest Information	
Version	e113c3759194c81e7df9e29b1debe00d
Testruns with	python 2.7.17 (final), python 3.6.9 (final)

1.3 Test System Information

System Information	
Architecture	64bit
Distribution	LinuxMint 19.3 tricia
Hostname	ahorn
Kernel	5.0.0-37-generic (#40 18.04.1-Ubuntu SMP Thu Nov 14 12:06:39 UTC 2019)
Machine	x86_64
Path	/user_data/data/dirk/prj/modules/caching/unittest
System	Linux
Username	dirk

2 Statistic

2.1 Test-Statistic for testrun with python 2.7.17 (final)

Number of tests	20
Number of successfull tests	16
Number of possibly failed tests	4
Number of failed tests	0

Executionlevel	Full Test (all defined tests)
Time consumption	0.126s

2.2 Test-Statistic for testrun with python 3.6.9 (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	0.093s

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 2.7.17 (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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/...init...py (31)
Start-Time:	2019-12-27 21:48:46,662
Finished-Time:	2019-12-27 21:48:46,669
Time-Consumption	0.007s

Testsummary:

Info	Initialising property_cache_json (load_all_on_init=True).
Info	Collecting data from cache instance.
Warning	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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/...init...py (32)
Start-Time:	2019-12-27 21:48:46,669
Finished-Time:	2019-12-27 21:48:46,673
Time-Consumption	0.003s

Testsummary:

Info	Initialising property_cache_json (load_all_on_init=True).
Info	Collecting data from cache instance.
Warning	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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/...init...py (37)
Start-Time:	2019-12-27 21:48:46,708
Finished-Time:	2019-12-27 21:48:46,710
Time-Consumption	0.002s

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 <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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (29)
Start-Time:	2019-12-27 21:48:46,643
Finished-Time:	2019-12-27 21:48:46,652
Time-Consumption	0.008s

Testsummary:

Info	Initialising property_cache_json (load_all_on_init=True).
Info	Extracting storage object from property_cache_json for comparison.
Warning	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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (35)
Start-Time:	2019-12-27 21:48:46,684
Finished-Time:	2019-12-27 21:48:46,692
Time-Consumption	0.007s

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'>).

3.1.6 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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (36)
Start-Time:	2019-12-27 21:48:46,692
Finished-Time:	2019-12-27 21:48:46,707

Time-Consumption 0.015s

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 2.7.17 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (33)
 Start-Time: 2019-12-27 21:48:46,673
 Finished-Time: 2019-12-27 21:48:46,674
 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 2.7.17 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (34)
 Start-Time: 2019-12-27 21:48:46,675
 Finished-Time: 2019-12-27 21:48:46,684
 Time-Consumption 0.009s

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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (38)
Start-Time:	2019-12-27 21:48:46,710
Finished-Time:	2019-12-27 21:48:46,716
Time-Consumption	0.006s

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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (30)
Start-Time:	2019-12-27 21:48:46,652
Finished-Time:	2019-12-27 21:48:46,662
Time-Consumption	0.010s

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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (44)
Start-Time:	2019-12-27 21:48:46,730
Finished-Time:	2019-12-27 21:48:46,733
Time-Consumption	0.004s

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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (45)
Start-Time:	2019-12-27 21:48:46,734
Finished-Time:	2019-12-27 21:48:46,737
Time-Consumption	0.004s

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'>).

3.1.13 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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (50)
Start-Time:	2019-12-27 21:48:46,770
Finished-Time:	2019-12-27 21:48:46,772
Time-Consumption	0.002s

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 <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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (42)
Start-Time:	2019-12-27 21:48:46,717
Finished-Time:	2019-12-27 21:48:46,723

Time-Consumption 0.006s

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 2.7.17 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/...init...py (48)
 Start-Time: 2019-12-27 21:48:46,753
 Finished-Time: 2019-12-27 21:48:46,759
 Time-Consumption 0.005s

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 2.7.17 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/...init...py (49)
 Start-Time: 2019-12-27 21:48:46,759
 Finished-Time: 2019-12-27 21:48:46,770
 Time-Consumption 0.011s

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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (46)
Start-Time:	2019-12-27 21:48:46,738
Finished-Time:	2019-12-27 21:48:46,741
Time-Consumption	0.003s

Testsummary:

Info	Initialising property_cache_pickle (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'>).

3.1.18 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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (47)
Start-Time:	2019-12-27 21:48:46,741
Finished-Time:	2019-12-27 21:48:46,752
Time-Consumption	0.012s

Testsummary:

Info	Initialising property_cache_pickle (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'>).

3.1.19 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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (51)
Start-Time:	2019-12-27 21:48:46,772
Finished-Time:	2019-12-27 21:48:46,776
Time-Consumption	0.003s

Testsummary:

Info	Initialising property_cache_pickle (load_all_on_init=True).
Info	Extracting storage object from property_cache_pickle for comparison.
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'>).
Success	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 2.7.17 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (43)
Start-Time:	2019-12-27 21:48:46,724
Finished-Time:	2019-12-27 21:48:46,729
Time-Consumption	0.006s

Testsummary:

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

3.2 Summary for testrun with python 3.6.9 (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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (31)
Start-Time:	2019-12-27 21:48:47,935
Finished-Time:	2019-12-27 21:48:47,942
Time-Consumption	0.007s

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'>).

3.2.2 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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (32)
Start-Time:	2019-12-27 21:48:47,942
Finished-Time:	2019-12-27 21:48:47,947

Time-Consumption 0.005s

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 3.6.9 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (37)
 Start-Time: 2019-12-27 21:48:47,979
 Finished-Time: 2019-12-27 21:48:47,980
 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 3.6.9 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (29)
 Start-Time: 2019-12-27 21:48:47,920
 Finished-Time: 2019-12-27 21:48:47,924
 Time-Consumption 0.004s

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (35)
Start-Time:	2019-12-27 21:48:47,964
Finished-Time:	2019-12-27 21:48:47,970
Time-Consumption	0.006s

Testsummary:

Info	Initialising property_cache.json (load_all_on_init=True).
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'>).

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (36)
Start-Time:	2019-12-27 21:48:47,970
Finished-Time:	2019-12-27 21:48:47,979
Time-Consumption	0.009s

Testsummary:

Info	Initialising property_cache.json (load_all_on_init=True).
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'>).

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (33)
Start-Time:	2019-12-27 21:48:47,948
Finished-Time:	2019-12-27 21:48:47,954
Time-Consumption	0.006s

Testsummary:

Info	Initialising property_cache.json (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'>).

3.2.8 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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (34)
Start-Time:	2019-12-27 21:48:47,954
Finished-Time:	2019-12-27 21:48:47,963
Time-Consumption	0.009s

Testsummary:

Info	Initialising property_cache_json (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'>).

3.2.9 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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (38)
Start-Time:	2019-12-27 21:48:47,980
Finished-Time:	2019-12-27 21:48:47,983
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 {'__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'>).
Success	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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (30)
Start-Time:	2019-12-27 21:48:47,924
Finished-Time:	2019-12-27 21:48:47,934
Time-Consumption	0.010s

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 3.6.9 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (44)
 Start-Time: 2019-12-27 21:48:47,989
 Finished-Time: 2019-12-27 21:48:47,991
 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 3.6.9 (final)
 Caller: /user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (45)
 Start-Time: 2019-12-27 21:48:47,991
 Finished-Time: 2019-12-27 21:48:47,992
 Time-Consumption 0.001s

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (50)
Start-Time:	2019-12-27 21:48:48,014
Finished-Time:	2019-12-27 21:48:48,016
Time-Consumption	0.002s

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (42)
Start-Time:	2019-12-27 21:48:47,983
Finished-Time:	2019-12-27 21:48:47,985
Time-Consumption	0.002s

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/___init___py (48)
Start-Time:	2019-12-27 21:48:48,002
Finished-Time:	2019-12-27 21:48:48,007
Time-Consumption	0.004s

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (49)
Start-Time:	2019-12-27 21:48:48,007
Finished-Time:	2019-12-27 21:48:48,013
Time-Consumption	0.006s

Testsummary:

Info	Initialising property_cache_pickle (load_all_on_init=True).
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'>).

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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (46)
Start-Time:	2019-12-27 21:48:47,992
Finished-Time:	2019-12-27 21:48:47,995
Time-Consumption	0.003s

Testsummary:

Info	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'>).

3.2.18 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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/__init__.py (47)
Start-Time:	2019-12-27 21:48:47,995
Finished-Time:	2019-12-27 21:48:48,002
Time-Consumption	0.007s

Testsummary:

Info	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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (51)
Start-Time:	2019-12-27 21:48:48,016
Finished-Time:	2019-12-27 21:48:48,019
Time-Consumption	0.003s

Testsummary:

Info	Initialising property_cache_pickle (load_all_on_init=True).
Info	Extracting storage object from property_cache_pickle for comparison.
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'>).
Success	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 3.6.9 (final)
Caller:	/user_data/data/dirk/prj/modules/caching/unittest/src/tests/_init_.py (43)
Start-Time:	2019-12-27 21:48:47,986
Finished-Time:	2019-12-27 21:48:47,988
Time-Consumption	0.003s

Testsummary:

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

A Trace for testrun with python 2.7.17 (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/modules/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/modules/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/modules/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/modules/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/modules/caching/unittest/output_data/no_load_on_init.json)
```

Info Partially initialising cache object by requesting some information.

Unittest for caching

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

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

```
↪ (/user_data/data/dirk/prj/modules/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/modules/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/modules/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/modules/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/modules/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/modules/caching/unittest/output_data/c ↵
 ↵ ache_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/modules/caching/unittest/o ↵
 ↵ utput_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.

Unittest for caching

```
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.
```

```
Initialising cached class with /user_data/data/dirk/prj/modules/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 - ['dict', 'unicode', 'str', 'integer', 'float',  
↳ 'list']
```

```
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/c_]  
↳ ache_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/modules/caching/unittest/o_
↪ utput_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/modules/caching/unittest/output_data/output_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/modules/caching/unittest/output_data/output_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/modules/caching/unittest/output_data/output_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/modules/caching/unittest/output_data/output_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**.

Info Initialising property_cache.json (load_all_on_init=True).

Unittest for caching

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

Initialising cached class with /user_data/data/dirk/prj/modules/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/modules/caching/unittest/output_data/d_
↪ ata_version_test_no_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/modules/caching/unittest/o_
↪ utput_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/modules/caching/unittest/output_data/d_
↪ ata_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/modules/caching/unittest/output_data/d_
↪ ata_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/modules/caching/unittest/output_data/d_
↪ ata_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/modules/caching/unittest/output_data/d_
↪ ata_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/modules/caching/unittest/output_data/d_
↪ ata_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/modules/caching/unittest/output_data/d_
↪ ata_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/modules/caching/unittest/output_data/d_
↪ ata_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/modules/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/modules/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/modules/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/modules/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**.

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/modules/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/modules/caching/unittest/output_data/uid_test_no_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ utput_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_test_no_load_on_init.json)
JsonCache: Loading property for 'dict' from source instance ({'1': '1', '3': 'three', '2': 2, '4': '4'})
↪ '4': '4'})
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_test_no_load_on_init.json)
JsonCache: Loading property for 'str' from source instance ('__string__')
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_test_no_load_on_init.json)
JsonCache: Loading property for 'integer' from source instance (34)
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_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'>)
↪ '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'>)
↪ '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/modules/caching/unittest/output_data/save_callback_load_on_init.json)
↪ ave_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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/caching/unittest/output_data/c ↵
 ↵ ache_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/modules/caching/unittest/o ↵
 ↵ utput_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/modules/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/modules/caching/unittest/output_data/c]
 ↪ ache_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/modules/caching/unittest/o]
 ↪ utput_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/modules/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/modules/caching/unittest/output_data/d ↵
 ↵ ata_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/modules/caching/unittest/o ↵
 ↵ utput_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/modules/caching/unittest/output_data/d ↵
 ↵ ata_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).

Unittest for caching

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

Initialising cached class with /user_data/data/dirk/prj/modules/caching/unittest/output_data/
↪ data_version_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/o
↪ utput_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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 3.6.9 (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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/caching/unittest/output_data/c ↵
 ↵ ache_data_test_load_on_init.json)

Info Collecting data from cache instance.

JsonCache: Loading properties from cache (/user_data/data/dirk/prj/modules/caching/unittest/o ↵
 ↵ utput_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/modules/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/modules/caching/unittest/output_data/c ↵
 ↵ ache_data_test_no_load_on_init.json)

Info Collecting data from cache instance.

JsonCache: Loading properties from cache (/user_data/data/dirk/prj/modules/caching/unittest/o ↵
 ↵ utput_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.

Initialising cached class with /user_data/data/dirk/prj/modules/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/modules/caching/unittest/output_data/d ↵
 ↵ ata_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/modules/caching/unittest/o ↵
 ↵ utput_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/modules/caching/unittest/output_data/d ↵
 ↵ ata_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).

Unittest for caching

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

Initialising cached class with /user_data/data/dirk/prj/modules/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 - ['str', 'unicode', 'integer', 'float', 'list',
↪ 'dict']

JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/o
↪ utput_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/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/modules/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/modules/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/modules/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**.

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/modules/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/modules/caching/unittest/output_data/uid_test_no_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ utput_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_test_no_load_on_init.json)
JsonCache: Loading property for 'str' from source instance ('__string__')
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_test_no_load_on_init.json)
JsonCache: Loading property for 'unicode' from source instance ('__unicode__')
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_test_no_load_on_init.json)
JsonCache: Loading property for 'integer' from source instance (34)
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_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/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_test_no_load_on_init.json)
JsonCache: Loading property for 'dict' from source instance ({'1': '1', '2': 2, '3': 'three', '4': '4'})
↪ '4': '4'})
JsonCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_load_on_init.json)
↪ id_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/modules/caching/unittest/output_data/save_callback_load_on_init.json)
↪ ave_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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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', 'unicode': 'unicode', 'integer': 17}

Deleting overhead keys: _property_cache_data_version_, _property_cache_uid_

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

Result (Cache object): { 'str': 'string', 'unicode': 'unicode', 'integer': 17 } (<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/modules/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/modules/caching/unittest/output_data/c]
 ↪ ache_data_test_load_on_init.pkl)

Info Collecting data from cache instance.

PickCache: Loading properties from cache (/user_data/data/dirk/prj/modules/caching/unittest/o]
 ↪ utput_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/modules/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/modules/caching/unittest/output_data/c]
 ↪ ache_data_test_no_load_on_init.pkl)

Info Collecting data from cache instance.

PickCache: Loading properties from cache (/user_data/data/dirk/prj/modules/caching/unittest/o]
 ↪ utput_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.

Initialising cached class with /user_data/data/dirk/prj/modules/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/modules/caching/unittest/output_data/d_]
 ↳ ata_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/modules/caching/unittest/o_]
 ↳ utput_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/modules/caching/unittest/output_data/d_]
 ↳ ata_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).

Unittest for caching

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

Initialising cached class with /user_data/data/dirk/prj/modules/caching/unittest/output_data/
↪ data_version_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/o
↪ utput_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/caching/unittest/output_data/d
↪ ata_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/modules/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/modules/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/modules/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/modules/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**.

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/modules/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 - ['str', 'unicode', 'integer', 'float', 'list', 'dict']

PickCache: cache-file stored (/user_data/data/dirk/prj/modules/caching/unittest/output_data/uid_test_no_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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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/modules/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'})
PickCache: cache-file stored (/user_data/data/dirk/prj/modules/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/modules/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/modules/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/modules/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/modules/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 """
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 logger_name = 'CACHING'
36 logger = logging.getLogger(logger_name)
37
38 __DESCRIPTION__ = """The Module {\\tt %s} is designed to store information in {\\tt json} or {\\tt pickle} files to support them much faster then generating them from the original source file.
39 For more Information read the documentation.""" % __name__.replace('-', '\\-')
40 """The Module Description"""
41 __INTERPRETER__ = (2, 3)
42 """The Tested Interpreter-Versions"""
43
44

```

Unittest for caching

```
45 class property_cache_pickle(object):
46     """
47     Class to cache properties, which take longer on initialising than reading a file in pickle
48     format.
49
50     :param source_instance: The source instance holding the data
51     :type source_instance: instance
52     :param cache_filename: File name, where the properties are stored as cache
53     :type cache_filename: str
54     :param load_all_on_init: Optionally init behaviour control parameter. True will load all
55     available properties from source on init, False not.
56     :raises: ?
57
58     .. note:: This module uses logging. So logging should be initialised at least by executing
59     logging.basicConfig(...)
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     With every following execution (slow for getting "two" which is not cached – see
86     implementation):
87
88     .. literalinclude:: ../../caching/_examples_/property_cache_pickle_2.log
89     """
90     LOG_PREFIX = 'PickCache: '
91     DATA_VERSION_TAG = '_property_cache_data_version_'
92     UID_TAG = '_property_cache_uid_'
93
94     def __init__(self, source_instance, cache_filename, load_all_on_init=False,
95                 callback_on_data_storage=None):
96         self._source_instance = source_instance
97         self._cache_filename = cache_filename
98         self._load_all_on_init = load_all_on_init
99         self._callback_on_data_storage = callback_on_data_storage
100        self._cached_props = None
101
102    def get(self, key, default=None):
103        """
104        Method to get the cached property. If key does not exists in cache, the property will be
105        loaded from source_instance and stored in cache (file).
```

Unittest for caching

```
96
97     :param key: key for value to get.
98     :param default: value to be returned, if key does not exists.
99     :returns: value for a given key or default value.
100     """
101     if key in self.keys():
102         if self._cached_props is None:
103             self._init_cache()
104         if self._key_filter(key) not in self._cached_props:
105             val = self._source_instance.get(key, None)
106             logger.debug("%s Loading property for '%s' from source instance (%s)", self.
LOG_PREFIX, key, repr(val))
107             self._cached_props[self._key_filter(key)] = val
108             self._save_cache()
109         else:
110             logger.debug("%s Providing property for '%s' from cache (%s)", self.LOG_PREFIX,
key, repr(self._cached_props.get(self._key_filter(key), default)))
111             return self._cached_props.get(self._key_filter(key), default)
112         else:
113             logger.info("%s Key '%s' is not in cached_keys. Uncached data will be returned.",
self.LOG_PREFIX, key)
114             return self._source_instance.get(key, default)
115
116     def keys(self):
117         return self._source_instance.keys()
118
119     def _data_version(self):
120         if self._cached_props is None:
121             return None
122         else:
123             return self._cached_props.get(self.DATA_VERSION_TAG, None)
124
125     def _init_cache(self):
126         if not self._load_cache() or self._source_instance.uid() != self._uid() or self.
_source_instance.data_version() > self._data_version():
127             if self._uid() is not None and self._source_instance.uid() != self._uid():
128                 logger.debug("%s Source uid changed, ignoring previous cache data", self.
LOG_PREFIX)
129             if self._data_version() is not None and self._source_instance.data_version() > self.
_data_version():
130                 logger.debug("%s Data version increased, ignoring previous cache data", self.
LOG_PREFIX)
131             self._cached_props = dict()
132             if self._load_all_on_init:
133                 self._load_source()
134             self._cached_props[self.UID_TAG] = self._source_instance.uid()
135             self._cached_props[self.DATA_VERSION_TAG] = self._source_instance.data_version()
136             self._save_cache()
137
138     def _load_cache(self):
139         if os.path.exists(self._cache_filename):
140             with open(self._cache_filename, 'rb') as fh:
141                 self._cached_props = pickle.load(fh)
142             logger.info('%s Loading properties from cache (%s)', self.LOG_PREFIX, self.
_cache_filename)
143             return True
144         else:
145             logger.debug('%s Cache file does not exists (yet).', self.LOG_PREFIX)
146             return False
147
148     def _key_filter(self, self, key):
149         if sys.version_info >= (3, 0):
150             tps = [str]
```

Unittest for caching

```
151     else:
152         tps = [str, unicode]
153     if type(key) in tps:
154         if key.endswith(self.DATA_VERSION_TAG) or key.endswith(self.UID_TAG):
155             return '_' + key
156     return key
157
158 def _load_source(self):
159     logger.debug('%s Loading all data from source - %s', self.LOG_PREFIX, repr(self._source_instance.keys()))
160     for key in self._source_instance.keys():
161         val = self._source_instance.get(key)
162         self._cached_props[self._key_filter(key)] = val
163
164 def _save_cache(self):
165     with open(self._cache_filename, 'wb') as fh:
166         pickle.dump(self._cached_props, fh)
167         logger.info('%s cache-file stored (%s)', self.LOG_PREFIX, self._cache_filename)
168     if self._callback_on_data_storage is not None:
169         self._callback_on_data_storage()
170
171 def _uid(self):
172     if self._cached_props is None:
173         return None
174     else:
175         return self._cached_props.get(self.UID_TAG, None)
176
177
178 class property_cache_json(property_cache_pickle):
179     """
180     Class to cache properties, which take longer on initialising than reading a file in json
181     format. See also parent :py:class:`property_cache_pickle`
182
183     :param source_instance: The source instance holding the data
184     :type source_instance: instance
185     :param cache_filename: File name, where the properties are stored as cache
186     :type cache_filename: str
187     :param load_all_on_init: Optionally init behaviour control parameter. True will load all
188     available properties from source on init, False not.
189     :raises: ?
190
191     .. warning::
192         * This class uses json. You should only use keys of type string!
193         * Unicode types are transferred to strings
194
195     .. note:: This module uses logging. So logging should be initialised at least by executing
196     logging.basicConfig(...)
197
198     .. note:: source_instance needs to have at least the following methods: uid(), keys(),
199     data_version(), get()
200
201         * uid(): returns the unique id of the source.
202         * keys(): returns a list of all available keys.
203         * data_version(): returns a version number of the current data (it should be
204     increased, if the get method of the source instance returns improved values or the data
205     structure had been changed).
206         * get(key, default): returns the property for a key. If key does not exists,
207     default will be returned.
208
209     Reasons for updating the complete data set:
```

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```
204 * UID of source_instance has changed (in comparison to the cached value).
205 * data_version is increased
206
207 **Example:**
208
209 .. literalinclude:: ../../caching/_examples_/property_cache_json.py
210
211 Will result on the first execution to the following output (with a long execution time):
212
213 .. literalinclude:: ../../caching/_examples_/property_cache_json_1.log
214
215 With every following execution (slow for getting "two" which is not cached – see
216 implementation):
217
218 .. literalinclude:: ../../caching/_examples_/property_cache_json_2.log
219 """
220 LOG_PREFIX = 'JsonCache: '
221
222 def _load_cache(self):
223     if os.path.exists(self._cache_filename):
224         with open(self._cache_filename, 'r') as fh:
225             self._cached_props = json.load(fh)
226             logger.info('%s Loading properties from cache (%s)', self.LOG_PREFIX, self._
227                 _cache_filename)
228             return True
229     else:
230         logger.debug('%s Cache file does not exists (yet).', self.LOG_PREFIX)
231         return False
232
233 def _save_cache(self):
234     with open(self._cache_filename, 'w') as fh:
235         json.dump(self._cached_props, fh, sort_keys=True, indent=4)
236         logger.info('%s cache-file stored (%s)', self.LOG_PREFIX, self._cache_filename)
237     if self._callback_on_data_storage is not None:
238         self._callback_on_data_storage()
```