

RobotframeworkExtensions

v. 0.5.0

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Contents

1	Introduction	1
2	Collection.py	2
2.1	Class: <code>Collection</code>	2
2.1.1	Method: <code>pretty_print</code>	2
2.1.2	Method: <code>normalize_path</code>	3
3	Appendix	6
4	History	7

Chapter 1

Introduction

The *Robotframework Extensions Collection* extends the functionality of the Robotframework by some keywords providing features, that are implemented in the *Python Extensions Collection*.

The goal behind these extensions is to have certain functionality available in both: pure Python applications and Robotframework.

The *Robotframework Extensions Collection* requires an installed *Python Extensions Collection*, that can be found in this repository:

[python-extensions-collection](#)

Chapter 2

Collection.py

The Collection module is the interface between the Python Extensions Collection and the Robotframework. This library containing the keyword definitions, can be imported in the following way:

```
Library      RobotframeworkExtensions.Collection      WITH NAME      rf.extensions
```

2.1 Class: Collection

```
RobotframeworkExtensions.Collection
```

Module main class

2.1.1 Method: pretty_print

The `pretty_print` keyword logs the content of parameters of any Python data type (input: `oData`). Simple data types are logged directly. Composite data types are resolved before logging.

The output contains for every parameter: the value, the type and counter values (in case of composite data types).

The trace level for output is `INFO`.

The output is also returned as list of strings.

Arguments:

- `oData`
/ *Condition*: required / *Type*: any Python type /
Data to be pretty printed

Returns:

- `listOutLines` (*list*)
/ *Type*: list /
List of strings containing the resolved data structure of `oData` (same content as printed to console).

Example:

Variable of Python type `list`:

```
set_test_variable    @{aItems}    String
...                  ${25}
...                  ${True}
...                  ${None}
```

Call of `pretty_print` keyword:

```
rf.extensions.pretty_print    ${aItems}
```

Output:

```
INFO - [LIST] (4/1) > [STR] : 'String'
INFO - [LIST] (4/2) > [INT] : 25
INFO - [LIST] (4/3) > [BOOL] : True
INFO - [LIST] (4/4) > [NONE] : None
```

2.1.2 Method: `normalize_path`

The `normalize_path` keyword normalizes local paths, paths to local network resources and internet addresses

Arguments:

- `sPath`
/ Condition: required / Type: str /
 The path to be normalized
- `bWin`
/ Condition: optional / Type: bool / Default: False /
 If `True` then the returned path contains masked backslashes as separator, otherwise slashes
- `sReferencePathAbs`
/ Condition: optional / Type: str / Default: None /
 In case of `sPath` is relative and `sReferencePathAbs` (expected to be absolute) is given, then the returned absolute path is a join of both input paths
- `bConsiderBlanks`
/ Condition: optional / Type: bool / Default: False /
 If `True` then the returned path is encapsulated in quotes - in case of the path contains blanks
- `bExpandEnvVars`
/ Condition: optional / Type: bool / Default: True /
 If `True` then in the returned path environment variables are resolved, otherwise not.
- `bMask`
/ Condition: optional / Type: bool / Default: True (requires bWin=True) /
 If `bWin` is `True` and `bMask` is `True` then the returned path contains masked backslashes as separator.
 If `bWin` is `True` and `bMask` is `False` then the returned path contains single backslashes only - this might be required for applications, that are not able to handle masked backslashes.
 In case of `bWin` is `False` `bMask` has no effect.

Returns:

- sPath
/ Type: str /
The normalized path (is None in case of sPath is None)

Example 1:

Variable containing a path with:

- different types of path separators
- redundant path separators (but backslashes have to be masked in the definition of the variable, this is *not* an unwanted redundancy)
- up-level references

```
set_test_variable    ${sPath}
↪ C:\\subfolder1\\../subfolder2\\\\../subfolder3\\
```

Printing the content of sPath shows how the path looks like when the masking of the backslashes is resolved:

```
C:\subfolder1\\../subfolder2\\../subfolder3\
```

Usage of the normalize_path keyword:

```
${sPath}    rf.extensions.normalize_path    ${sPath}
```

Result (content of sPath):

```
C:/subfolder3
```

In case we need the Windows version (with masked backslashes instead of slashes):

```
${sPath}    rf.extensions.normalize_path    ${sPath}    bWin=${True}
```

Result (content of sPath):

```
C:\\subfolder3
```

The masking of backslashes can be deactivated:

```
${sPath}    rf.extensions.normalize_path    ${sPath}    bWin=${True}
↪ bMask=${False}
```

Result (content of sPath):

```
C:\subfolder3
```

Example 2:

Variable containing a path of a local network resource:

```
set_test_variable    ${sPath}    \\\anyserver.com\\part1//part2\\\part3/part4
```

Result of normalization:

```
//anyserver.com/part1/part2/part3/part4
```

Example 3:

Variable containing an internet address:

```
set_test_variable    ${sPath}  
↪ http:\\\\anyserver.com\\part1//part2\\\part3/part4
```

Result of normalization:

```
http://anyserver.com/part1/part2/part3/part4
```

Chapter 3

Appendix

About this package:

Table 3.1: Package setup

Setup parameter	Value
Name	RobotframeworkExtensions
Version	0.5.0
Date	31.05.2022
Description	Additional Robot Framework keywords
Package URL	robotframework-extensions-collection
Author	Holger Queckenstedt
Email	Holger.Queckenstedt@de.bosch.com
Language	Programming Language :: Python :: 3
License	License :: OSI Approved :: Apache Software License
OS	Operating System :: OS Independent
Python required	>=3.0
Development status	Development Status :: 4 - Beta
Intended audience	Intended Audience :: Developers
Topic	Topic :: Software Development

Chapter 4

History

0.1.0	01/2022
<i>Initial version</i>	
0.2.0	03/2022
<i>Setup maintenance</i>	
0.3.0	05/2022
<i>Documentation tool chain switched to GenPackageDoc</i>	
0.4.0	24.05.2022
<i>Documentation rebuild with GenPackageDoc v. 0.13.0; code maintenance</i>	
0.5.0	31.05.2022
<i>Adapted to GenPackageDoc v. 0.15.0</i>	

RobotframeworkExtensions.pdf

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