
xhale Documentation

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Contents:

1	Introduction	3
1.1	xhale package	3
2	Licensing	5
3	Indices and tables	7
	Python Module Index	9
	Index	11

Converts sphinx and breathe inventory files to doxygen tag files.

CHAPTER 1

Introduction

`xhale` transforms an inventory file given by `sphinx` into a doxygen tag file. This package is mainly used for `xeus-cling` in order to be able to get the documentation of a C++ package in a jupyter notebook.

To create your tag file, you just have to use the script **xhale** and give the following arguments

- the package name which will be the name of the tag file
- the url where to find the inventory file

Here is an example

```
xhale -p xtensor --url https://xtensor.readthedocs.io/en/latest/
```

1.1 xhale package

`xhale.xhale.extract_tag(inventory, url)`
extract data from sphinx inventory.

The extracted datas come from a C++ project documented using Breathe. The structure of the inventory is a dictionary with the following keys

- `cpp:class` (class names)
- `cpp:function` (functions or class methods)
- `cpp:type` (type names)

each value of this dictionary is again a dictionary with

- `key` : the name of the element
- `value` : a tuple where the third index is the url to the corresponding documentation

Parameters

- **inventory** (*dict*) – sphinx inventory

- **url** (*url of the documentation*) –

Returns

- *dictionary with keys class, class_methods, func, type*
- *but now the class methods are with their class.*

`xhale.xhale.get_sphinx_inventory(url)`

get the sphinx inventory from a url.

Parameters **url** (*url of the package where find objects.inv file*) –

Returns the inventory

Return type dict

`xhale.xhale.write_tagfile(tag_elem, package, url)`

write the doxygen tagfile (package.tag).

Parameters

- **tag_elem** (*dictionary given by extract_tag*) –
- **package** (*name of the package*) –
- **url** (*url of the documentation*) –

CHAPTER 2

Licensing

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CHAPTER 3

Indices and tables

- `genindex`
- `modindex`
- `search`

X

`xhale.xhale`, 3

E

`extract_tag()` (*in module `xhale.xhale`*), 3

G

`get_sphinx_inventory()` (*in module `xhale.xhale`*),
4

W

`write_tagfile()` (*in module `xhale.xhale`*), 4

X

`xhale.xhale` (*module*), 3