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# tree Documentation

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## Welcome to tree's documentation!

This is the Sphinx documentation for the Python product tree

- What's new in tree?
- Installation of python package
- Introduction to the Tree
- Tree environment configuration
- Setting up the Tree in your local enviroment



# CHAPTER 1

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## Reference

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### 1.1 tree Reference

#### 1.1.1 Tree

```
class tree.tree.Tree(*args, **kwargs)
Bases: object
```

Initialize the sdss tree object

This class provides Python programmatic access to the SDSS tree environment structure

##### Parameters

- **key** (*str/list*) – A section or list of sections of the tree to add into the local environment
- **uproot\_with** (*str*) – A new TREE\_DIR path used to override an existing TREE\_DIR environment variable
- **config** (*str*) – Name of manual config file to load. Default is sdsswork.
- **update** (*bool*) – If True, overwrites existing tree environment variables in your local environment. Default is False.
- **exclude** (*list*) – A list of environment variables to exclude from forced updates

##### Variables

- **treedir** (*str*) – The directory of the tree
- **environ** (*dict*) – The fully loaded SDSS config file held internally

**add\_limbs** (*key=None*)

Add a new section from the tree into the existing os environment

**Parameters** **key** (*str*) – The section name to grab from the environment

**add\_paths\_to\_os** (*key=None, update=None*)

Add the paths in tree environ into the os environ

This code goes through the tree environ and checks for existence in the os environ, then adds them

**Parameters**

- **key** (*str*) – The section name to check against / add
- **update** (*bool*) – If True, overwrites existing tree environment variables in your local environment. Default is False.

**branch\_out** (*limb=None*)

Set the individual section branches

This adds the various sections of the config file into the tree environment for access later. Optically can specify a specific branch. This does not yet load them into the os environment.

**Parameters limb** (*str/list*) – The name of the section of the config to add into the environ or a list of strings

**check\_paths** (*paths, update=None*)

Check if the path is in the os environ, and if not add it

**Paramters:**

**paths (OrderedDict):** An ordered dict containing all of the paths from the a given section, as key:val = name:path

**update (bool):** If True, overwrites existing tree environment variables in your local environment. Default is False.

**get\_paths** (*key*)

Retrieve a set of environment paths from the config

**Parameters key** (*str*) – The section name to grab from the environment

**Returns self.environ[newkey] (OrderedDict)** – An ordered dict containing all of the paths from the specified section, as key:val = name:path

**list\_keys()**

List the available keys you can load

**load\_config** (*config=None*)

loads a config file

**Parameters config** (*str*) – Optional name of manual config file to load

**replant\_tree** (*config=None, exclude=None*)

Replant the tree with a different config setup

**Parameters**

- **config** (*str*) – The config name to reload
- **exclude** (*list*) – A list of environment variables to exclude from forced updates

**set\_roots** (*uproot\_with=None*)

Set the roots of the tree in the os environment

**Parameters uproot\_with** (*str*) – A new TREE\_DIR path used to override an existing TREE\_DIR environment variable

## CHAPTER 2

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### Indices and tables

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## Python Module Index

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## Index

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