
pyorg Documentation

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pyorg is a Python library for working with [Org mode](#) files and interacting with Org mode through Emacs itself. This project, and especially the documentation, are a work in progress.

1.1 Emacs dependencies

pyorg requires the `ox-json` package be installed in Emacs in order to be able to extract syntax trees from files.

1.2 Installing the package

Just clone the repository and run the setup script:

```
git clone https://github.com/jlumpe/pyorg
cd pyorg
python setup.py install
```


2.1 Getting the data from Emacs to Python

Create the following example file in Emacs:

```
#+title: Example file

* Header 1
Section 1

** Header 2
Section 2

*** Header 3
Section 3

**** Header 4
Section 4

* Markup
A paragraph with *bold*, /italic/, _underline_, +strike+, =verbatim=, and ~code~
objects.

* TODO [#A] A headline with a TODO and tags                                     :tag1:tag2:
DEADLINE: <2019-06-29 Sat>
```

Use the `ox-json-export-to-json` command to export it as `example.json`. Now, read the JSON file with `pyorg`:

```
import json
from pyorg.io import org_doc_from_json
```

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```
with open('example.json') as f:
    data = json.load(f)

doc = org_doc_from_json(data)
```

2.2 Explore the AST structure

`doc` is an *OrgDocument* which contains all data read from the file. Its `root` attribute the root node of the AST:

```
>>> doc.root
OrgDataNode(type='org-data')
```

Its has the type `org-data`, which is always the root node of the buffer. Its contents are a section node and some more headline nodes:

```
>>> doc.root.contents
[OrgNode(type='section'),
 OrgOutlineNode(type='headline'),
 OrgOutlineNode(type='headline'),
 OrgOutlineNode(type='headline')]
```

We can print a simple representation of the outline tree with the *dump_outline()* method:

```
>>> doc.root.dump_outline()
Root
  0. Header 1
    0. Header 2
      0. Header 3
        0. Header 4
  1. Markup
  2. A headline with a TODO and tags
```

Get the 2nd headline (3rd item in root node's contents) and print the full AST subtree, along with each node's properties:

```
>>> h12 = doc.root[2]
>>> h12.dump(properties=True)
headline
  :archivedp          = False
  :commentedp         = False
  :footnote-section-p = False
  :level              = 1
  :post-affiliated    = 120
  :post-blank         = 2
  :pre-blank          = 0
  :priority           = None
  :raw-value          = 'Markup'
  :tags               = []
  :title              = ['Markup']
  :todo-keyword       = None
  :todo-type          = None
  0 section
    :post-affiliated = 129
```

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```

:post-blank      = 2
0 paragraph
:post-affiliated = 129
:post-blank      = 0
0 'A paragraph with '
1 bold
:post-blank      = 0
0 'bold'
2 ', '
3 italic
:post-blank      = 0
0 'italic'
4 ', '
5 underline
:post-blank      = 0
0 'underline'
6 ', '
7 strike-through
:post-blank      = 0
0 'strike'
8 ', '
9 verbatim
:post-blank      = 0
:value           = 'verbatim'
10 ', and '
11 code
:post-blank      = 0
:value           = 'code'
12 '\nobjects.\n'

```

Check third headline's properties to get the TODO information and tags:

```

>>> h13 = doc.root[3]
>>> h13.properties
{'title': ['A headline with a TODO and tags'],
 'deadline': OrgTimestampNode(type='timestamp'),
 'post-affiliated': 301,
 'commentedp': False,
 'archivedp': False,
 'footnote-section-p': False,
 'post-blank': 0,
 'todo-type': 'todo',
 'todo-keyword': 'TODO',
 'tags': ['tag1', 'tag2'],
 'priority': 65,
 'level': 1,
 'pre-blank': 0,
 'raw-value': 'A headline with a TODO and tags'}

```


The contents of an org file are represented internally in Org mode as an Abstract Syntax Tree (AST). The nodes of this tree are org elements and objects, such as headings, paragraphs, blocks, and text formatting/markup constructs. See Org mode's [documentation on the Element API](#) for more detailed information.

3.1 The document

The *OrgDocument* class stores data and metadata for an entire Org document. The *OrgDocument.root* attribute stores the root of the document's AST (see *Outline structure*).

3.2 AST nodes

Nodes are all represented as instances of *OrgNode* or one of its subclasses. They have several key attributes:

type The node's type, such as `paragraph` or `list-item` (see below).

ref A unique string ID assigned by Org mode during the export process. Can be used to look up targets of internal links.

properties A dictionary of named properties that depends on the node's type. See Org mode's documentation on the [Element API](#) for a list of all properties by type. Some additional properties are also added by `ox-json` on export.

contents Ordered list of this node's AST children and text contents. Elements of the list are either *OrgNode* instances or strings.

keywords TODO

3.2.1 Node types

The *OrgNode.type* attribute is an instance of *OrgNodeType*. This is a `namedtuple` which stores the type's name as well as its properties as determined by the name's membership in the

`org-element-all-elements`, `org-element-all-objects`, `org-element-greater-elements`, `org-element-object-containers`, and `org-element-recursive-objects` variables in Emacs.

`pyorg.ast.ORG_NODE_TYPES` is a dictionary containing all node types defined by Org mode, keyed by name.

3.2.2 Specialized OrgNode subclasses

Outline structure

An org document is structured as an outline tree, which is made of nested headline elements. In Org mode, the root of the parse tree (and therefore the outline tree) is a special element with type `org-data`. All other outline nodes correspond to headline elements. In pyorg these are represented with the specialized classes `OrgDataNode` and `OrgHeadlineNode`, both of which inherit from the abstract base class `OrgOutlineNode`.

The contents of an outline node always consist of an optional `section` element followed by zero or more headline elements. For convenience these are also stored in the `OrgOutlineNode.section` and `OrgOutlineNode.subheadings` attributes.

You can use the `OrgOutlineNode.dump_outline` method to print a simple representation of an outline node's subtree:

```
>>> mydocument.root.dump_outline()

Root
0. Header for section one
  0. Header for subsection 1.1
    0. Header 1.1.1
  1. Header 1.2
1. These are the header's title text
2. Section three...
```

Timestamps

See `OrgTimestampNode`

Tables

See `OrgTableNode`

Reading in Org file data

The main function of this package is to read in Org mode documents as Abstract Syntax Trees (ASTs) where they can be processed and converted/exported into other formats. See the documentation for the [org element API](#) for more information about the AST structure.

4.1 Reading from JSON export

Rather attempting to parse .org files directly, pyorg is designed to work with the output of the [ox-json](#) Emacs package. This simply export the AST generated by the `org` package itself to machine-readable JSON format. This has the advantage of also including all of your personal Org mode setting and customization in Emacs (such as link abbreviations).

4.2 Parsing Org files directly

pyorg has very limited capability to parse .org files without the help of Emacs. See the [pyorg.parse](#) module.

Interfacing directly with Org mode

5.1 High-level interface to Org mode

`pyorg.interface.Org`

5.2 Communicating with Emacs

5.2.1 Emacs interface

`pyorg.emacs.Emacs`

5.2.2 Representing elisp code in Python

`pyorg.elisp`

Converting org file data to other formats

6.1 Plain text

`pyorg.convert.plaintext.to_plaintext()`

6.2 HTML

`pyorg.convert.html.converter.to_html()`

6.3 JSON

`pyorg.convert.json.to_json()`

6.4 Creating your own converters

Subclass `pyorg.convert.base.OrgConverterBase`.

CHAPTER 7

The agenda

Support for the agenda is a work in progress. See `pyorg.agenda`.

8.1 pyorg package

8.1.1 Subpackages

pyorg.convert package

Subpackages

pyorg.convert.html package

Submodules

pyorg.convert.html.converter module

```
class pyorg.convert.html.converter.OrgHtmlConverter(config=None, **kw)
```

Bases: `pyorg.convert.base.OrgConverterBase`

```
DEFAULT_CONFIG = {'date_format': '%Y-%m-%d %a', 'image_extensions': ('.png', '.jpg',
```

```
DEFAULT_RESOLVE_LINK = {'http': True, 'https': True}
```

```
INLINE_NODES = frozenset({'link', 'line-break', 'footnote-reference', 'macro', 'code',
```

```
TAGS = {'babel-call': None, 'bold': 'strong', 'center-block': 'div', 'code': 'code
```

```
convert (node, dom=False, **kwargs)
```

Convert org node to HTML.

Parameters

- **node** (`pyorg.ast.OrgNode`) – Org node to convert.
- **dom** (`bool`) – Return HTML element instead of string.

Returns**Return type** `str` or `HtmlElement`**default_classes** (*type*)**default_tag** (*type_*)**make_headline_text** (*node*, *ctx=None*, *dom=False*)

Make HTML element for text content of headline node.

resolve_link (*linktype*, *raw*, *path*, *ctx=None*)

Resolve link into a proper URL.

`pyorg.convert.html.converter.to_html` (*node*, *dom=False*, ***kwargs*)

Convert org node to HTML.

Parameters

- **node** (`pyorg.ast.OrgNode`) – Org node to convert.
- **dom** (*bool*) – Return HTML element instead of string.
- **kwargs** – Keyword arguments to `OrgHtmlConverter` constructor.

Returns**Return type** `str` or `HtmlElement`**pyorg.convert.html.element module**`class pyorg.convert.html.element.HtmlElement` (*tag*, *children=None*, *attrs=None*, *inline=False*, *post_ws=False*)Bases: `object`

Lightweight class to represent an HTML element.

tag

HTML tag name (minus angle brackets).

Type `str`**children**List of child elements (`HtmlElement` or strings).**Type** `list`**attrs**

Mapping from attributes names (strings) to values (strings or bools).

Type `dict`**inline**Whether to render children in an inline context. If `False` each child will be rendered on its own line. If `True` whitespace will only be added before/after children according to the `post_ws` attribute of the child.**Type** `bool`**classes**

List of class names present in the “class” attribute. Assignable property.

Type `list`**post_ws**

Whether to add whitespace after the tag when rendering in an inline context.

Type `bool`

add_class (*classes*)

classes

class `pyorg.convert.html.element.TextNode` (*text*, *post_ws=False*)

Bases: `object`

Text node to be used within HTML.

text

Wrapped text.

Type `str`

post_ws

Whether to add whitespace after the tag when rendering in an inline context.

Type `bool`

`pyorg.convert.html.element.html_to_string` (*elem*, ***kwargs*)

`pyorg.convert.html.element.write_html` (*stream*, *elem*, *indent='\t'*, *inline=False*)

Module contents

Export org mode AST nodes to HTML.

Submodules

pyorg.convert.base module

class `pyorg.convert.base.OrgConverterBase` (*config=None*, ***kw*)

Bases: `object`

Abstract base class for objects which convert org mode AST to another format.

config

Type `dict`

DEFAULT_CONFIG = {'date_format': '%Y-%m-%d %a', 'image_extensions': ('.png', '.jpg',

convert (*node*, ***kwargs*)

pyorg.convert.json module

Convert org mode AST nodes to JSON.

class `pyorg.convert.json.OrgJsonConverter` (*config=None*, ***kw*)

Bases: `pyorg.convert.base.OrgConverterBase`

DEFAULT_CONFIG = {'date_format': '%Y-%m-%d %a', 'image_extensions': ('.png', '.jpg',

make_object (*type_*, *data*)

`pyorg.convert.json.to_json` (*node*, ***kwargs*)

pyorg.convert.plaintext module

```
class pyorg.convert.plaintext.OrgPlaintextConverter (config=None, **kw)
    Bases: pyorg.convert.base.OrgConverterBase

    convert_multi (items, blanks=False, sep=None)

pyorg.convert.plaintext.to_plaintext (arg, blanks=False, sep=None, **kwargs)
```

Module contents

Convert org AST to other formats.

8.1.2 Submodules

pyorg.agenda module

pyorg.ast module

Work with org file abstract syntax trees.

See <https://orgmode.org/worg/dev/org-syntax.html> for a description of the org syntax.

```
class pyorg.ast.DispatchNodeType (default, registry=None, doc=None)
    Bases: pyorg.util.SingleDispatchBase
```

Generic function which dispatches on the node type of its first argument.

```
format_key (key)
```

```
get_key (node)
```

Get the key to look up the correct implementation for the given argument.

```
pyorg.ast.NODE_CLASSES = {'headline': <class 'pyorg.ast.OrgHeadlineNode'>, 'org-data': <
    Mapping from org element/node types to their Python class
```

```
pyorg.ast.ORG_NODE_TYPES = {'babel-call': OrgNodeType('babel-call'), 'bold': OrgNodeType
    Mapping from names of all AST node types to OrgNodeType instances.
```

```
class pyorg.ast.OrgDataNode (type_, *args, **kw)
    Bases: pyorg.ast.OrgOutlineNode
```

Root node for an org mode parse tree.

Doesn't do anything special, aside from being the outline node at level 0.

```
class pyorg.ast.OrgDocument (root, properties=None, meta=None)
    Bases: object
```

Represents an entire Org mode document.

```
root
```

The root of the document's Abstract Syntax Tree.

Type *OrgOutlineNode*

```
properties
```

Additional file-level properties attached to the document, such as the author or date. Values may be strings or secondary strings.

Type *dict*

meta
A dictionary containing arbitrary application-specific metadata.

Type `dict`

assign_header_ids (*depth=3*)
Assign unique IDs to headers.

class `pyorg.ast.OrgHeadlineNode` (*type_, *args, title=None, id=None, **kw*)
Bases: `pyorg.ast.OrgOutlineNode`

Org header element.

title
Title of headline as plain text.

Type `str`

id
Unique ID for TOC tree.

Type `str`

has_todo
Whether this outline has a TODO keyword.

Type `bool`

priority_chr
Priority character if headline with priority, otherwise None.

Type `str`

scheduled
The timestamp in the “scheduled” property of the headline, if present.

Type `OrgTimestamp`

deadline
The timestamp in the “deadline” property of the headline, if present.

Type `OrgTimestamp`

closed
The timestamp in the “closed” property of the headline, if present.

Type `OrgTimestamp`

closed

deadline

has_todo

priority_chr

scheduled

class `pyorg.ast.OrgNode` (*type_, properties=None, contents=None, keywords=None, ref=None, meta=None*)

Bases: `object`

A node in an org file abstract syntax tree.

Implements the sequence protocol as a sequence containing its child nodes (identically to `contents`). Also allows accessing property values by indexing with a string key.

type
Node type, obtained from *org-element-type*.
Type *OrgNodeType*

properties
Dictionary of property values, obtained from *org-element-property*.
Type *dict*

contents
List of contents (org nodes or strings), obtained from *org-element-contents*.
Type *list*

ref
A unique ID assigned to the node during the export process.
Type *str*

keywords
Dictionary of keyword values.
Type *dict*

meta
A dictionary containing arbitrary application-specific metadata.
Type *dict*

is_outline
Whether this node is an outline node.
Type *bool*

children
Iterator over all child AST nodes (in contents or keyword/property values).

descendants (*incself=False, properties=False*)
Recursively iterate over all of the node's descendants.

Parameters

- **incself** (*bool*) – Include self.
- **properties** (*bool*) – Include children in the node's properties, not just *contents* (see *children*).

Yields *OrgNode*

dump (*properties=False, indent=' '*)
Print a debug representation of the node and its descendants.

Parameters

- **value** (*OrgNode*) –
- **properties** (*bool*) – Also print node properties.
- **indent** (*str*) –
- **to indent with.** (*Characters*) –

is_outline = False

class `pyorg.ast.OrgNodeType`

Bases: `pyorg.ast.OrgNodeType`

The properties of an org AST node type.

name

The unique name of this node type.

Type `str`

is_element

Whether this node type is an element. “An element defines syntactical parts that are at the same level as a paragraph, i.e. which cannot contain or be included in a paragraph.”

Type `bool`

is_object

Whether this node type is an object. All nodes which are not elements are objects. “An object is a part that could be included in an element.”

Type `bool`

is_greater_element

Whether this node type is a greater element. “Greater elements are all parts that can contain an element.”

Type `bool`

is_recursive

Whether this node type is a recursive object.

Type `bool`

is_object_container

Whether this node type is an object container, i.e. can directly contain objects.

Type `bool`

References

[Org Syntax](#)

is_object

class `pyorg.ast.OrgOutlineNode` (*type_*, *properties=None*, *contents=None*, *keywords=None*, *ref=None*, *meta=None*)

Bases: `pyorg.ast.OrgNode`

Abstract base class for org node that is a component of the outline tree.

Corresponds to the root org-data node or a headline node.

level

Outline level. 0 corresponds to the root node of the file.

Type `int`

section

Org node with type “*section*” that contains the outline node’s direct content (not part of any nested outline nodes).

Type `OrgNode`

subheadings

List of nested headings.

Type `list`

dump_outline (*depth=None, indent=' '*)

Print representation of node's outline subtree.

Parameters

- **depth** (*int*) – Maximum depth to print.
- **indent** (*str*) – String to indent with.

is_outline = `True`

outline_tree ()

Create a list of (child, child_tree) pairs.

section

subheadings

class `pyorg.ast.OrgTableNode` (*type_, properties=None, contents=None, keywords=None, ref=None, meta=None*)

Bases: `pyorg.ast.OrgNode`

An org node with type “table”.

rows

List of standard rows.

Type `list` of `OrgNode`

nrows

Number of (non-rule) rows in table. This includes the header.

Type `int`

ncols

Number of columns in table.

Type `int`

blocks ()

Standard rows divided into “blocks”, which were separated by rule rows.

Returns

Return type `list` of `list` of `OrgNode`

cells ()

ncols

nrows

rows

class `pyorg.ast.OrgTimestamp` (*tstype, start, end=None, repeater=None, warning=None*)

Bases: `object`

Stores Org mode timestamp data, without the whole AST node.

tstype

Type `str`

start

Type `datetime.datetime`

```

    end
        Type datetime.datetime
    repeater
        Type OrgTimestampInterval
    warning
        Type OrgTimestampInterval
    interval
    is_range

class pyorg.ast.OrgTimestampInterval (type_, unit, value)
    Bases: object
    An interval of time stored in an Org mode time stamp's repeater or warning.
    type
        Type str
    unit
        Type str
    value
        Type float

class pyorg.ast.OrgTimestampNode (type_, *args, **kwargs)
    Bases: pyorg.ast.OrgNode, pyorg.ast.OrgTimestamp
    An org node with type "timestamp".

pyorg.ast.as_node_type (t)
    Convert to node type object, looking up strings by name.

pyorg.ast.as_secondary_string (obj)
    Convert argument to a "secondary string" (list of nodes or strings).

    Parameters obj (OrgNode or str or list) –
    Returns
    Return type list
    Raises TypeError : if obj is not a str or OrgNode or iterable of these.

pyorg.ast.dispatch_node_type (parent=None)
    Decorator to create DispatchNodeType instance from default implementation.

pyorg.ast.dump_ast (value, properties=False, indent=' ', _level=0)
    Print a debug representation of an org AST node and its descendants.

    Parameters
        • value (OrgNode) –
        • properties (bool) – Also print node properties.
        • indent (str) – Characters to indent with.

pyorg.ast.get_node_type (obj, name=False)
    Get type of AST node, returning None for other Python types.

```

`pyorg.ast.node_cls (type_)`

Register a node class for a particular type in `NODE_CLASSES`.

pyorg.interface module

class `pyorg.interface.Org (emacs, orgdir=None, loader=None)`

Bases: `object`

Interface to org mode.

emacs

Type `pyorg.emacs.Emacs`

orgdir

Directory org files are read from.

Type `pyorg.files.OrgDirectory`

loader

Loader used to read .org file data.

Type `pyorg.files.OrgFileLoader`

open_org_file (file, focus=False)

Open an org file in the org directory for editing in Emacs.

Parameters

- **file** (`str` or `pathlib.Path`) – Path to file to open. If not absolute it is taken to be relative to `orgdir`.
- **focus** (`bool`) – Switch window system focus to the active Emacs frame.

Raises

- `emacs.emacs.EmacsException`
- `FileNotFoundError`

read_org_file (file, raw=None)

Read and parse an org file.

Parameters

- **file** (`str` or `pathlib.Path`) – Path to file to load (relative paths are interpreted relative to org directory).
- **raw** (`bool`) – Don't parse and just return raw JSON exported from Emacs.

Returns

Return type `pyorg.ast.OrgDocument`

Raises

- `emacs.emacs.EmacsException`
- `FileNotFoundError`

read_org_file_direct (file, raw=False)

Read and parse an org file directly from Emacs.

Always reads the current file and does not use cached data, or perform any additional processing other than parsing.

Parameters

- **file** (*str* or *pathlib.Path*) – Path to file to load (relative paths are interpreted relative to org directory).
- **raw** (*bool*) – Don't parse and just return raw JSON exported from Emacs.

Returns

Return type *pyorg.ast.OrgDocument* or dict

Raises

- `emacs.emacs.EmacsException`
- `FileNotFoundError`

pyorg.io module

Read (and write) org mode data from JSON and other formats.

`pyorg.io.org_doc_from_json(data)`

Parse an ORG document from exported JSON data.

Returns

Return type *OrgDocument*

`pyorg.io.org_node_from_json(data)`

Parse an org AST node from JSON data.

Returns

Return type *OrgNode*

pyorg.parse module

(Partially) parse org files.

`pyorg.parse.parse_tags(string)`

Parse tags from string.

Parameters **string** (*str*) – Tags separated by colons.

Returns List of tags.

Return type `list[str]`

`pyorg.parse.read_file_keywords(file)`

Read file-level keywords from an .org file (without using Emacs).

Limitations: only reads up to the first element in the initial section (excluding comments). If the initial section does contain such an element, any keywords directly preceding it (not separated with a blank line) will be considered affiliated keywords of that element and ignored.

Will not parse org markup in keyword values.

All keys are converted to uppercase.

Keys which appear more than once will have values in a list.

Parameters **file** – String or open file object or stream in text mode.

Returns

Return type `dict`

pyorg.util module

Misc. utility code.

class `pyorg.util.Namespace` (*_map=None, **kwargs*)
Bases: `object`

A simple collection of attribute values, that supports inheritance.

Meant to be used to pass large sets of arguments down through recursive function calls in a way that they can be overridden easily.

Public attributes and methods start with an underscore so as not to interfere with the namespace.

_map
Stores the underlying data.

Type `collections.ChainMap`

class `pyorg.util.SingleDispatch` (*default, registry=None, doc=None*)
Bases: `pyorg.util.SingleDispatchBase`

Generic function which dispatches on the type of its first argument.

iter_keys (*arg*)

validate_key (*key*)

Validate and possibly replace a key before an implementation is registered under it.

Default implementation simply returns the argument. Subclasses may wish to override this. An error should be raised for invalid keys.

Parameters **key** – Key passed to `register()`.

Returns

Return type Key to use for registration, which may be different than argument.

class `pyorg.util.SingleDispatchBase` (*default, registry=None, doc=None*)
Bases: `abc.ABC`

ABC for a generic function which dispatches on some trait of its first argument.

May be bound to an object or class as a method.

Concrete subclasses must implement one of the `get_key()` or `iter_keys()` method.

default
Default implementation.

Type callable

registry
Stores the specialized implementation functions by key.

Type `dict`

bind (*instance, owner=None*)

Get a version of the function bound to the given instance as a method.

Parameters

- **instance** – Object instance to bind to.

- **owner** –

copy ()

dispatch (*arg*)

Get the actual function implementation for the given argument.

get_key (*arg*)

Get the key to look up the correct implementation for the given argument.

iter_keys (*arg*)

register (*key*, *impl=None*)

Register an implementation for the given key.

Parameters

- **key** – Key to register method under. May also be a list of keys.
- **impl** (*callable*) – Implementation to register under the given key(s). If None will return a decorator function that completes the registration.

Returns None if method is given. Otherwise returns a decorator that will register the function it is applied to.

Return type function or None

validate_key (*key*)

Validate and possibly replace a key before an implementation is registered under it.

Default implementation simply returns the argument. Subclasses may wish to override this. An error should be raised for invalid keys.

Parameters **key** – Key passed to *register()*.

Returns

Return type Key to use for registration, which may be different than argument.

class `pyorg.util.SingleDispatchMethod` (*func*, *instance*, *owner=None*)

Bases: `object`

Version of a *SingleDispatchBase* which acts as a method.

func

Type *SingleDispatchBase*

instance

Instance the function is bound to, or None.

owner

default

dispatch (*arg*)

class `pyorg.util.TreeNamespace` (*_map=None*, *_path=()*, ***kwargs*)

Bases: `pyorg.util.Namespace`

Namespace with a *_path* attribute that marks its location in a tree structure.

_path

Type `tuple`

`pyorg.util.parse_iso_date` (*string*)

Parse date or datetime from an ISO 8601 date string.

Parameters `string` –

Returns Return time varies based on whether the string includes a time component.

Return type `datetime.date` or `datetime.datetime`

8.1.3 Module contents

Root package for pyorg.

Package for working with Emacs org-mode files

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