

# reStructuredText & Sphinx Cheatsheet

## Section Headings

```
=====
Level 1 Heading
=====

Level 2 Heading
-----
```

```
Level 1 Heading
^^^^^^^^^^^^^^

Level 2 Heading
+++++
```

- Heading structure is determined only by occurrence order.
- Heading overline is optional.
- Under/overlines use the following characters:

```
Recommended: = - ` : , ' " ~ ^ _ * + #
! $ % & ( ) , / ; < > ? @ [ \ ] { | }
```

## Styles

```
*Bold text*
**Italic text**
``Inline literal/code``
:sup:`super`\ Script
:sub:`sub`\ Script
```

## Bullet Lists

```
* Unordered item
* Unordered item

1. Nested ordered item
2. Nested ordered item

    a. Nested ordered item

* Unordered item
```

## Definition Lists

```
First term
  Definition of first term,
  it can span multiple lines.

Second term
  Definition of second term.

  Indent additional paragraphs.
```

## Literal Code Blocks

```
Here is a literal block::

    Its contents are indented.

::

    The :: marker is omitted here
```

The `::` marker will insert a `"` in the output in the above example. To omit the `"`, precede the `::` marker with white space, or use the marker on a line of its own.

## Targets and Links

```
Anchor target .. _anchorbyref:
External target .. _External link name: http://example.com
Footnote target .. [1] A footnote
Citation target .. [cit1] A global citation
```

```
External links `External link <http://example.com>`_
`External link name`_ or `Example <External link name>`_
```

```
Internal links `Anchor link by text`_ or `Anchor <Anchor link by text>`_
`Anchor link by ref <anchorbyref>`_
:ref:`anchorbyref`
```

```
Footnote Reference a footnote [1]_
Citation or a global citation [cit1]_
```

```
Section link Section Heading
-----
`Link <Section Heading>`_
```

## Tables

```
=====
Simple table Header 2 Header 3
=====
Column 1 Column 2 Column 3
Horizontal column span ...
-----
... ...
```

```
+-----+-----+-----+
| Grid | Header 2 | Header 3 |
| table | | |
+-----+-----+-----+
| Column 1 | Column 2 | Vertical |
+-----+-----+-----+ column |
| Horizontal span | span |
+-----+-----+-----+
```

Simple tables and grid tables can be replaced with external CSV files, using the `csv-table` directive.

## Images and Figures

```
.. image:: image.png
:height: 100px
:width: 100px
:align: bottom
:target: target_
```

```
.. figure:: image.png
:height: 100px
```

Figures are images with captions. They support all image options.

## Comments

```
.. This is a single line comment, comments can span multiple lines as well.
```

## Directives

reStructuredText directives consist of a **directive type**, **arguments**, and any number of **options**. Some directives expect a block of indented **content**.

```
.. type:: arguments
    :option: option value

    Directive content
```

```
.. container:: [container class]
.. csv-table:: [table title]
    :header: CSV data for headers
    :widths: number [, number]
    :file: filename
    :encoding: encoding
    :header-rows: number
    :delim: character, "tab", or "space"
    :quote: character
    :escape: character
.. rubric:: title
```

## Table of Contents

```
.. toctree::
    :maxdepth: number of title levels
    :glob:
    :hidden:
    :numbered:
    :caption: caption text
    :titlesonly:
```

[Include paths]

## Python Domain

Domain directives expect a domain **directive type**, the **construct name** as a directive argument, and optionally, **domain directive options**.

```
.. py:method:: MyClass.foo(args)
    :param args: Arguments
    :type args: list

    Link to :py:meth:`MyClass.foo`.
```

### Python Domain Directives

```
.. py:module:: module
.. py:class:: signature
.. py:function:: signature
.. py:data:: name
.. py:exception:: name
.. py:attribute:: name
.. py:method:: signature
.. py:staticmethod:: signature
.. py:classmethod:: signature
.. py:decorator:: signature
.. py:currentmodule:: module
```

### Python Domain References

```
:py:mod:`module`
:py:class:`signature`
:py:func:`signature`
:py:data:`name`
:py:exc:`name`
:py:attr:`name`
:py:meth:`signature`

:py:const:`name`
```

### Python Domain Directive Options

```
:param [type] name: description
:type name: type
:raises class: description
:var name: description
:vartype name: type
:returns description:
:rtype type:
```

There are a number of other Sphinx language domains for representing code constructs in reference documentation: rst, c, cpp, js, ruby, php, dotnet, scala, go, lisp, coffee, and others.

## Content Block Directives

```
.. topic:: [title]
.. sidebar:: [title]
    :subtitle: subtitle
.. admonition:: title
.. attention::
.. caution::
.. danger::
.. error::
.. hint::
.. important::
.. note::
.. tip::
.. warning::
.. seealso::
.. deprecated:: [version]
.. versionadded:: [version]
.. versionchanged:: [version]
.. math::
.. raw:: output format
```

```
.. topic:: Examples

    A topic block

.. note::
    This is a note.

.. versionchanged:: 1.3
    Something changed.

.. math::
    a_1 = b_1 + c_1

.. raw:: html

    <b>HTML output</b>
```

## Code Examples

```
.. highlight:: language
    :linenothreshold: number
.. codeblock:: [language]
    :linenos:
    :emphasize-lines: number [, number]
    :caption: caption text
    :name: block target name

    [Code example, indented]
.. literalinclude:: filename
    :language: language
    :emphasize-lines: number [, number]
    :linenos:
    :encoding: encoding
    :diff: filename
    :dedent: number
```

Some of the language lexers supported by the code example language option: none, python, js, php, ruby, perl, c, cpp, csharp, go, scala, lisp, coffee, dart, julia, lua, html, css, sass, json, yaml, diff, sql, bash, and shell-session

## References

```
:role:`title <target>`      Link to target with link text title
:role:`!title`               Don't create link or reference
:role:`~module.Object`      Use last element, Object, for link text
```

### Cross-reference roles

```
:any:`name`
:doc:`document name`
:download:`filename`
:envvar:`name`
:keyword:`python keyword`
:option:`CLI option`
```

### Other inline markup roles

```
:abbr:`long (abbreviation)`
:command:`name`
:kbd:`keystrokes`
:program:`program`
:pep:`number`
:rfc:`number`
```

Brought to you by **Read the Docs**.

We offer `private hosting` <http://readthedocs.com> and `open source hosting` <http://readthedocs.org> for *Sphinx* documentation projects.