

© 2025 ANSYS, Inc. or affiliated companies Unauthorized use, distribution, or duplication prohibited.

Ansys Sphinx Theme



ANSYS, Inc. Southpointe 2600 Ansys Drive Canonsburg, PA 15317 ansysinfo@ansys.com http://www.ansys.com (T) 724-746-3304 (F) 724-514-9494

Feb 21, 2025

ANSYS, Inc. and ANSYS Europe, Ltd. are UL registered ISO 9001:2015 companies.

CONTENTS

1	Getti	ing started			3			
	1.1	Installatio	n		. 3			
2	User guide 5							
	2.1	Basic con	figuration		. 5			
		2.1.1 P	yAnsys and Ansys logos		. 5			
		2.1.2 f	avicon		. 6			
		2.1.3 V	Version switcher		. 7			
		2.1.4 P	PDF cover page		. 7			
		2.1.5 C	Custom CSS		. 7			
	2.2	PDF cover	r page		. 7			
	2.3	HTML the	eme options		. 8			
		2.3.1 S	Show breadcrumbs		. 8			
		2.3.2 A	Add and hide icons in the navigation bar		. 9			
		2.3.3 S	Static search options		. 10			
		2.3.4 C	Cheat sheets		. 11			
		2.3.5 V	Vhat's new section		. 12			
	2.4	The link	code extension		. 14			
		2.4.1 C	Configuration options		. 15			
	2.5	Sphinx Au	utoAPI		. 15			
3	Evan	nnles			19			
3	Exan		tensions		19			
3	3.1	Sphinx ex	tensions		. 19			
3		Sphinx ex Document	tation components		. 19 . 19			
3	3.1	Sphinx ex Document 3.2.1 S	tation components		. 19 . 19 . 19			
3	3.1	Sphinx ex Document 3.2.1 S 3.2.2 Jr	tation components		. 19 . 19 . 19 . 34			
3	3.1	Sphinx ex Document 3.2.1 S 3.2.2 Ju 3.2.3 S	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery		. 19 . 19 . 19 . 34 . 35			
3	3.1	Sphinx ex Document 3.2.1 S 3.2.2 Ju 3.2.3 S 3.2.4 S	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI		. 19. 19. 19. 34. 35. 37			
3	3.1	Sphinx ex Document 3.2.1 S 3.2.2 Ju 3.2.3 S 3.2.4 S 3.2.5 T	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Cable		. 19 . 19 . 19 . 34 . 35 . 37 . 43			
3	3.1 3.2	Sphinx ex Document 3.2.1 S 3.2.2 Ju 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI		. 19 . 19 . 34 . 35 . 37 . 43			
3	3.1 3.2 Relea	Sphinx ex	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Cable Admonitions		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46			
	3.1 3.2	Sphinx ex Document 3.2.1 S 3.2.2 Jt 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A ase notes 1.3.2 (202	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Sable Admonitions		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46 . 49			
	3.1 3.2 Relea	Sphinx ex Document 3.2.1 S 3.2.2 Jt 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A ase notes 1.3.2 (202 4.1.1 N	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Cable Admonitions		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46 . 49			
	3.1 3.2 Relea	Sphinx ex Document 3.2.1 S 3.2.2 Jr 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A ase notes 1.3.2 (202 4.1.1 M 4.1.2 D	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Table Admonitions S25-02-21) Miscellaneous Documentation		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46 . 49 . 49			
	3.1 3.2 Relea	Sphinx ex Document 3.2.1 S 3.2.2 Jr 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A ase notes 1.3.2 (202 4.1.1 M 4.1.2 D 4.1.3 M	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Table Admonitions 25-02-21) Miscellaneous Documentation Maintenance		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46 . 49 . 49 . 49			
	3.1 3.2 Relea	Sphinx ex Document 3.2.1 S 3.2.2 Jt 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A ase notes 1.3.2 (202 4.1.1 M 4.1.2 E 4.1.3 M 1.3.1 (202	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Table Admonitions 25-02-21) Miscellaneous Documentation Maintenance 25-02-06)		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46 . 49 . 49 . 49 . 49			
	3.1 3.2 Relea 4.1	Sphinx ex Document 3.2.1 S 3.2.2 Jt 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A ase notes 1.3.2 (202 4.1.1 M 4.1.2 D 4.1.3 M 1.3.1 (202 4.2.1 D	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Table Admonitions 25-02-21) Miscellaneous Documentation Maintenance 25-02-06) Documentation		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46 . 49 . 49 . 49 . 49 . 49 . 49			
	3.1 3.2 Relea 4.1	Sphinx ex Document 3.2.1 S 3.2.2 Jt 3.2.3 S 3.2.4 S 3.2.5 T 3.2.6 A ase notes 1.3.2 (202 4.1.1 M 4.1.2 D 4.1.3 M 1.3.1 (202 4.2.1 D 1.3.0 (202	tation components Sphinx design upyter notebook - nbsphinx Sphinx-Gallery Sphinx AutoAPI Table Admonitions 25-02-21) Miscellaneous Documentation Maintenance 25-02-06)		. 19 . 19 . 19 . 34 . 35 . 37 . 43 . 46 . 49 . 49 . 49 . 49 . 49 . 49			

	4.3.2 Miscellaneous	50
	4.3.3 Documentation	50
	4.3.4 Maintenance	50
4.4	1.2.7 - 2025-02-04	50
	4.4.1 Maintenance	50
4.5	1.2.5 - 2025-01-13	50
	4.5.1 Dependencies	50
4.6	1.2.4 - 2024-12-20	50
4.7	4.6.1 Miscellaneous	50
4.7	1.2.3 - 2024-12-05	50
4.0	4.7.1 Miscellaneous	50
4.8	1.2.2 - 2024-11-21	51
4.0	4.8.1 Miscellaneous	51
4.9	1.2.1 - 2024-11-13	51
	4.9.1 Miscellaneous	51
4.40	4.9.2 Documentation	51
4.10	1.2.0 - 2024-10-31	51
	4.10.1 Fixed	51
	4.10.2 Dependencies	51
	4.10.3 Miscellaneous	51
	4.10.4 Documentation	51
	4.10.5 Maintenance	52
4.11	1.1.7 - 2024-10-23	52
	4.11.1 Miscellaneous	52
4.12	1.1.6 - 2024-10-18	52
	4.12.1 Fixed	52
4.13	1.1.5 - 2024-10-15	52
	4.13.1 Fixed	52
4.14	1.1.4 - 2024-10-14	52
	4.14.1 Fixed	52
4.15	1.1.3 - 2024-10-11	52
	4.15.1 Fixed	52
4.16	1.1.2 - 2024-10-02	53
	4.16.1 Fixed	53
4.17	1.1.1 - 2024-10-01	53
	4.17.1 Fixed	53
	1.1.0 - 2024-10-01	53
	4.18.1 Added	53
	4.18.2 Changed	53
	4.18.3 Fixed	53
	4.18.4 Dependencies	53
	4.18.5 Documentation	54
4.19	1.0.11 - 2024-09-19	54
	4.19.1 Fixed	54
4.20	1.0.10 - 2024-09-18	54
	4.20.1 Fixed	54
4.21	1.0.9 - 2024-09-16	54
	4.21.1 Added	54
	4.21.2 Fixed	54
4.22	1.0.8 - 2024-09-03	54
	4.22.1 Fixed	54
4.23	1.0.7 - 2024-08-23	54
	4.23.1 Fixed	54
4.24	1.0.6 - 2024-08-23	55

	4.24.1 Fixed	55				
	4.24.2 Documentation	55				
4.25	1.0.5 - 2024-08-16	55				
	4.25.1 Fixed	55				
	4.25.2 Dependencies	55				
4.26	1.0.4 - 2024-08-13	55				
	4.26.1 Fixed	55				
	4.26.2 Dependencies	55				
4.27	1.0.3 - 2024-08-09	55				
	4.27.1 Fixed	55				
4.28	1.0.2 - 2024-08-08	55				
	4.28.1 Changed	55				
	4.28.2 Fixed	56				
4.29	1.0.1 - 2024-08-08	56				
	4.29.1 Fixed	56				
4.30	1.0.0 - 2024-08-08	56				
	4.30.1 Added	56				
	4.30.2 Changed	56				
	4.30.3 Fixed	56				
	4.30.4 Dependencies	57				
	4.30.5 Miscellaneous	57				
4.31	0.16.6 - 2024-06-18	57				
	4.31.1 Fixed	57				
4.32	0.16.5 - 2024-05-31	57				
	4.32.1 Fixed	57				
4.33	0.16.4 - 2024-05-29	58				
	4.33.1 Added	58				
	4.33.2 Dependencies	58				
4.34	0.16.3 - 2024-05-29	58				
	4.34.1 Fixed	58				
4.35	0.16.2 - 2024-05-22	58				
	4.35.1 Changed	58				
	4.35.2 Miscellaneous	58				
4.36	0.16.1 - 2024-05-22	58				
	4.36.1 Added	58				
	4.36.2 Fixed	58				
	4.36.3 Dependencies	58				
Python Module Index 59						
Index		61				

The Ansys Sphinx Theme is a custom Ansys-branded theme for use with Sphinx, a documentation generator for creating project documentation from reStructuredText source files.

This theme is specifically tailored for documentation related to Ansys projects helping to ensure consistency in its look and feel. Various useful extensions are included in the theme to make documentation more appealing and user-friendly.

Getting started Learn how to install the Ansys Sphinx Theme.

Getting started User guide Learn how to use the capabilities and features of this theme.

User guide Examples Explore examples that show how to integrate third-party extensions with this theme.

Examples Changelog View the changelog for this project.

Release notes

CONTENTS 1

2 CONTENTS

CHAPTER

ONE

GETTING STARTED

How to install Learn how to download and install the theme.

Installation

1.1 Installation

There are multiple sources for installing the latest stable version of the Ansys Sphinx Theme. These include public PyPI, Ansys PyPI, and GitHub.

Public PyPI

python -m pip install ansys-sphinx-theme

Ansys PyPI

```
PIP_EXTRA_INDEX_URL="https://${PYANSYS_PYPI_PRIVATE_PAT}@pkgs.dev.azure.com/pyansys/_
-packaging/pyansys/pypi/simple/"
python -m pip install ansys-sphinx-theme
```

GitHub

python -m pip install git+https://github.com/ansys/ansys-sphinx-theme.git@main

CHAPTER

TWO

USER GUIDE

This section outlines the fundamental configurations of the Ansys Sphinx theme and how to integrate third-party extensions with this theme to customize your documentation.

Basic configuration Configure the Ansys Sphinx Theme

Basic configuration HTML theme options Set theme options

HTML theme options The linkcode extension See how to use the linkcode extension with the Ansys Sphinx

Theme.

The linkcode extension Sphinx AutoAPI See how to use Sphinx AutoAPI with the Ansys Sphinx Theme.

Sphinx AutoAPI

2.1 Basic configuration

To use the Ansys Sphinx Theme, add the following line to your project's Sphinx conf.py file:

```
html_theme = "ansys_sphinx_theme"
```

The Ansys Sphinx Theme provides these features:

- PyAnsys and Ansys logos
- · Version switcher
- PDF cover page
- Custom CSS

2.1.1 PyAnsys and Ansys logos

The Ansys Sphinx Theme includes the PyAnsys and Ansys logos. All the logos are available in the ansys_sphinx_theme/static/ directory.

To use the logo in both dark and light modes, add the following code to the `html_theme_options` dictionary in your project's Sphinx conf.py file:

Ansys logo

```
html_theme_options = {
    "logo": "ansys",
}
```

PyAnsys logo

```
html_theme_options = {
    "logo": "pyansys",
}
```

No logo

```
html_theme_options = {
    "logo": "no_logo",
}
```

Note

By default, if ansys logo is displayed, the logo links to the Ansys website. If the PyAnsys logo is displayed, the logo links to the PyAnsys website. If you want to change the link, you can set the logo_link option in the conf.py file.

For example:

```
html_theme_options = {
    "logo": "ansys",
    "logo_link": "https://www.example.com",
}
```

Note

If you use the logo option, make sure to remove the html_logo option from the conf.py file. logo option overrides the html_logo option and display the specified logo.

You can also add a custom logo by specifying the path to the logo file as specified in pydata-sphinx-theme.

For example:

```
html_theme_options = {
    "logo": {
        "image_light": "_static/logo-light.png",
        "image_dark": "_static/logo-dark.png",
    }
}
```

2.1.2 favicon

The favicon setting specifies the icon that appears in the browser tab. To use the Ansys favicon, add the following code to your project's Sphinx conf.py file:

```
html_favicon = ansys_favicon
```

2.1.3 Version switcher

The Ansys Sphinx Theme includes a version switcher for switching between different versions of the documentation. To show the version switcher in your documentation, add the following code to your project's Sphinx conf.py file:

```
from ansys_sphinx_theme import get_version_match

version = "0.1.0"
switcher_versions = get_version_match(version)
cname = "your_name"

html_theme_options = {
    "switcher": {
        "json_url": f"https://{cname}/versions.json",
        "version_match": switcher_version,
    },
}
```

The switcher requires a versions.json file that contains the versions of the documentation and their URLs in the given json_url. For more information, see PyAnsys multi-version documentation in the PyAnsys developer's guide.

2.1.4 PDF cover page

The Ansys Sphinx Theme includes a PDF cover page that you can customize. To customize the PDF cover page, see *PDF cover page*.

2.1.5 Custom CSS

You can add custom CSS to the Ansys Sphinx Theme by creating a directory named _static/css in your documentation and adding the following code to your project's Sphinx conf.py file:

```
html_static_path = ["_static"]
html_css_files = ["css/custom.css"]
```

Here is an example of a custom CSS file that changes the background color of the body to black and the text color to white:

```
.body {
   background-color: black;
   color: white;
}
```

2.2 PDF cover page

For generating a PDF of your documentation, Sphinx uses a default cover page. However, you can use the generate_preamble function in the ansys_sphinx_theme.latex module to create and use a custom cover page:

```
ansys_sphinx_theme.latex.generate_preamble(title, watermark='watermark', date=None)
```

Generate the preamble for the PDF documentation.

```
Parameters

title
    [str] Title of the document.

watermark
    [str, optional] Name of the watermark image.
```

date

[datetime, optional] Date of document generation. If not provided, today's date is used.

Returns

str

A string representing the LaTeX source code for the preamble.

You use this function to generate the value for the preamble key in the latex_elements variable declared in the conf.py file:

To use the logo and watermark provided by Ansys on the cover page, you must import them and then add them to the latex_additional_files dictionary:

```
from ansys_sphinx_theme import (
    ansys_logo_white,
    ansys_logo_white_cropped,
    watermark,
)
```

```
latex_additional_files = [watermark, ansys_logo_white, ansys_logo_white_cropped]
```

For an example of a rendered PDF cover page, see the PDF documentation.

2.3 HTML theme options

In the Sphinx configuration (conf.py) file in the doc directory, you can use the html_theme_options dictionary to customize the Ansys Sphinx theme.

2.3.1 Show breadcrumbs

Showing breadcrumbs at the top of your documentation pages makes navigation easier. Breadcrumbs are shown by setting "show_breadcrumbs": True. To add additional *root* breadcrumbs, "additional_breadcrumbs" is set to a list of tuples in this form: ("Link text", "url").

This html_theme_options dictionary show breadcrumbs, including a root breadcrumb for the documentation landing page for the Ansys repository:

When you are on the landing page for your documentation, the breadcrumb shows the title for this page. However, Sphinx cannot access this title from other documentation pages. Thus, after html_theme_options dictionary, you must set html_short_title to the display text to use for this breadcrumb.

To ensure a consistent user experience, always set the html_short_title (or optionally html_title if html_short_title is not used) to the library name.

For example, in the conf.py file for the Ansys Sphinx Theme, this line is added after the html_theme_options dictionary:

```
html_short_title = html_title = "Ansys Sphinx Theme"
```

If you want the title for your documentation's main index.rst file to show the version, include |version| in the title:

```
html_short_title = html_title = "Ansys Sphinx Theme |version|"
```

2.3.2 Add and hide icons in the navigation bar

The navigation bar shows two icons on the right by default. The first is for switching between light and dark modes. The second is for going to the library's GitHub repository.

- For comprehensive information on adding custom link behavior, see Add custom attributes to icon links in the PyData Theme documentation.
- For comprehensive information on how to use Font Awesome to add icons, see How To Add Icons in the Font Awesome documentation.

The following sections explain how to add icons and hide icons.

Add icons

In the conf.py file, the html_theme_options dictionary has a child icon_links dictionary. To add icons to the navigation bar, add them to the icon_links dictionary. For each icon to add, specify its name, the associated url, the icon, and the type.

This example adds an icon for sending an email:

```
html_theme_options = {
  "icon_links": [
     dict(name="Mail", url="mailto:me", icon="fas fa-envelope")
],
...
}
```

Hide icons

To hide icons so that they do not show in the navigation bar, add their names to the hidden_icons dictionary:

```
html_theme_options = {
    "hidden_icons": ["GitHub"],
    ...
}
```

If you want to hide all icons, use the show_icons Boolean variable:

```
html_theme_options = {
    "show_icons": False,
    ...
}
```

2.3.3 Static search options

The Ansys Sphinx theme supports static search options to customize the search experience.

The static search bar is created using Fuse.js. You can provide all options supported by Fuse.js through the static_search dictionary in the html_theme_options.

To improve the search performance, a debounce function is available. By default, a delay of 300 milliseconds is applied. To modify this value, declare the delay key in the static_search dictionary with a value specifying the amount of milliseconds to wait before executing the search. A value of 0 disables the debounce function.

Additionally, you can decide the limit of the search results by setting the limit key in the static_search dictionary. The default value is 10.

To exclude files or directories from the search index, you can use the files_to_exclude key in the static_search dictionary. This key is a list of strings representing the directories or files to exclude from the search index.

Here is an example of how to add the static_search dictionary to the html_theme_options dictionary:

```
html_theme_options = {
    "static_search": {
        "threshold": 0.5,
        "limit": 10,
        "minMatchCharLength": 1,
        "delay": 300,
        "files_to_exclude": ["_build", "api/", "examples/sphinx_demo"],
    },
}
```

To customise the indexing of your documentation, you can use the index_patterns dictionary in the conf.py file. This dictionary contains the paths to the directories you want to index and the type of nodes to index. The type of nodes can be ALL_NODES, TITLES or PARAGRAPHS. The default value is TITLES + PARAGRAPHS.

Here is an example of how to add the index_patterns dictionary to the *conf.py*`file:

```
index_patterns = {
    "api/": ALL_NODES,
    "examples/": TITLES + PARAGRAPHS,
}
```

The above example indexes all nodes in the api/directory and only titles and paragraphs in the examples/directory.

```
Note

All other options are available in the Fuse.js documentation.
```

Here is an example of how to add the static_search dictionary to the html_theme_options dictionary:

Chapter 2. User guide

```
"threshold": 0.5,
    "limit": 10,
    "minMatchCharLength": 1,
    "delay": 300,
},
```

Note

Serve locally your documentation using the python -m http.server -d /path/to/docs/html/ to have a live-preview of your search results. This method is compliant with the CORS policy and allows to load the generated resource files containing the indices of your documentation. The search bar does not work if you open the HTML files directly in the browser.

To open the documentation in a local server, run the following command in the directory where the HTML files are located:

```
python -m http.server
```

Then, open the browser and go to http://localhost:8000.

2.3.4 Cheat sheets

If a cheat sheet has been created for your PyAnsys library, with quarto, you can add it to the left navigation pane of your documentation.

In the html_theme_options dictionary, you add a child dictionary named cheatsheet that contain these keys, in the order given:

- 1. file: File name including the extension of the cheat sheet. If the file is inside a directory, include the directory name relative to the root of the documentation. For example, if the cheat sheet is in the getting_started directory, the file name is getting_started/cheat_sheet.qmd.
- 2. title: Title of the cheat sheet to be displayed in the left navigation pane.
- 3. pages: List of names for the pages to include the cheat sheet on. If no value is provided, the cheat sheet is displayed only on the main index.html file.
- 4. version: Version of the cheat sheet. If no value is provided, the version is main by default.

Here is an example of how to add the cheatsheet dictionary to the *html_theme_options*` dictionary:

Here is an example of how to show a thumbnail of a PyMAPDL cheat sheet in the left navigation pane of its main index.rst file and the learning.rst file in its "Getting started" section:

Note

To use this feature, you must have the *quarto <https://quarto.org/>* package installed. To create thumbnails of generated PDF files, the theme is using *pdf2image*. So you should have the poppler package installed in your system. For more information, see the pdf2image documentation.

2.3.5 What's new section

The "What's new" section is an option that allows you to highlight new features in your library for each minor version within the changelog file.

To install the "What's new" dependencies from ansys-sphinx-theme, run the following command:

```
pip install ansys-sphinx-theme[changelog]
```

To get started, create a YAML file named whatsnew.yml in the doc/changelog.d directory. The YAML file should contain the following structure:

```
fragments:
    title: Feature title
    version: 0.2.0 # The version the feature is introduced
    content: |
        Feature description in RST format.

- title: Another feature title
    version: 0.1.2
    content: |
        Feature description in RST format.
```

The dropdown generation only supports the following RST formats in the "content" field:

- Bold: Use double asterisks to wrap the text.
- Italics: Use single asterisks to wrap the text.
- Code samples: Use single or double backticks to wrap the text.
- Links: Use the following format to include links:

```
`link text <https://www.example.com>`_
```

• Code blocks: Use the following format to include code blocks:

```
.. code:: python
print("hello world")
```

If a format is used in the "content" field that does not fall into the categories above, it will not be rendered correctly.

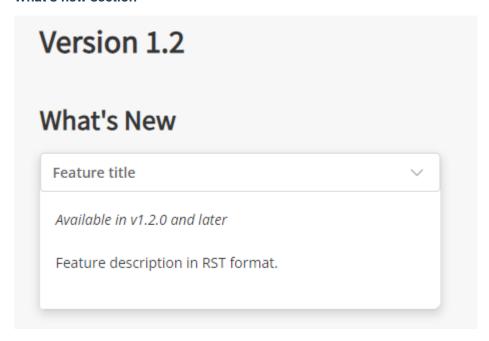
To enable the "What's new" sections and sidebar in the changelog file, add the following dictionary to the html_theme_options dictionary:

The dictionary contains the following keys:

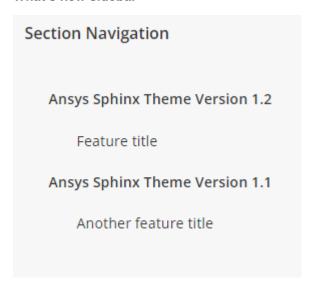
- whatsnew_file_path: The path to the YAML file containing what's new content local to the doc/source directory. If not provided, the what's new section will not be generated.
- changelog_file_path: The path to the changelog.rst file local to the doc/source directory. If not provided, the what's new section will not be generated.
- sidebar_pages: List of names for the pages to include the what's new sidebar on. If not provided, the what's new sidebar is not displayed.
- sidebar_no_of_headers: Number of minor version sections to display in the what's new sidebar. By default, it displays three version sections in the sidebar.
- sidebar_no_of_contents: Number of what's new content to display under each minor version in the what's new sidebar. If not provided, it displays all dropdowns by default.

The following images show a sample "What's new" section and sidebar in the changelog file:

What's new section



What's new sidebar



2.4 The linkcode extension

The linkcode extension automatically adds *source* links to the documentation for Python, C, C++, and JavaScript objects. It allows you to link to the source code hosted on GitHub.

To use the linkcode extension, you must add it to the extensions variable in your project's Sphinx conf.py file:

```
extensions = ["ansys_sphinx_theme.extension.linkcode"]
```

2.4.1 Configuration options

The Linkcode extension provides a way to configure its behavior by using certain options within your conf.py file. Depending on your preferred approach, you can utilize the direct configuration options or the html_context dictionary to streamline your settings.

If both sets of configuration options are given, the direct configuration options (that is, link_code_library, link_code_source, link_code_branch) has precedence over the corresponding settings in the html_context dictionary.

Direct configuration options

- link_code_library: The user/repository name where the source code is hosted. For example, ansys/ansys-sphinx-theme.
- link_code_source (str, optional, default: ''): The relative path of the source code file within the repository. For example, src.
- link_code_branch (str, optional, default: 'main'): The GitHub branch. It can be a specific version like main
 or dev.

If the link_code_source and link_code_branch options are not provided in the configuration, the following default values are used:

- link_code_source: An empty string (''). This links to the root of the repository.
- link_code_branch: main. This is the default branch name used if no branch is specified.

```
# Example of setting direct configuration in example
link_code_library = "username/repo-name"
link_code_source = "src"
link_code_branch = "dev"
```

Using html_context dictionary

You also have the option to centralize your GitHub-related configuration by incorporating it directly into the html_context dictionary within your conf.py file. This approach allows you to minimize redundancy and manage the GitHub-related information more effectively for the extension:

```
# Example of setting GitHub-related configuration in conf.py
html_context = {
    "github_user": "<your-github-org>",
    "github_repo": "<your-github-repo>",
    "github_version": "<your-branch>",
    "source_path": "<path-from-root-to-your-source_file>",
}
```

With this setup, you can fine-tune your configuration according to your preferences and requirements, enhancing the integration of the linkcode extension into your documentation.

2.5 Sphinx AutoAPI

To use Sphinx AutoAPI with the Ansys Sphinx Theme, you must add ansys_sphinx_theme.extension.autoapi to the extensions list in your conf.py file and set the ansys_sphinx_theme_autoapi theme options in the html_theme_options dictionary.

• project: The name of the project.

- output: The path to the directory where the generated files are placed. By default, this is set to the api directory.
- templates: The path to the directory containing the custom templates for sphinx-autoapi. By default, this is set to the autoapi_templates directory in the theme package.
- directory: The path to the directory containing the source code with respect to the conf.py file. By default, this is set to the src/ansys directory.
- use_implicit_namespaces: If set to True, the autoapi extension use *implicit namespaces*. By default, this is set to True.
- keep_files: If set to True, the autoapi extension keeps the generated files. By default, this is set to True.
- own_page_level: The level of the page where the autoapi extension places the content of the class. By default, this is set to class.
- type: The type of the autoapi extension. By default, this is set to python.
- options: The options to pass to the autoapi extension. By default, this is set to ["members", "undoc-members", "show-inheritance", "show-module-summary", "special-members"].
- class_content: The content of the class. By default this is set to class.
- ignore: The list of directories to ignore. By default, this is empty.
- add_toctree_entry: If set to True, the autoapi extension adds the generated files to the TOC tree. By default, this is set to False.
- package_depth: The depth of the package. By default, this is set to 3. This is the namespace depth of the package. For example, if the package is ansys, the depth is 1. If the package is ansys. foo, the depth is 2.
- member_order: The order to document members. By default, this is set to bysource. Other options include alphabetical, which orders members by their name (case sensitive), or groupwise, which orders members by their type and alphabetically.

All these options can be set in the conf.py file of your Sphinx project.

```
html_theme_options = {
    "ansys_sphinx_theme_autoapi": {
        "project": "My Project",
        "output": "api",
        "directory": "src/ansys",
        "use_implicit_namespaces": True,
        "keep_files": True,
        "own_page_level": "class",
        "type": "python",
        "options": [
            "members",
            "undoc-members",
            "show-inheritance",
            "show-module-summary".
            "special-members".
        ],
        "class_content": "class",
        "ignore": [],
        "add_toctree_entry": False,
        "package_depth": 3,
        "member_order": "bysource",
    }
}
```

You need to add ansys_sphinx_theme.extension.autoapi to the extensions list in your conf.py file:

```
extensions = [
   "ansys_sphinx_theme.extension.autoapi",
]
```

The complete configuration for sphinx-autoapi in your conf.py file should look like this:

```
html_theme_options = {
    "ansys_sphinx_theme_autoapi": {
        "project": "My Project",
        "output": "api",
        "use_implicit_namespaces": True,
        "directory": "src/ansys",
        "keep_files": True,
        "own_page_level": "class",
        "type": "python",
        "options": [
            "members",
            "undoc-members",
            "show-inheritance",
            "show-module-summary",
            "special-members",
        ],
        "class_content": "class",
    }
}
extensions = [
    "ansys_sphinx_theme.extension.autoapi",
```

CHAPTER

THREE

EXAMPLES

This section provides examples that show how the Ansys Sphinx Theme renders different Sphinx extensions and documentation components.

3.1 Sphinx extensions

These examples show how the Ansys Sphinx Theme renders different Sphinx extensions.

Sphinx design Examples of how the Sphinx design is rendered.

Sphinx design Jupyter notebook - nbsphinx Examples of how notebooks are rendered.

Jupyter notebook - nbsphinx Sphinx gallery Examples of how the Sphinx gallery is rendered.

Sphinx-Gallery Sphinx autoapi Examples of how Sphinx AutoAPI documentation is rendered.

Sphinx AutoAPI

3.2 Documentation components

These examples show how the Ansys Sphinx Theme renders different documentation components.

Tables Examples of tables with JavaScript and RST rendered using the ansys-sphinx-theme.

Table Admonitions Examples of how admonitions are rendered.

Admonitions

3.2.1 Sphinx design

This example shows how the Ansys Sphinx Theme renders documentation components using the sphinx-design extension. For comprehensive information, see its documentation.

Credits and acknowledgments

The examples presented below are sourced from the Sphinx Design project Copyright (c) by Chris Sewell (2023), available at sphinx design examples. This project is licensed under the MIT License.

Badge-basic

```
:bdg:`plain badge`
:bdg-primary:`primary`, :bdg-primary-line`
```

```
:bdg-secondary:`secondary`, :bdg-secondary-line:`secondary-line`
:bdg-success:`success`, :bdg-success-line:`success-line`
:bdg-info:`info`, :bdg-info-line:`info-line`
:bdg-warning:`warning`, :bdg-warning-line:`warning-line`
:bdg-danger:`danger`, :bdg-danger-line:`danger-line`
:bdg-light:`light`, :bdg-light-line:`light-line`
:bdg-muted:`muted`, :bdg-muted-line:`muted-line`
:bdg-dark:`dark`, :bdg-dark-line:`dark-line`
:bdg-white:`white`, :bdg-white-line:`white-line`
:bdg-black:`black`, :bdg-black-line:`black-line`
```

This directive renders as follows:

plain badge

primary, primary-line

secondary, secondary-line

success, success-line

info, info-line

warning, warning-line

danger, danger-line

light, light-line

muted, muted-line

dark, dark-line

white, white-line

black, black-line

Badge-link

```
:bdg-link-primary:`https://example.com`

:bdg-link-primary-line:`explicit title <https://example.com>`
```

This directive renders as follows:

https://example.com

explicit title

Button-link

```
.. button-link:: https://example.com

Button text
.. button-link:: https://example.com
    :color: primary
    :shadow:
.. button-link:: https://example.com
    :color: primary
    :outline:
.. button-link:: https://example.com
    :color: secondary
    :expand:
```

This directive renders as follows:

https://example.com

Button text

https://example.com

https://example.com

https://example.com

Card-basic

```
.. card:: Card Title

Card content
```

This directive renders as follows:

Card Title Card content

Card-carousel

```
.. card-carousel:: 2
    .. card:: card 1
        content
    .. card:: card 2
        Longer
        content
```

```
.. card:: card 3
.. card:: card 4
.. card:: card 5
.. card:: card 6
```

This directive renders as follows:

```
card 1 content
card 2 Longer
content
card 3 card 4 card 5 card 6
```

Card-head-foot

```
.. card:: Card Title

   Header
   ^^^
   Card content
   +++
   Footer
```

This directive renders as follows:

Header

Card Title Card content

Footer

Card-images

```
.. grid:: 2 3 3 4

.. grid-item::

    .. card:: Title
        :img-background: images/particle_background.jpg
        :class-card: sd-text-black
        :img-alt: my text

        Text

.. grid-item-card:: Title
        :img-top: images/particle_background.jpg
        :img-alt:
        Header
```

```
Content
+++
Footer

.. grid-item-card:: Title
:img-bottom: images/particle_background.jpg

Header
^^^
Content
+++
Footer
```

This directive renders as follows:



Title Text



Header

Title Content

Footer

Header

Title Content

Footer



Card-link

```
... cards-clickable:
Clickable cards
. . . . . . . . . . . . . . . .
Using the ``link`` and ``link-type`` options, you can turn an entire card into au
→clickable link. Try hovering over then clicking on the cards below:
.. card:: Clickable Card (external)
    :link: https://example.com
    The entire card can be clicked to navigate to https://example.com.
.. card:: Clickable Card (external)
    :link: https://example.com
    :link-alt: example.com
    The entire card can be clicked to navigate to https://example.com.
.. card:: Clickable Card (internal)
    :link: cards-clickable
    :link-type: ref
    The entire card can be clicked to navigate to the ``cards-clickable`` reference card-
→link.txt.
.. card:: Clickable Card (internal)
    :link: cards-clickable
    :link-type: ref
    :link-alt: clickable cards
    The entire card can be clicked to navigate to the ``cards-clickable`` reference card-
⊸link.txt.
```

This directive renders as follows:

Clickable cards

Using the link and link-type options, you can turn an entire card into a clickable link. Try hovering over then clicking on the cards below:

Clickable Card (external) The entire card can be clicked to navigate to https://example.com.

https://example.com Clickable Card (external) The entire card can be clicked to navigate to https://example.com.

example.com Clickable Card (internal) The entire card can be clicked to navigate to the cards-clickable reference card-link.txt.

Clickable cards Clickable Card (internal) The entire card can be clicked to navigate to the cards-clickable reference card-link.txt.

clickable cards

Card-title-link

This directive renders as follows:

Div-basic

```
.. div:: sd-text-center sd-font-italic sd-text-primary

Some CSS styled text
```

This directive renders as follows:

Some CSS styled text

Dropdown-basic

```
.. dropdown::
    Dropdown content
.. dropdown:: Dropdown title
    Dropdown content
.. dropdown:: Open dropdown
    :open:
    Dropdown content
```

This directive renders as follows:

Dropdown content

Dropdown title

Dropdown content

Open dropdown

Dropdown content

Dropdown-options

```
.. dropdown:: Title
   :name: dropdown-options.txt
   :color: info
   :icon: alert
```

```
:margin: 1
:class-container: class-container
:class-title: class-title
:class-body: class-body

Dropdown content
:ref:`dropdown-options.txt`, :ref:`text <dropdown-options.txt>`
```

This directive renders as follows:

Title

Dropdown content

Title, text

Grid-basic

This directive renders as follows:

Α

В

 \mathbf{C}

D

Grid-card-columns

This directive renders as follows:

Α

В

 \mathbf{C}

Grid-card

```
.. grid:: 2
.. grid-item-card:: Title 1

A
.. grid-item-card:: Title 2

B
```

This directive renders as follows:

Title 1 A

Title 2 B

Grid-gutter

```
.. grid-item-card::
    A
.. grid-item-card::
    B
```

This directive renders as follows:

Δ

В

Α

В

Grid-nested

```
.. grid:: 1 1 2 2
   :gutter: 1
   .. grid-item::
        .. grid:: 1 1 1 1
            :gutter: 1
            .. grid-item-card:: Item 1.1
                Multi-line
                content
            .. grid-item-card:: Item 1.2
                Content
    .. grid-item::
        .. grid:: 1 1 1 1
            :gutter: 1
            .. grid-item-card:: Item 2.1
                Content
            .. grid-item-card:: Item 2.2
                Content
            .. grid-item-card:: Item 2.3
```

Content

This directive renders as follows:

Item 1.1 Multi-line

content

Item 1.2 Content

Item 2.1 Content

Item 2.2 Content

Item 2.3 Content

Icon-fontawesome

```
An icon :fas:`spinner;sd-bg-primary sd-bg-text-primary`, some more text.
```

This directive renders as follows:

An icon, some more text.

Icon-material-design

```
- A regular icon: :material-regular: `data_exploration; 2em`, some more text
- A coloured regular icon: :material-regular: `settings; 3em; sd-text-success`, some more__
-text.
- A coloured outline icon: :material-outlined: `settings; 3em; sd-text-success`, some more__
-text.
- A coloured sharp icon: :material-sharp: `settings; 3em; sd-text-success`, some more text.
- A coloured round icon: :material-round: `settings; 3em; sd-text-success`, some more text.
- A coloured two-tone icon: :material-twotone: `settings; 3em; sd-text-success`, some more__
-text.
- A fixed size icon: :material-regular: `data_exploration; 24px`, some more text.
```

This directive renders as follows:

- A regular icon: , some more text
- A coloured regular icon: , some more text.
- A coloured outline icon: , some more text.
- A coloured sharp icon: , some more text.
- A coloured round icon: , some more text.
- A coloured two-tone icon: , some more text.
- A fixed size icon: , some more text.

Icon-octicon

```
A coloured icon: :octicon:`report;lem;sd-text-info`, some more text.
```

This directive renders as follows:

A coloured icon: , some more text.

Tab-basic

```
.. tab-set::
    .. tab-item:: Label1
        Content 1
        .. tab-item:: Label2
        Content 2
```

This directive renders as follows:

Label1

Content 1

Label2

Content 2

Tab-code-set

```
.. tab-set-code::
    .. literalinclude:: ./snippet.py
        :language: python
    .. code-block:: javascript
    a = 1;
```

This directive renders as follows:

PYTHON

```
# Copyright (C) 2021 - 2025 ANSYS, Inc. and/or its affiliates.
# SPDX-License-Identifier: MIT
#
#
# Permission is hereby granted, free of charge, to any person obtaining a copy
# of this software and associated documentation files (the "Software"), to deal
# in the Software without restriction, including without limitation the rights
# to use, copy, modify, merge, publish, distribute, sublicense, and/or sell
# copies of the Software, and to permit persons to whom the Software is
# furnished to do so, subject to the following conditions:
#
# The above copyright notice and this permission notice shall be included in all
# copies or substantial portions of the Software.
```

(continued from previous page)

```
# THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
# IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
# FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
# AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
# LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,
# OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE
# SOFTWARE.
"""Sample functions for ansys-sphinx-theme."""
def func(arg1, arg2):
    """Summary line <should be one one line>.
   Extended description of function. Can span multiple lines and
   provides a general overview of the function.
    .. warning::
       Use the ``.. warning::` directive within the doc-string for any
       warnings you would like to explicitly state. For example, if
       this method will be deprecated in the next release.
   Parameters
    . _ _ _ _ _ _ _ _ _
   arg1 : int
       Description of arg1.
    arg2 : str
       Description of arg2.
   Returns
    bool
       Description of return value.
   Examples
   >>> func(1, "foo")
   True
   return True
```

JAVASCRIPT

```
a = 1;
```

Tab-options

```
.. tab-set::
    :class: class-set

.. tab-item:: **Label**
    :name: tab-options.txt
    :selected:
    :class-container: class-container
    :class-label: class-label
    :class-content: class-content

Content

:ref:`tab-options.txt`, :ref:`text <tab-options.txt>`
```

This directive renders as follows:

Label

Content

Label, text

Tab-sync

```
.. tab-set::
   :sync-group: category
   .. tab-item:: Label1
        :sync: key1
       Content 1
    .. tab-item:: Label2
       :sync: key2
       Content 2
.. tab-set::
    :sync-group: category
    .. tab-item:: Label1
        :sync: key1
       Content 1
    .. tab-item:: Label2
        :sync: key2
       Content 2
```

This directive renders as follows:

Label1

Content 1

Label2

Content 2

Label1

Content 1

Label2

Content 2

3.2.2 Jupyter notebook - nbsphinx

This example shows how the Ansys Sphinx Theme renders a Jupyter notebook using the nbspinx extension.

Download this example as a Jupyter notebook.

Nbsphinx example

This example renders a Jupyter notebook using the nbsphinx extension.

Plot a simple sphere using PyVista.

```
[1]: import pyvista as pv

pv.set_jupyter_backend("html")

sphere = pv.Sphere()
sphere.plot()

EmbeddableWidget(value='<iframe srcdoc="<!DOCTYPE html>\n<html>\n <head>\n <meta_
http-equiv=&quot;Content-...</pre>
```

Render equations using the IPython math module.

```
[3]: from IPython.display import Math
eq = Math(r"\int\limits_{-\infty}^\infty f(x) \delta(x - x_0) dx = f(x_0)")
eq
```

```
[3]: \int_{-\infty}^{\infty} f(x)\delta(x-x_0)dx = f(x_0)
```

```
[4]: from IPython.display import Latex Latex(r"This is a \LaTeX{} equation: a^2 + b^2 = c^2")
[4]: This is a Latex equation: a^2 + b^2 = c^2
```

Render a table in markdown.

This is an example to render the table inside the notebook

Α	В	A and B
False	False	False
True	False	False
False	True	False
True	True	True

Render a data frame

```
[5]: import pandas as pd
    # Create a dictionary of data
    data = {
        "A": [True, False, True, False],
        "B": [False, True, False, True],
        "C": [True, True, False, False],
    }
    # Create DataFrame from the dictionary
    df = pd.DataFrame(data)
    # Display the DataFrame
    df.head()
[5]:
           Α
                         C
       True False
                      True
    1 False True
                     True
       True False False
    3 False True False
```

3.2.3 Sphinx-Gallery

This example shows how the Ansys Sphinx Theme renders examples using Sphinx-Gallery.

Sphinx-Gallery

This example shows how to add a new example when using Sphinx-Gallery.

To use Sphinx-Gallery, first install the package with this command:

```
pip install sphinx-gallery
```

Then, add the package to the extensions variable in your Sphinx conf.py file:

```
extensions = [
    "sphinx_gallery.gen_gallery",
]
```

Plot a simple sphere using PyVista

This code plots a simple sphere using PyVista.

```
import pyvista as pv

pv.set_jupyter_backend("html")

sphere = pv.Sphere()
sphere.plot()
```

Plot a simple sphere using PyVista with a plotter

```
plotter = pv.Plotter(notebook=True)
plotter.add_mesh(sphere, color="white", show_edges=True)
plotter.title = "3D Sphere Visualization"
plotter.show()
```

Render equations using IPython math

This example shows how to render equations using the IPython math module.

```
from IPython.display import Math, display

# LaTeX formatted equation
equation = r"\int\limits_{-\infty}^\infty f(x) \delta(x - x_0) \, dx = f(x_0)"

# Display the equation
display(Math(equation))
```

```
from IPython.display import Latex

Latex(r"This is a \LaTeX{} equation: $a^2 + b^2 = c^2$")
```

Render a table in markdown

This is an example to render a table inside the markdown with Sphinx-Gallery.

Α	В	A and B
False	False	False
True	False	False
False	True	False
True	True	True

Render a table using pandas

```
import pandas as pd

# Create a dictionary of data
data = {
    "A": [True, False, True, False],
    "B": [False, True, False, True],
    "C": [True, True, False, False],
}

# Create DataFrame from the dictionary
df = pd.DataFrame(data)

# Display the DataFrame
df.head()
```

3.2.4 Sphinx AutoAPI

This example shows how the Ansys Sphinx Theme renders API documentation using the Sphinx AutoAPI extension.

API reference

This section describes ansys_sphinx_theme endpoints, their capabilities, and how to interact with them programmatically.

The examples package

Summary

Submodules

sample_func	Sample functions for ansys-sphinx-theme.
samples	Sample classes and functions for ansys-sphinx-theme.
type_hint_example	Module containing an example function using type hinting.

The sample_func.py module

Summary

Functions

func Summary line <should be one one line>.

examples.sample func.func

```
examples.sample_func.func(arg1, arg2)
```

Summary line <should be one one line>.

Extended description of function. Can span multiple lines and provides a general overview of the function.

Warning

Use the .. warning:: directive within the doc-string for any warnings you would like to explicitly state. For example, if this method will be deprecated in the next release.

Parameters

Examples

```
>>> func(1, "foo")
True
```

Description

Sample functions for ansys-sphinx-theme.

The samples.py module

Summary

Classes

ExampleClass	The summary line for a class docstring should fit on one line.
Complex	Custom implementation of a complex number.

ExampleClass

```
class examples.samples.ExampleClass(param1, param2, param3=0)
```

The summary line for a class docstring should fit on one line.

Attributes should be documented inline with the attribute's declaration.

Properties created with the @property decorator should be documented in the property's getter method.

Parameters

```
param1
```

[str] Description of param1.

param2

[list of str] Description of param2. Multiple lines are supported.

param3

[int, optional] Description of param3.

Examples

An example of how to initialize this class should be given.

```
>>> from ansys_sphinx_theme import samples
>>> example = samples.ExampleClass("mystr", ["apple", "orange"], 3)
```

Overview

Methods

 ${\it example_method} \quad Class \ methods \ are \ similar \ to \ regular \ functions.$

Properties

readonly_property	Properties should be documented in their getter method.
readwrite_property	Set or return the readwrite property.

Attributes

attr1 attr2 attr3 attr4 attr5

Special methods

```
__special__ By default special members with docstrings are not included. __special_without_docstring__
```

Import detail

```
from examples.samples import ExampleClass
```

Property detail

property ExampleClass.readonly_property: str

Properties should be documented in their getter method.

Examples

```
>>> example.readonly_property
"readonly_property"
```

property ExampleClass.readwrite_property

Set or return the readwrite property.

Properties with both a getter and setter should only be documented in their getter method.

If the setter method contains notable behavior, it should be mentioned here.

Examples

```
>>> example.readwrite_property
"readwrite_property"

>>> example.readwrite_property = "hello world"
>>> example.readwrite_property
'hello world'
```

Attribute detail

```
ExampleClass.attr1
ExampleClass.attr2
ExampleClass.attr3 = 0
ExampleClass.attr4 = ['attr4']
ExampleClass.attr5 = None
```

Method detail

```
ExampleClass.example_method(param1, param2)
```

Class methods are similar to regular functions.

```
Parameters
```

```
param1
[str] The first parameter.

param2
[str] The second parameter.

Returns
bool
```

True if successful, False otherwise.

Notes

Do not include the self parameter in the Parameters section.

Examples

```
>>> example.example_method("foo", "bar")
True
```

ExampleClass.__special__()

By default special members with docstrings are not included.

Special members are any methods or attributes that start with and end with a double underscore. Any special member with a docstring will be included in the output, if napoleon_include_special_with_doc is set to True.

This behavior can be enabled by changing the following setting in Sphinx's conf.py:

```
napoleon_include_special_with_doc = True
```

```
ExampleClass.__special_without_docstring__()
```

Complex

```
class examples.samples.Complex(real, imag=0.0)
```

Bases: object

Custom implementation of a complex number.

Parameters

real

[float] Real component of the complex number.

imag

[float, optional] Imaginary component of the complex number.

Examples

```
>>> my_num = Complex(real=1, imag=-1.0)
>>> my_num
(1.0 + 1.0j)
```

Overview

Properties

real	Real component of this complex number.
imag	Real component of this complex number.
abs	Return the absolute value of this number.

Special methods

add	Add two complex numbers.
sub	Subtract two complex numbers.
mu1	Multiply two complex numbers.
truediv	Divide two complex numbers.
repr	

Import detail

```
from examples.samples import Complex
```

Property detail

property Complex.real

Real component of this complex number.

Examples

```
>>> my_num = Complex(real=1, imag=-1.0)
>>> my_num.real
1.0
```

property Complex.imag

Real component of this complex number.

Examples

```
>>> my_num = Complex(real=1, imag=-1.0)
>>> my_num.imag
-1.0
```

Set the imaginary component

```
>>> my_num.imag = 2.0
>>> my_num.imag
2.0
```

property Complex.abs

Return the absolute value of this number.

Examples

```
>>> my_num = Complex(real=1, imag=1.0)
>>> my_num.abs
```

Method detail

```
Complex.__add__(other)
```

Add two complex numbers.

```
Complex.__sub__(other)
```

Subtract two complex numbers.

```
Complex.__mul__(other)
```

Multiply two complex numbers.

```
Complex.__truediv__(other)
```

Divide two complex numbers.

```
Complex.__repr__()
```

Description

Sample classes and functions for ansys-sphinx-theme.

The type_hint_example.py module

Summary

Functions

type_hint_func Summary containing the function description.

examples.type hint example.type hint func

```
examples.type_hint_example.type_hint_func(param1: int = 1, param2: str = 'test', param3: int | float = 1) \rightarrow bool
```

Summary containing the function description.

Extended description of the function. Can span multiple lines and provides a general overview of the function.

Parameters

param1

Description of an integer parameter.

param2

Description of a string parameter.

param3

Parameter that can be either int or float using Union (typing).

Returns

bool

Description of the returned value.

Examples

```
>>> func(1, "foo", 1)
True
```

Description

Module containing an example function using type hinting.

Description

A sub-package containing various examples for checking their rendering.

3.2.5 Table

The table directive with ansys sphinx theme allows for rendering of tables. There are different types of tables, such as the data table, longtable-centered, and table-centered, each serving different purposes.

Normal table

Table 1: Truth table for "not"

Α	В	С
False		
	True False	False True
False		
	True	False
	False	True
False	True	
		False
	True False	True

Data table

This is an example of a data table that can be rendered using the table directive. It consists of three columns representing the variables A, B, and A and B respectively. Each row represents a different combination of True and False for variables A and B. The *datatable* class can be used to style the data table.

Α	В	A and B
False	False	False
True	False	False
False	True	False
True	True	True

Longtable-centered

The longtable-centered class can be used to create a table that spans multiple pages and is centered horizontally. This is useful for tables that have a large number of rows or columns. Here is an example of a longtable-centered:

	MAPDL Command
GUI commands	• *ASK
GUI commands	• *ASK
GUI commands	• *ASK

Table-centered

The table-centered class can be used to create a table that is horizontally centered. This is useful for tables that have only a few columns. Here is an example of a table-centered:

	MAPDL Command
GUI commands	• *ASK
GUI commands	• *ASK
GUI commands	• *ASK

3.2.6 Admonitions

Admonitions are specially formatted blocks that highlight important information in the documentation. This page shows how the Ansys Sphinx Theme renders admonitions.

The examples shown below are derived from the PyData Sphinx Theme project, copyrighted by pandas, 2018. Original examples can be found in Examples in the PyData Sphinx Theme documentation. These examples are licensed under the BSD 3-Clause License.

The examples included below in this page were originally copyrighted and licensed as follows:

Copyright (c) 2021, Pradyun Gedam. Licensed under the Creative Commons Attribution-ShareAlike 4.0 International License (SPDX-License-Identifier: CC-BY-SA-4.0), as specified by the PyData Sphinx Theme in their examples.

Admonitions

Sphinx provides several different types of admonitions.

topic

This is a topic.

This is what admonitions are a special case of, according to the docutils documentation.

admonition

The one with the custom titles

It's got a certain charm to it.

attention

Attention

Climate change is real.

caution

Caution

Cliff ahead: Don't drive off it.

danger

Danger

Mad scientist at work!



Error Does not compute.

hint

Hint Insulators insulate, until they are subject to ______ voltage.

important

Important

Tech is not neutral, nor is it apolitical.

note

Note

This is a note.

seealso

See also

Other relevant information.

tip

Tip

25% if the service is good.

todo

Todo

This needs the sphinx.ext.todo extension.

warning

Warning

Reader discretion is strongly advised.

versionadded

Added in version v0.1.1: Here's a version added message.

versionchanged

Changed in version v0.1.1: Here's a version changed message.

deprecated

Deprecated since version v0.1.1: Here's a deprecation message.

versionremoved

Removed in version v0.1.1: Here's a version removed message.

CHAPTER

FOUR

RELEASE NOTES

4.1 1.3.2 (2025-02-21)

4.1.1 Miscellaneous

- fix: alignment and styles for primary sidebar #621
- fix: typo in autoapi template #630

4.1.2 Documentation

• Fix: whatsnew config instructions #619

4.1.3 Maintenance

• fix: prettier pre-commit hook #627

4.2 1.3.1 (2025-02-06)

4.2.1 Documentation

• Fix: optimize imports for whatsnew #617

4.3 1.3.0 (2025-02-05)

4.3.1 Dependencies

- chore(deps): bump pygithub from 2.4.0 to 2.5.0 #582
- chore(deps): bump pyvista[jupyter] from 0.44.1 to 0.44.2 #589
- chore(deps): bump sphinx-autoapi from 3.3.3 to 3.4.0 #592
- chore(deps): bump notebook from 7.2.2 to 7.3.1 #596
- chore(deps): bump jupytext from 1.16.4 to 1.16.5 #598
- chore(deps): bump jupytext from 1.16.5 to 1.16.6 #600
- chore(deps): bump notebook from 7.3.1 to 7.3.2 #606
- chore(deps): bump nbsphinx from 0.9.5 to 0.9.6 #607
- chore(deps): bump sphinx-notfound-page from 1.0.4 to 1.1.0 #611

4.3.2 Miscellaneous

- chore: bump version 1.3.dev0 #577
- fix: CONTRIBUTORS.md #578
- fix: errors and warnings caused by CSS imports #588
- fix: typo in date variable for last modified #602
- chore: update CHANGELOG for v1.2.5 #609

4.3.3 Documentation

- chore: update CHANGELOG for v1.2.0 #576
- feat: add whatsnew options #583
- chore: update CHANGELOG for v1.2.1 #585
- chore: update CHANGELOG for v1.2.2 #587
- chore: update CHANGELOG for v1.2.3 #595
- chore: update CHANGELOG for v1.2.4 #604
- chore: update CHANGELOG for v1.2.7 #613

4.3.4 Maintenance

• fix: style and license headers #608

4.4 1.2.7 - 2025-02-04

4.4.1 Maintenance

• fix: astroid version #612

4.5 1.2.5 - 2025-01-13

4.5.1 Dependencies

• chore(deps): update pydata-sphinx-theme requirement from <0.16,>=0.15.4 to >=0.15.4,<0.17 #605

4.6 1.2.4 - 2024-12-20

4.6.1 Miscellaneous

• fix: impose upper version for the pydata-sphinx-theme #603

4.7 1.2.3 - 2024-12-05

4.7.1 Miscellaneous

• fix: rename the date to ast_build_date in js #594

4.8 1.2.2 - 2024-11-21

4.8.1 Miscellaneous

• fix: section ids with search #586

4.9 1.2.1 - 2024-11-13

4.9.1 Miscellaneous

• fix: enable local page Search and default to PyData search on 'Enter' #584

4.9.2 Documentation

• Enable 'show_prev_next' in the documented defaults #580

4.10 1.2.0 - 2024-10-31

4.10.1 Fixed

- fix: contributors file #529
- fix: padding for toctree entry in sidebar #554
- fix: revisit header size #555

4.10.2 Dependencies

- chore: bump version 1.2.dev0 #518
- chore(deps): bump sphinx-gallery from 0.17.1 to 0.18.0 #538
- chore(deps): bump sphinx from 8.0.2 to 8.1.3 #546
- chore(deps): update pydata-sphinx-theme requirement from <0.16,>=0.15.4 to >=0.15.4,<0.17 #562
- chore(deps): bump sphinx-autoapi from 3.3.2 to 3.3.3 #569

4.10.3 Miscellaneous

- fix: cleanup autoapi templates using macros #556
- fix: typos #560
- fix: change the display of math rendering #568

4.10.4 Documentation

- chore: update CHANGELOG for v1.1.0 #516
- chore: update CHANGELOG for v1.1.1 #520
- chore: update CHANGELOG for v1.1.2 #522
- docs: adding title in example section #524
- fix: add more components to the search indexing #541
- chore: update CHANGELOG for v1.1.3 #545
- chore: update CHANGELOG for v1.1.4 #547

4.8. 1.2.2 - 2024-11-21 51

- chore: update CHANGELOG for v1.1.5 #550
- doc: allow developer to skip examples build #553
- chore: update CHANGELOG for v1.1.6 #559
- docs: update the landing page #561
- chore: update CHANGELOG for v1.1.7 #566
- fix: exclude search files #572

4.10.5 Maintenance

- ci: bump ansys/actions from 7 to 8 #530
- chore: add hacktoberfest labels #535
- ci: add new labels #549
- ci: update labeling strategy #558

4.11 1.1.7 - 2024-10-23

4.11.1 Miscellaneous

• fix: ensure app.builder.outdir is a Path object #565

4.12 1.1.6 - 2024-10-18

4.12.1 Fixed

• fix: add the default search options in the config env #557

4.13 1.1.5 - 2024-10-15

4.13.1 Fixed

• use ansys-sphinx-theme variables in CSS files #537

4.14 1.1.4 - 2024-10-14

4.14.1 Fixed

• fix: static search performance #525

4.15 1.1.3 - 2024-10-11

4.15.1 Fixed

• fix: add default enter for search #542

4.16 1.1.2 - 2024-10-02

4.16.1 Fixed

• fix: add version as params in cheatsheet #521

4.17 1.1.1 - 2024-10-01

4.17.1 Fixed

- fix(ci): update to Ansys actions v8 #517
- fix: update the token and email of bot for changelog actions #519

4.18 1.1.0 - 2024-10-01

4.18.1 Added

• feat: add static search #487

4.18.2 Changed

- chore: update CHANGELOG for v1.0.0 #445
- chore: update CHANGELOG for v1.0.1 #447
- chore: update CHANGELOG for v1.0.2 #451
- chore: update CHANGELOG for v1.0.3 #455

4.18.3 Fixed

- maint: update tooling, cleanup and drop python 3.9 #484
- feat: implement default search bar expansion behavior #496
- fix: the anchor url of search with the switcher version #497
- fix: change file location for search.json file #509
- maint: styles for dark theme search bar #511
- fix: style for smaller media #513
- fix: navigation end columns #514
- fix: add title breadcrumbs #515

4.18.4 Dependencies

- maint: version 1.1.dev0 #448
- build(deps): bump pygithub from 2.3.0 to 2.4.0 #480
- build(deps): bump notebook from 7.2.1 to 7.2.2 #482
- build(deps): bump sphinx-autoapi from 3.2.1 to 3.3.0 #485
- build(deps): bump sphinx-autoapi from 3.3.0 to 3.3.1 #488
- build(deps): bump pandas from 2.2.2 to 2.2.3 #508

• build(deps): bump sphinx-autoapi from 3.3.1 to 3.3.2 #512

4.18.5 Documentation

- chore: update CHANGELOG for v1.0.4 #463
- chore: update CHANGELOG for v1.0.6 #476
- chore: update CHANGELOG for v1.0.7 #478
- chore: update CHANGELOG for v1.0.8 #491
- chore: update CHANGELOG for v1.0.9 #501
- chore: update CHANGELOG for v1.0.10 #504
- chore: update CHANGELOG for v1.0.11 #507

4.19 1.0.11 - 2024-09-19

4.19.1 Fixed

• fix: location of nbsphinx #506

4.20 1.0.10 - 2024-09-18

4.20.1 Fixed

• fix: do not display captions for nbgallery #503

4.21 1.0.9 - 2024-09-16

4.21.1 Added

• feat: add member_order to autoapi #495

4.21.2 Fixed

• fix: autoapi relative directory path wrt tox env #494

4.22 1.0.8 - 2024-09-03

4.22.1 Fixed

- fix: Align jupyter cell output #489
- fix: the download in sphinx gallery #490

4.23 1.0.7 - 2024-08-23

4.23.1 Fixed

- fix: autoapi extension #472
- fix: admonitions styles for topic admonition #477

4.24 1.0.6 - 2024-08-23

4.24.1 Fixed

- fix: download icon with sphinx-gallery and nbsphinx #471
- feat: add different width for different media for main content #473
- fix: the scrollbar on sidebar #474

4.24.2 Documentation

• chore: update CHANGELOG for v1.0.5 #470

4.25 1.0.5 - 2024-08-16

4.25.1 Fixed

• feat: add default logo links for Ansys and PyAnsys logos #469

4.25.2 Dependencies

• build(deps): bump nbsphinx from 0.9.4 to 0.9.5 #465

4.26 1.0.4 - 2024-08-13

4.26.1 Fixed

• fix: tables and cell output #460

4.26.2 Dependencies

- ci: bump ansys/actions from 6 to 7 #457
- build(deps): bump numpydoc from 1.7.0 to 1.8.0 #459

4.27 1.0.3 - 2024-08-09

4.27.1 Fixed

- fix: minor style changes #452
- fix: downgrade the autoapi and keep autoapi toctree to True by default #453
- fix: pygment_styles with dark and light theme and dark theme table #454

4.28 1.0.2 - 2024-08-08

4.28.1 Changed

• maint: update ansys actions #449

4.28.2 Fixed

• fix: sphinx design image background #450

4.29 1.0.1 - 2024-08-08

4.29.1 Fixed

• fix: stable docs indexing package name #446

4.30 1.0.0 - 2024-08-08

4.30.1 Added

- fix: update the github icon #401
- feat: add default logo and update logo option with theme #425
- feat: add quarto cheat sheet extension with cheat sheet option #428

4.30.2 Changed

- chore: update CHANGELOG for v0.16.2 #381
- chore: update CHANGELOG for v0.16.3 #389
- chore: update CHANGELOG for v0.16.4 #390
- chore: update CHANGELOG for v0.16.5 #394
- chore: update CHANGELOG for v0.16.6 #402

4.30.3 Fixed

- fix: Align cheat sheet center #382
- fix: reformat the style files #406
- fix: reformat the table styles #408
- fix: reformat navigation bar and background #409
- fix: primary, 'secondary' sidebars and links #411
- fix: sphinx design reformat #412
- fix: update the breadcrumbs #419
- fix: admonitions style #424
- fix: sidebar borders and overflow #427
- fix: search bar styles #429
- fix: updated the logo options #431
- fix: add dropdown styles for the header navigation bar #437
- fix: dark theme variables #438
- fix: sphinx card box shadow on focus #439
- fix: focus links with keyboard #440

• fix: search bar style for dark theme, icons links #442

4.30.4 Dependencies

- build(deps-dev): update pydata-sphinx-theme requirement from <0.15,>=0.14 to >=0.15 #336
- chore: version 0.17.dev0 #386
- chore(deps): bump requests from 2.32.2 to 2.32.3 #391
- docs: reformat the documentation #396
- chore(deps): bump sphinx-autoapi from 3.1.1 to 3.1.2 #405
- build(deps): bump pyvista[jupyter] from 0.43.10 to 0.44.0 #413
- build(deps): bump jupytext from 1.16.2 to 1.16.3 #415
- build(deps): bump sphinx from 7.3.7 to 7.4.4 #416
- build(deps): bump sphinx from 7.4.4 to 7.4.5 #417
- build(deps): bump sphinx from 7.4.5 to 7.4.6 #418
- build(deps): bump sphinx-autoapi from 3.1.2 to 3.2.0 #420
- build(deps): bump sphinx-gallery from 0.16.0 to 0.17.0 #421
- build(deps): bump pyvista[jupyter] from 0.44.0 to 0.44.1 #422
- build(deps): bump sphinx from 7.4.6 to 7.4.7 #423
- build(deps): bump sphinx-autoapi from 3.2.0 to 3.2.1 #426
- build(deps): bump sphinx-notfound-page from 1.0.2 to 1.0.3 #432
- build(deps): bump jupytext from 1.16.3 to 1.16.4 #433
- build(deps): bump sphinx-notfound-page from 1.0.3 to 1.0.4 #434
- build(deps): bump sphinx-design from 0.6.0 to 0.6.1 #435
- build(deps): bump sphinx from 7.4.7 to 8.0.2 #436
- build(deps): bump sphinx-gallery from 0.17.0 to 0.17.1 #441

4.30.5 Miscellaneous

- refactor: remove function duplicate #407
- docs: Update mail id in README.rst #414

4.31 0.16.6 - 2024-06-18

4.31.1 Fixed

• fix: wrong env var name for PACKAGE NAME #395

4.32 0.16.5 - 2024-05-31

4.32.1 Fixed

• fix: sphinx design card font size #393

4.33 0.16.4 - 2024-05-29

4.33.1 Added

• feat: adapt package to general PyAnsys repository layout #387

4.33.2 Dependencies

- chore(deps): bump sphinx-design from 0.5.0 to 0.6.0 #383
- chore(deps): bump sphinx-notfound-page from 1.0.1 to 1.0.2 #384
- chore(deps): bump sphinx-autoapi from 3.1.0 to 3.1.1 #385

4.34 0.16.3 - 2024-05-29

4.34.1 Fixed

• fix: update the sphinx design style to disable display of name #388

4.35 0.16.2 - 2024-05-22

4.35.1 Changed

• chore: update CHANGELOG for v0.16.1 #379

4.35.2 Miscellaneous

• docs: update changelog_template.jinja #380

4.36 0.16.1 - 2024-05-22

4.36.1 Added

- feat: add nerd fonts for autoapi templates icon #362
- feat: add the changelog action #370
- feat: add autoapi extension #372

4.36.2 Fixed

• fix: add changelog action in ci-cd #378

4.36.3 Dependencies

- chore(deps): bump requests from 2.31.0 to 2.32.1 #374
- maint: update the sphinx-autoapi version #375
- chore(deps): bump sphinx-notfound-page from 1.0.0 to 1.0.1 #376
- chore(deps): bump requests from 2.32.1 to 2.32.2 #377

PYTHON MODULE INDEX

е

```
examples, 37
examples.sample_func, 37
examples.samples, 38
examples.type_hint_example, 43
```

60 Python Module Index

INDEX

```
Symbols
                                                   G
                                                   generate_preamble()
__add__() (in module Complex), 42
                                                                                      module
                                                                              (in
                                                                                                 an-
__mul__() (in module Complex), 42
                                                            sys_sphinx_theme.latex), 7
__repr__() (in module Complex), 42
__special__() (in module ExampleClass), 41
__special_without_docstring__() (in module Ex-
                                                   imag (in module Complex), 42
        ampleClass), 41
                                                   M
__sub__() (in module Complex), 42
__truediv__() (in module Complex), 42
                                                   module
                                                       examples, 37
Α
                                                       examples.sample_func, 37
abs (in module Complex), 42
                                                       examples.samples, 38
attr1 (in module ExampleClass), 40
                                                       examples.type_hint_example, 43
attr2 (in module ExampleClass), 40
                                                   R
attr3 (in module ExampleClass), 40
attr4 (in module ExampleClass), 40
                                                   readonly_property (in module ExampleClass), 39
attr5 (in module ExampleClass), 40
                                                   readwrite_property (in module ExampleClass), 40
                                                   real (in module Complex), 42
В
built-in function
    examples.sample_func.func(), 38
    examples.type_hint_example.type_hint_func(),
        43
F
example_method() (in module ExampleClass), 40
examples
    module, 37
examples.sample_func
    module, 37
examples.sample_func.func()
    built-in function, 38
examples.samples
    module, 38
examples.samples.Complex (built-in class), 41
examples.samples.ExampleClass (built-in class), 38
examples.type_hint_example
    module, 43
examples.type_hint_example.type_hint_func()
    built-in function, 43
```