Command line tool

```
System Message: ERROR/3 (p:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 1)
Unknown directive type "highlight".
.. highlight:: none
```

Scrapy is controlled through the scrapy command-line tool, to be referred here as the "Scrapy tool" to differentiate it from the sub-commands, which we just call "commands" or "Scrapy commands".

The Scrapy tool provides several commands, for multiple purposes, and each one accepts a different set of arguments and options.

(The scrapy deploy command has been removed in 1.0 in favor of the standalone scrapyd-deploy. See Deploying your project.)

Configuration settings

Scrapy will look for configuration parameters in ini-style scrapy.cfg files in standard locations:

- 1. /etc/scrapy.cfg or c:\scrapy\scrapy.cfg (system-wide),
- 2. ~/.config/scrapy.cfg (\$XDG_CONFIG_HOME) and ~/.scrapy.cfg (\$HOME) for global (user-wide) settings, and
- scrapy.cfg inside a Scrapy project's root (see next section).

Settings from these files are merged in the listed order of preference: user-defined values have higher priority than system-wide defaults and project-wide settings will override all others, when defined.

Scrapy also understands, and can be configured through, a number of environment variables. Currently these are:

• SCRAPY SETTINGS MODULE (see ref. topics-settings-module-envvar)

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 39); backlink

Unknown interpreted text role "ref".
```

• SCRAPY_PROJECT (see ref: topics-project-envvar')

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 40); backlink

Unknown interpreted text role "ref".
```

• SCRAPY PYTHON SHELL (see ref topics-shell)

```
System Message: ERROR/3 (p:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master\) (docs) (topics) commands.rst, line 41); backlink
Unknown interpreted text role "ref".
```

Default structure of Scrapy projects

Before delving into the command-line tool and its sub-commands, let's first understand the directory structure of a Scrapy project. Though it can be modified, all Scrapy projects have the same file structure by default, similar to this:

```
scrapy.cfg
myproject/
    __init__.py
items.py
middlewares.py
pipelines.py
settings.py
spiders/
    __init__.py
spider1.py
spider2.py
```

The directory where the <code>scrapy.cfg</code> file resides is known as the *project root directory*. That file contains the name of the python module that defines the project settings. Here is an example:

```
[settings]
default = myproject.settings
```

Sharing the root directory between projects

A project root directory, the one that contains the scrapy.cfg, may be shared by multiple Scrapy projects, each with its own settings module.

In that case, you must define one or more aliases for those settings modules under [settings] in your scrapy.cfg file:

```
[settings]
default = myproject1.settings
project1 = myproject1.settings
project2 = myproject2.settings
```

By default, the scrapy command-line tool will use the default settings. Use the scrapy_project environment variable to specify

a different project for scrapy to use:

```
$ scrapy settings --get BOT_NAME
Project 1 Bot
$ export SCRAPY_PROJECT=project2
$ scrapy settings --get BOT_NAME
Project 2 Bot
```

Using the scrapy tool

You can start by running the Scrapy tool with no arguments and it will print some usage help and the available commands:

```
Scrapy X.Y - no active project

Usage:
    scrapy <command> [options] [args]

Available commands:
    crawl          Run a spider
    fetch          Fetch a URL using the Scrapy downloader
[...]
```

The first line will print the currently active project if you're inside a Scrapy project. In this example it was run from outside a project. If run from inside a project it would have printed something like this:

```
Scrapy X.Y - project: myproject
Usage:
    scrapy <command> [options] [args]
[...]
```

Creating projects

The first thing you typically do with the scrapy tool is create your Scrapy project:

```
scrapy startproject myproject [project_dir]
```

That will create a Scrapy project under the $project_dir$ directory. If $project_dir$ wasn't specified, $project_dir$ will be the same as myproject.

Next, you go inside the new project directory:

```
cd project dir
```

And you're ready to use the scrapy command to manage and control your project from there.

Controlling projects

You use the scrapy tool from inside your projects to control and manage them.

For example, to create a new spider:

```
scrapy genspider mydomain mydomain.com
```

Some Scrapy commands (like <u>command</u>: crawl') must be run from inside a Scrapy project. See the <u>ref</u>: commands reference <topics-commands-ref> below for more information on which commands must be run from inside projects, and which not.

```
System\ Message: ERROR/3\ (\texttt{D:\noboarding-resources}) sample-onboarding-resources \\ \texttt{scrapy-master})\ (\texttt{docs})\ (\texttt{topics})\ commands.rst,\ line\ 160);\ \textit{backlink}
```

Unknown interpreted text role "command".

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 160); backlink
Unknown interpreted text role "ref".
```

Also keep in mind that some commands may have slightly different behaviours when running them from inside projects. For example, the fetch command will use spider-overridden behaviours (such as the user_agent attribute to override the user-agent) if the url being fetched is associated with some specific spider. This is intentional, as the fetch command is meant to be used to check how spiders are downloading pages.

Available tool commands

This section contains a list of the available built-in commands with a description and some usage examples. Remember, you can always get more info about each command by running:

```
scrapy <command> -h
```

And you can see all available commands with:

```
scrapy -h
```

There are two kinds of commands, those that only work from inside a Scrapy project (Project-specific commands) and those that also work without an active Scrapy project (Global commands), though they may behave slightly different when running from inside a project (as they would use the project overridden settings).

Global commands:

:command:\startproject\

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 194); backlink
```

Unknown interpreted text role "command".

:command:`genspider`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 195); backlink

Unknown interpreted text role "command".

· :command:\settings

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 196); backlink

Unknown interpreted text role "command".

· :command:`runspider`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 197); backlink

Unknown interpreted text role "command".

· :command:\shell

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 198); backlink

Unknown interpreted text role "command".

· :command:'fetch'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 199); backlink

Unknown interpreted text role "command".

· :command:'view'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)\) (docs) (topics) commands.rst, line 200); backlink

Unknown interpreted text role "command".

· :command:'version'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)\) (docs) (topics) commands.rst, line 201); backlink

Unknown interpreted text role "command".

Project-only commands:

• :command:`crawl

 $System \ Message: ERROR/3 \ (\c : \c sample-onboarding-resources \scrapy-master) \ (docs) \ (topics) \ commands.rst, \ line 205); \ backlink$

Unknown interpreted text role "command".

• :command:`check`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 206); backlink

Unknown interpreted text role "command".

• :command:`list`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 207); backlink

Unknown interpreted text role "command".

· :command:'edit'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line

208); backlink

Unknown interpreted text role "command".

· :command:'parse'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 209); backlink

Unknown interpreted text role "command".

· :command:'bench'

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 210); backlink

Unknown interpreted text role "command".

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Unknown directive type "command".

.. command:: startproject

startproject

- Syntax:scrapy startproject <project_name> [project_dir]
- · Requires project: no

Creates a new Scrapy project named project_name, under the project_dir directory. If project_dir wasn't specified, project_dir will be the same as project_name.

Usage example:

\$ scrapy startproject myproject

 $System\ Message: ERROR/3\ (\verb|D:\onboarding-resources| sample-onboarding-resources| scrapy-master| (docs)\ (scrapy-master)\ (docs)\ (topics)\ commands.rst, line\ 228)$

Unknown directive type "command".

.. command:: genspider

genspider

- Syntax:scrapy genspider [-t template] <name> <domain or URL>
- Requires project: no

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 236)

Unknown directive type "versionadded".

```
.. versionadded:: 2.6.0 $\operatorname{The\ ability}$ to pass a URL instead of a domain.
```

Create a new spider in the current folder or in the current project's spiders folder, if called from inside a project. The <name> parameter is set as the spider's name, while <domain or URL> is used to generate the allowed_domains and start_urls spider's attributes.

Note

Even if an HTTPS URL is specified, the protocol used in start_urls is always HTTP. This is a known issue: issue: 3553.

System Message: ERROR/3 (p:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 241); backlink

Unknown interpreted text role "issue".

Usage example:

```
$ scrapy genspider -1
Available templates:
basic
crawl
csvfeed
xmlfeed

$ scrapy genspider example example.com
Created spider 'example' using template 'basic'

$ scrapy genspider -t crawl scrapyorg scrapy.org
Created spider 'scrapyorg' using template 'crawl'
```

This is just a convenience shortcut command for creating spiders based on pre-defined templates, but certainly not the only way to create spiders. You can just create the spider source code files yourself, instead of using this command.

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)\) (docs) (topics) commands.rst, line 264)

Unknown directive type "command".

... command:: crawl
```

crawl

- Syntax: scrapy crawl <spider>
- · Requires project: yes

Start crawling using a spider.

Usage examples:

```
$ scrapy crawl myspider
[ ... myspider starts crawling ... ]
```

 $System\ Message: ERROR/3\ (\texttt{D:\onboarding-resources}\sample-onboarding-resources\\scrapy-master\)\ (\texttt{docs})\ (\texttt{topics})\ commands.rst,\ line\ 280)$

Unknown directive type "command".

.. command:: check

check

- Syntax: scrapy check [-1] <spider>
- · Requires project: yes

Run contract checks.

Usage examples:

```
$ scrapy check -1
first_spider
  * parse
  * parse_item
second_spider
  * parse_item
second_spider
  * parse_item

$ scrapy check
[FAILED] first_spider:parse_item
>>> 'RetailPricex' field is missing

[FAILED] first_spider:parse
>>> Returned 92 requests, expected 0..4
```

 $System\ Message: ERROR/3\ (\texttt{D:\onboarding-resources}\ sample-onboarding-resources\ scrapy-master\ (docs)\ (topics)\ commands.rst,\ line\ 311)$

Unknown directive type "command".

.. command:: list

list

- Syntax: scrapy list
- Requires project: yes

List all available spiders in the current project. The output is one spider per line.

Usage example:

```
$ scrapy list
spider1
spider2
```

 $System\ Message: ERROR/3\ (p:\onboarding-resources\sample-onboarding-resources\scrapy-master)\ (docs)\ (topics)\ commands.rst,\ line\ 328)$

Unknown directive type "command".

.. command:: edit

edit

- Syntax: scrapy edit <spider>
- · Requires project: yes

Edit the given spider using the editor defined in the EDITOR environment variable or (if unset) the setting EDITOR' setting.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 336); backlink

Unknown interpreted text role "setting".

This command is provided only as a convenience shortcut for the most common case, the developer is of course free to choose any tool or IDE to write and debug spiders.

Usage example:

\$ scrapy edit spider1

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 347)
Unknown directive type "command".
.. command:: fetch
```

fetch

- Syntax: scrapy fetch <url>
- · Requires project: no

Downloads the given URL using the Scrapy downloader and writes the contents to standard output.

The interesting thing about this command is that it fetches the page how the spider would download it. For example, if the spider has a USER_AGENT attribute which overrides the User Agent, it will use that one.

So this command can be used to "see" how your spider would fetch a certain page.

If used outside a project, no particular per-spider behaviour would be applied and it will just use the default Scrapy downloader settings.

Supported options:

- --spider=SPIDER: bypass spider autodetection and force use of specific spider
- --headers: print the response's HTTP headers instead of the response's body
- --no-redirect: do not follow HTTP 3xx redirects (default is to follow them)

Usage examples:

```
$ scrapy fetch --nolog http://www.example.com/some/page.html
[ ... html content here ... ]
$ scrapy fetch --nolog --headers http://www.example.com/
{'Accept-Ranges': ['bytes'],
   'Age': ['1263 '],
   'Connection': ['close '],
   'Content-Length': ['596'],
   'Content-Type': ['text/html; charset=UTF-8'],
   'Date': ['Wed, 18 Aug 2010 23:59:46 GMT'],
   'Etag': ['"573c1-254-48c99c87349680"'],
   'Last-Modified': ['Fri, 30 Jul 2010 15:30:18 GMT'],
   'Server': ['Apache/2.2.3 (CentOS)']}
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 391)

Unknown directive type "command".

.. command:: view

view

- Syntax: scrapy view <url>
- · Requires project: no

Opens the given URL in a browser, as your Scrapy spider would "see" it. Sometimes spiders see pages differently from regular users, so this can be used to check what the spider "sees" and confirm it's what you expect.

Supported options:

- $\bullet\,$ --spider=SPIDER: bypass spider autodetection and force use of specific spider
- --no-redirect: do not follow HTTP 3xx redirects (default is to follow them)

Usage example:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 414)

Unknown directive type "command".

```
.. command:: shell
```

shell

- Syntax: scrapy shell [url]
- Requires project: no

Starts the Scrapy shell for the given URL (if given) or empty if no URL is given. Also supports UNIX-style local file paths, either relative with ./ or ../ prefixes or absolute file paths. See ref" topics-shell for more info.

 $System\ Message: ERROR/3 \ (\texttt{D:\noboarding-resources} \ sample-onboarding-resources \ scrapy-master) \ (\texttt{docs}) \ (\texttt{topics}) \ commands.rst, \ line\ 422); \ \textit{backlink}$

Unknown interpreted text role 'ref'.

Supported options:

- --spider=SPIDER: bypass spider autodetection and force use of specific spider
- -c code: evaluate the code in the shell, print the result and exit

--no-redirect: do not follow HTTP 3xx redirects (default is to follow them); this only affects the URL you may pass as
argument on the command line; once you are inside the shell, fetch (url) will still follow HTTP redirects by default.

Usage example:

```
$ scrapy shell http://www.example.com/some/page.html
[ ... scrapy shell starts ... ]
$ scrapy shell --nolog http://www.example.com/ -c '(response.status, response.url)'
(200, 'http://www.example.com/')

# shell follows HTTP redirects by default
$ scrapy shell --nolog http://httpbin.org/redirect-to?url=http%3A%2F%2Fexample.com%2F -c '(response.status, response.ur.
(200, 'http://example.com/')

# you can disable this with --no-redirect
# (only for the URL passed as command line argument)
$ scrapy shell --no-redirect --nolog http://httpbin.org/redirect-to?url=http%3A%2F%2Fexample.com%2F -c '(response.status)
(302, 'http://httpbin.org/redirect-to?url=http%3A%2F%2Fexample.com%2F')
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\ (scrapy-master) (docs) (topics) commands.rst, line 455)

Unknown directive type "command".

.. command:: parse

parse

- Syntax: scrapy parse <url> [options]
- · Requires project: yes

Fetches the given URL and parses it with the spider that handles it, using the method passed with the --callback option, or parse if not given.

Supported options:

- --spider=SPIDER: bypass spider autodetection and force use of specific spider
- --a NAME=VALUE: set spider argument (may be repeated)
- --callback or -c: spider method to use as callback for parsing the response
- --meta or -m: additional request meta that will be passed to the callback request. This must be a valid json string. Example: --meta='{"foo": "bar"}'
- --cbkwargs: additional keyword arguments that will be passed to the callback. This must be a valid json string. Example: --cbkwargs='{"foo": 'bar"}'
- --pipelines: process items through pipelines
- --rules or -r: use class: ~scrapy.spiders.CrawlSpider` rules to discover the callback (i.e. spider method) to use for parsing
 the response

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 483); backlink

Unknown interpreted text role "class".

- --noitems: don't show scraped items
- --nolinks: don't show extracted links
- --nocolour: avoid using pygments to colorize the output
- --depth or -d: depth level for which the requests should be followed recursively (default: 1)
- $\bullet \;\; \text{--verbose} \; \text{or} \; \text{-v:} \; \text{display information for each depth level}$
- $\bullet\,\,$ --output or -o: dump scraped items to a file

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 500)

Unknown directive type "versionadded".

.. versionadded:: 2.3

Usage example:

 $System\ Message: ERROR/3\ (\texttt{D:\onboarding-resources}\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)\ (docs)\ (topics)\ commands.rst,\ line\ 521)$

Unknown directive type "command".

```
.. command:: settings
```

settings

- ullet Syntax: scrapy settings [options]
- · Requires project: no

Get the value of a Scrapy setting.

If used inside a project it'll show the project setting value, otherwise it'll show the default Scrapy value for that setting.

Example usage:

```
$ scrapy settings --get BOT_NAME
scrapybot
$ scrapy settings --get DOWNLOAD_DELAY
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 541)

Unknown directive type "command".

.. command:: runspider

runspider

- Syntax: scrapy runspider <spider_file.py>
- · Requires project: no

Run a spider self-contained in a Python file, without having to create a project.

Example usage:

```
\ scrapy runspider myspider.py [ ... spider starts crawling ... ]
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 557)

Unknown directive type "command".

.. command:: version

version

- Syntax: scrapy version [-v]
- Requires project: no

Prints the Scrapy version. If used with -v it also prints Python, Twisted and Platform info, which is useful for bug reports.

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Unknown directive type "command".

.. command:: bench

bench

- Syntax: scrapy bench
- Requires project: no

Run a quick benchmark test. ref. benchmarking.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master) (docs) (topics) commands.rst, line 576); backlink

Unknown interpreted text role "ref".

Custom project commands

You can also add your custom project commands by using the setting: COMMANDS_MODULE' setting. See the Scrapy commands in scrapy/commands for examples on how to implement your commands.

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Unknown interpreted text role "setting".

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Unknown directive type "setting".

.. setting:: COMMANDS MODULE

COMMANDS_MODULE

Default: ' ' (empty string)

A module to use for looking up custom Scrapy commands. This is used to add custom commands for your Scrapy project.

Example:

```
COMMANDS_MODULE = 'mybot.commands'
```

Register commands via setup.py entry points

You can also add Scrapy commands from an external library by adding a scrapy.commands section in the entry points of the library sctup.py file.

The following example adds my_command command:

```
from setuptools import setup, find_packages
setup(name='scrapy-mymodule',
   entry_points={
    'scrapy.commands': [
    'my_command=my_scrapy_module.commands:MyCommand',
    ],
},
)
```