Core API

This section documents the Scrapy core API, and it's intended for developers of extensions and middlewares.

Crawler API

The main entry point to Scrapy API is the :class:`~scrapy.crawler.Crawler` object, passed to extensions through the `from_crawler` class method. This object provides access to all Scrapy core components, and it's the only way for extensions to access them and hook their functionality into Scrapy.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 15); *backlink*

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 20)

Unknown directive type "module".

```
.. module:: scrapy.crawler
   :synopsis: The Scrapy crawler
```

The Extension Manager is responsible for loading and keeping track of installed extensions and it's configured through the :setting:`EXTENSIONS` setting which contains a dictionary of all available extensions and their order similar to how you :ref:`configure the downloader middlewares <topics-downloader-middleware-setting>`.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 23); *backlink*

Unknown interpreted text role "setting".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 23); *backlink*

Unknown interpreted text role "ref".

The Crawler object must be instantiated with a :class:`scrapy.Spider` subclass and a :class:`scrapy.settings.Settings` object.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 31); *backlink*

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 31); *backlink*

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 35)

Unknown directive type "attribute".

```
.. attribute:: settings

    The settings manager of this crawler.

    This is used by extensions & middlewares to access the Scrapy settings
    of this crawler.

    For an introduction on Scrapy settings see :ref:`topics-settings`.

    For the API see :class:`~scrapy.settings.Settings` class.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 46)

Unknown directive type "attribute".

```
.. attribute:: signals

    The signals manager of this crawler.

    This is used by extensions & middlewares to hook themselves into Scrapy
    functionality.

    For an introduction on signals see :ref:`topics-signals`.

    For the API see :class:`~scrapy.signalmanager.SignalManager` class.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 57)

Unknown directive type "attribute".

```
.. attribute:: stats

    The stats collector of this crawler.

    This is used from extensions & middlewares to record stats of their
    behaviour, or access stats collected by other extensions.

    For an introduction on stats collection see :ref:`topics-stats`.

    For the API see :class:`~scrapy.statscollectors.StatsCollector` class.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 68)

Unknown directive type "attribute".

```
.. attribute:: extensions

    The extension manager that keeps track of enabled extensions.

    Most extensions won't need to access this attribute.

    For an introduction on extensions and a list of available extensions on
    Scrapy see :ref:`topics-extensions`.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 77)

Unknown directive type "attribute".

```
.. attribute:: engine

    The execution engine, which coordinates the core crawling logic
    between the scheduler, downloader and spiders.

    Some extension may want to access the Scrapy engine, to inspect  or
    modify the downloader and scheduler behaviour, although this is an
    advanced use and this API is not yet stable.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 86)

Unknown directive type "attribute".

```
.. attribute:: spider

    Spider currently being crawled. This is an instance of the spider class
    provided while constructing the crawler, and it is created after the
    arguments given in the :meth:`crawl` method.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 92)

Unknown directive type "method".

```
.. method:: crawl(*args, **kwargs)

    Starts the crawler by instantiating its spider class with the given
    ``args`` and ``kwargs`` arguments, while setting the execution engine in
    motion.

    Returns a deferred that is fired when the crawl is finished.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 100)

Unknown directive type "automethod".

```
.. automethod:: stop
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 102)

Unknown directive type "autoclass".

```
.. autoclass:: CrawlerRunner
   :members:
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 105)

Unknown directive type "autoclass".

```
.. autoclass:: CrawlerProcess
   :show-inheritance:
   :members:
   :inherited-members:
```

Settings API

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 115)

Unknown directive type "module".

```
.. module:: scrapy.settings
   :synopsis: Settings manager
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 118)

Unknown directive type "attribute".

```
.. attribute:: SETTINGS_PRIORITIES

    Dictionary that sets the key name and priority level of the default
    settings priorities used in Scrapy.

    Each item defines a settings entry point, giving it a code name for
    identification and an integer priority. Greater priorities take more
    precedence over lesser ones when setting and retrieving values in the
    :class:`~scrapy.settings.Settings` class.

    .. highlight:: python

    ::

        SETTINGS_PRIORITIES = {
            'default': 0,
            'command': 10,
```

```
            'project': 20,
            'spider': 30,
            'cmdline': 40,
        }

    For a detailed explanation on each settings sources, see:
    :ref:`topics-settings`.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 143)

Unknown directive type "autofunction".

```
.. autofunction:: get_settings_priority
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 145)

Unknown directive type "autoclass".

```
.. autoclass:: Settings
   :show-inheritance:
   :members:
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 149)

Unknown directive type "autoclass".

```
.. autoclass:: BaseSettings
   :members:
```

SpiderLoader API

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 157)

Unknown directive type "module".

```
.. module:: scrapy.spiderloader
   :synopsis: The spider loader
```

This class is in charge of retrieving and handling the spider classes defined across the project.

Custom spider loaders can be employed by specifying their path in the :setting:`SPIDER_LOADER_CLASS` project setting. They must fully implement the :class:`scrapy.interfaces.ISpiderLoader` interface to guarantee an errorless execution.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 165); *backlink*

Unknown interpreted text role "setting".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 165); *backlink*

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 170)

Unknown directive type "method".

```
.. method:: from_settings(settings)

   This class method is used by Scrapy to create an instance of the class.
   It's called with the current project settings, and it loads the spiders
   found recursively in the modules of the :setting:`SPIDER_MODULES`
```

```
setting.

:param settings: project settings
:type settings: :class:`~scrapy.settings.Settings` instance
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 180)

Unknown directive type "method".

```
.. method:: load(spider_name)

   Get the Spider class with the given name. It'll look into the previously
   loaded spiders for a spider class with name ``spider_name`` and will raise
   a KeyError if not found.

   :param spider_name: spider class name
   :type spider_name: str
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 189)

Unknown directive type "method".

```
.. method:: list()

   Get the names of the available spiders in the project.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 193)

Unknown directive type "method".

```
.. method:: find_by_request(request)

   List the spiders' names that can handle the given request. Will try to
   match the request's url against the domains of the spiders.

   :param request: queried request
   :type request: :class:`~scrapy.Request` instance
```

Signals API

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

Unknown directive type "automodule".

```
.. automodule:: scrapy.signalmanager
    :synopsis: The signal manager
    :members:
    :undoc-members:
```

Stats Collector API

There are several Stats Collectors available under the :mod:`scrapy.statscollectors` module and they all implement the Stats Collector API defined by the :class:`~scrapy.statscollectors.StatsCollector` class (which they all inherit from).

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 216); *backlink*

Unknown interpreted text role "mod".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 216); *backlink*

Unknown interpreted text role "class".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 221)

Unknown directive type "module".

```
.. module:: scrapy.statscollectors
   :synopsis: Stats Collectors
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 226)

Unknown directive type "method".

```
.. method:: get_value(key, default=None)

    Return the value for the given stats key or default if it doesn't exist.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 230)

Unknown directive type "method".

```
.. method:: get_stats()

    Get all stats from the currently running spider as a dict.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 234)

Unknown directive type "method".

```
.. method:: set_value(key, value)

    Set the given value for the given stats key.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 238)

Unknown directive type "method".

```
.. method:: set_stats(stats)

    Override the current stats with the dict passed in ``stats`` argument.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 242)

Unknown directive type "method".

```
.. method:: inc_value(key, count=1, start=0)

    Increment the value of the given stats key, by the given count,
    assuming the start value given (when it's not set).
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 247)

Unknown directive type "method".

```
.. method:: max_value(key, value)

    Set the given value for the given key only if current value for the
    same key is lower than value. If there is no current value for the
    given key, the value is always set.
```

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 253)

Unknown directive type "method".

```
.. method:: min_value(key, value)

    Set the given value for the given key only if current value for the
    same key is greater than value. If there is no current value for the
    given key, the value is always set.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 259)

Unknown directive type "method".

```
.. method:: clear_stats()

    Clear all stats.
```

The following methods are not part of the stats collection api but instead used when implementing custom stats collectors:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 266)

Unknown directive type "method".

```
.. method:: open_spider(spider)

    Open the given spider for stats collection.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scrapy-master\docs\topics\(scrapy-master)(docs)(topics)api.rst, line 270)

Unknown directive type "method".

```
.. method:: close_spider(spider)

    Close the given spider. After this is called, no more specific stats
    can be accessed or collected.
```