yamllint

Release 1.29.0

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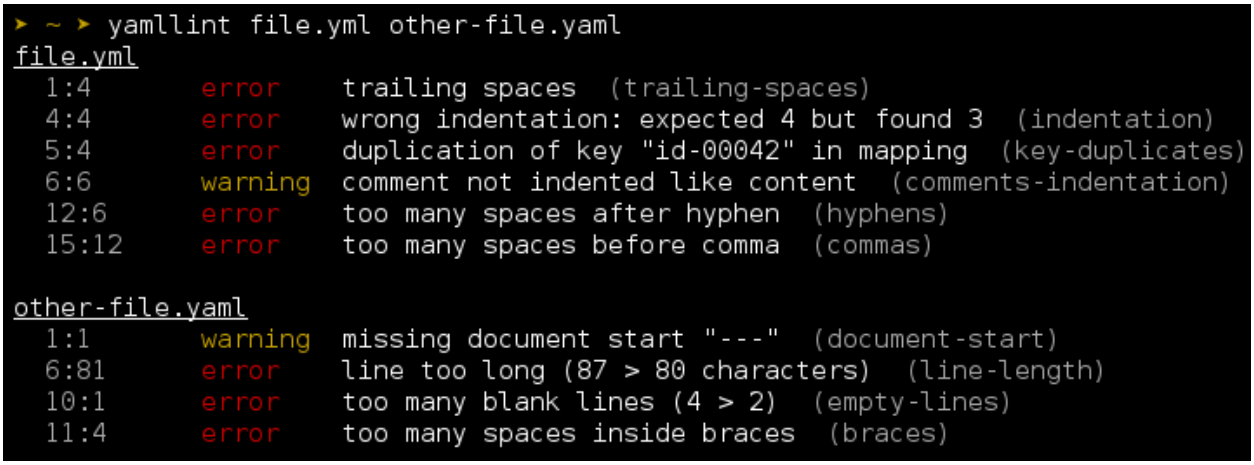
Contents

A linter for YAML files.

yamllint does not only check for syntax validity, but for weirdnesses like key repetition and cosmetic problems such as lines length, trailing spaces, indentation, etc.

CHAPTER 1

Screenshot



Note: The default output format is inspired by eslint, a great linting tool for Javascript.

CHAPTER 2

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2.1 Quickstart

2.1.1 Installing yamllint

On Fedora / CentOS (note: EPEL is required on CentOS):

```
sudo dnf install yamllint
```

On Debian 8+ / Ubuntu 16.04+:

```
sudo apt-get install yamllint
```

On Mac OS 10.11+:

```
brew install yamllint
```

On FreeBSD:

```
pkg install py36-yamllint
```

On OpenBSD:

```
doas pkg_add py3-yamllint
```

Alternatively using pip, the Python package manager:

```
pip install --user yamllint
```

If you prefer installing from source, you can run, from the source directory:

```
python setup.py sdist
pip install --user dist/yamllint-*.tar.gz
```

2.1.2 Running yamllint

Basic usage:

```
yamllint file.yml other-file.yaml
```

You can also lint all YAML files in a whole directory:

```
yamllint .
```

Or lint a YAML stream from standard input:

```
echo -e 'this: is\nvalid: YAML' | yamllint -
```

The output will look like (colors are not displayed here):

```
file.yml
  1:4       error    trailing spaces  (trailing-spaces)
  4:4       error    wrong indentation: expected 4 but found 3  (indentation)
  5:4       error    duplication of key "id-00042" in mapping  (key-duplicates)
  6:6       warning  comment not indented like content  (comments-indentation)
  12:6      error    too many spaces after hyphen  (hyphens)
  15:12     error    too many spaces before comma  (commas)

other-file.yaml
  1:1       warning  missing document start "---"  (document-start)
  6:81      error    line too long (87 > 80 characters)  (line-length)
  10:1      error    too many blank lines (4 > 2)  (empty-lines)
  11:4      error    too many spaces inside braces  (braces)
```

By default, the output of yamllint is colored when run from a terminal, and pure text in other cases. Add the `-f standard` arguments to force non-colored output. Use the `-f colored` arguments to force colored output.

Add the `-f parsable` arguments if you need an output format parsable by a machine (for instance for *syntax highlighting in text editors*). The output will then look like:

```
file.yml:6:2: [warning] missing starting space in comment (comments)
file.yml:57:1: [error] trailing spaces (trailing-spaces)
file.yml:60:3: [error] wrong indentation: expected 4 but found 2 (indentation)
```

If you have a custom linting configuration file (see *how to configure yamllint*), it can be passed to yamllint using the `-c` option:

```
yamllint -c ~/myconfig file.yaml
```

Note: If you have a `.yamllint` file in your working directory, it will be automatically loaded as configuration by yamllint.

2.2 Configuration

yamllint uses a set of *rules* to check source files for problems. Each rule is independent from the others, and can be enabled, disabled or tweaked. All these settings can be gathered in a configuration file.

To use a custom configuration file, use the `-c` option:

```
yamllint -c /path/to/myconfig file-to-lint.yaml
```

If `-c` is not provided, yamllint will look for a configuration file in the following locations (by order of preference):

- a file named `.yamllint`, `.yamllint.yaml`, or `.yamllint.yml` in the current working directory
- a filename referenced by `$YAMLLINT_CONFIG_FILE`, if set
- a file named `$XDG_CONFIG_HOME/yamllint/config` or `~/.config/yamllint/config`, if present

Finally if no config file is found, the default configuration is applied.

2.2.1 Default configuration

Unless told otherwise, yamllint uses its `default` configuration:

```
---

yaml-files:
  - '*.yaml'
  - '*.yml'
  - '.yamllint'

rules:
  braces: enable
  brackets: enable
  colons: enable
  commas: enable
  comments:
    level: warning
  comments-indentation:
    level: warning
  document-end: disable
  document-start:
    level: warning
  empty-lines: enable
  empty-values: disable
  float-values: disable
  hyphens: enable
  indentation: enable
  key-duplicates: enable
  key-ordering: disable
  line-length: enable
  new-line-at-end-of-file: enable
  new-lines: enable
  octal-values: disable
  quoted-strings: disable
  trailing-spaces: enable
  truthy:
    level: warning
```

Details on rules can be found on *the rules page*.

There is another pre-defined configuration named `relaxed`. As its name suggests, it is more tolerant:

```
---
```

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```
extends: default

rules:
  braces:
    level: warning
    max-spaces-inside: 1
  brackets:
    level: warning
    max-spaces-inside: 1
  colons:
    level: warning
  commas:
    level: warning
  comments: disable
  comments-indentation: disable
  document-start: disable
  empty-lines:
    level: warning
  hyphens:
    level: warning
  indentation:
    level: warning
    indent-sequences: consistent
  line-length:
    level: warning
    allow-non-breakable-inline-mappings: true
  truthy: disable
```

It can be chosen using:

```
yamllint -d relaxed file.yml
```

2.2.2 Extending the default configuration

When writing a custom configuration file, you don't need to redefine every rule. Just extend the `default` configuration (or any already-existing configuration file).

For instance, if you just want to disable the `comments-indentation` rule, your file could look like this:

```
# This is my first, very own configuration file for yamllint!
# It extends the default conf by adjusting some options.

extends: default

rules:
  comments-indentation: disable  # don't bother me with this rule
```

Similarly, if you want to set the `line-length` rule as a warning and be less strict on block sequences indentation:

```
extends: default

rules:
  # 80 chars should be enough, but don't fail if a line is longer
  line-length:
    max: 80
```

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```
    level: warning

  # accept both      key:
  #                    - item
  #
  # and              key:
  #                  - item
  indentation:
    indent-sequences: whatever
```

2.2.3 Custom configuration without a config file

It is possible – although not recommended – to pass custom configuration options to yamllint with the `-d` (short for `--config-data`) option.

Its content can either be the name of a pre-defined conf (example: `default` or `relaxed`) or a serialized YAML object describing the configuration.

For instance:

```
yamllint -d "{extends: relaxed, rules: {line-length: {max: 120}}}" file.yaml
```

2.2.4 Errors and warnings

Problems detected by yamllint can be raised either as errors or as warnings. The CLI will output them (with different colors when using the `colored` output format, or `auto` when run from a terminal).

By default the script will exit with a return code `1` *only when* there is one or more error(s).

However if strict mode is enabled with the `-s` (or `--strict`) option, the return code will be:

- `0` if no errors or warnings occur
- `1` if one or more errors occur
- `2` if no errors occur, but one or more warnings occur

If the script is invoked with the `--no-warnings` option, it won't output warning level problems, only error level ones.

2.2.5 YAML files extensions

To configure what yamllint should consider as YAML files when listing directories, set `yaml-files` configuration option. The default is:

```
yaml-files:
  - '*.yaml'
  - '*.yml'
  - '.yamllint'
```

The same rules as for ignoring paths apply (`.gitignore`-style path pattern, see below).

If you need to know the exact list of files that yamllint would process, without really linting them, you can use `--list-files`:

```
yamllint --list-files .
```

2.2.6 Ignoring paths

It is possible to exclude specific files or directories, so that the linter doesn't process them. They can be provided either as a list of paths, or as a bulk string.

You can either totally ignore files (they won't be looked at):

```
extends: default

ignore: |
  /this/specific/file.yaml
  all/this/directory/
  *.template.yaml

# or:

ignore:
  - /this/specific/file.yaml
  - all/this/directory/
  - '*.template.yaml'
```

or ignore paths only for specific rules:

```
extends: default

rules:
  trailing-spaces:
    ignore: |
      /this-file-has-trailing-spaces-but-it-is-OK.yaml
      /generated/*.yaml

# or:

rules:
  trailing-spaces:
    ignore:
      - /this-file-has-trailing-spaces-but-it-is-OK.yaml
      - /generated/*.yaml
```

Note that this `.gitignore`-style path pattern allows complex path exclusion/inclusion, see the pathspec README file for more details. Here is a more complex example:

```
# For all rules
ignore: |
  *.dont-lint-me.yaml
  /bin/
  !/bin/*.lint-me-anyway.yaml

extends: default

rules:
  key-duplicates:
    ignore: |
      generated
```

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```
      *.template.yaml
  trailing-spaces:
    ignore: |
      *.ignore-trailing-spaces.yaml
      ascii-art/*
```

You can also use the `.gitignore` file (or any list of files) through:

```
ignore-from-file: .gitignore
```

or:

```
ignore-from-file: [.gitignore, .yamlignore]
```

Note: However, this is mutually exclusive with the `ignore` key.

If you need to know the exact list of files that yamllint would process, without really linting them, you can use `--list-files`:

```
yamllint --list-files .
```

2.2.7 Setting the locale

It is possible to set the `locale` option globally. This is passed to Python's locale.setlocale, so an empty string `""` will use the system default locale, while e.g. `"en_US.UTF-8"` will use that.

Currently this only affects the `key-ordering` rule. The default will order by Unicode code point number, while locales will sort case and accents properly as well.

```
extends: default

locale: en_US.UTF-8
```

2.3 Rules

When linting a document with yamllint, a series of rules (such as `line-length`, `trailing-spaces`, etc.) are checked against.

A *configuration file* can be used to enable or disable these rules, to set their level (*error* or *warning*), but also to tweak their options.

This page describes the rules and their options.

List of rules

- *braces*
- *brackets*
- *colons*

2.3.1 braces

Use this rule to control the use of flow mappings or number of spaces inside braces (`{` and `}`).

Options

- `forbid` is used to forbid the use of flow mappings which are denoted by surrounding braces (`{` and `}`). Use `true` to forbid the use of flow mappings completely. Use `non-empty` to forbid the use of all flow mappings except for empty ones.
- `min-spaces-inside` defines the minimal number of spaces required inside braces.
- `max-spaces-inside` defines the maximal number of spaces allowed inside braces.
- `min-spaces-inside-empty` defines the minimal number of spaces required inside empty braces.
- `max-spaces-inside-empty` defines the maximal number of spaces allowed inside empty braces.

Default values (when enabled)

```
rules:
  braces:
    forbid: false
```

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```
    min-spaces-inside: 0
    max-spaces-inside: 0
    min-spaces-inside-empty: -1
    max-spaces-inside-empty: -1
```

Examples

1. With `braces: {forbid: true}`

   the following code snippet would **PASS**:

   ```
   object:
     key1: 4
     key2: 8
   ```

   the following code snippet would **FAIL**:

   ```
   object: { key1: 4, key2: 8 }
   ```

2. With `braces: {forbid: non-empty}`

   the following code snippet would **PASS**:

   ```
   object: {}
   ```

   the following code snippet would **FAIL**:

   ```
   object: { key1: 4, key2: 8 }
   ```

3. With `braces: {min-spaces-inside: 0, max-spaces-inside: 0}`

   the following code snippet would **PASS**:

   ```
   object: {key1: 4, key2: 8}
   ```

   the following code snippet would **FAIL**:

   ```
   object: { key1: 4, key2: 8 }
   ```

4. With `braces: {min-spaces-inside: 1, max-spaces-inside: 3}`

   the following code snippet would **PASS**:

   ```
   object: { key1: 4, key2: 8 }
   ```

   the following code snippet would **PASS**:

   ```
   object: { key1: 4, key2: 8   }
   ```

   the following code snippet would **FAIL**:

   ```
   object: {    key1: 4, key2: 8   }
   ```

   the following code snippet would **FAIL**:

   ```
   object: {key1: 4, key2: 8 }
   ```

5. With `braces: {min-spaces-inside-empty: 0, max-spaces-inside-empty: 0}`

   the following code snippet would **PASS**:

   ```
   object: {}
   ```

   the following code snippet would **FAIL**:

   ```
   object: { }
   ```

6. With `braces: {min-spaces-inside-empty: 1, max-spaces-inside-empty: -1}`

   the following code snippet would **PASS**:

   ```
   object: {          }
   ```

   the following code snippet would **FAIL**:

   ```
   object: {}
   ```

2.3.2 brackets

Use this rule to control the use of flow sequences or the number of spaces inside brackets (`[` and `]`).

Options

- `forbid` is used to forbid the use of flow sequences which are denoted by surrounding brackets (`[` and `]`). Use `true` to forbid the use of flow sequences completely. Use `non-empty` to forbid the use of all flow sequences except for empty ones.
- `min-spaces-inside` defines the minimal number of spaces required inside brackets.
- `max-spaces-inside` defines the maximal number of spaces allowed inside brackets.
- `min-spaces-inside-empty` defines the minimal number of spaces required inside empty brackets.
- `max-spaces-inside-empty` defines the maximal number of spaces allowed inside empty brackets.

Default values (when enabled)

```
rules:
  brackets:
    forbid: false
    min-spaces-inside: 0
    max-spaces-inside: 0
    min-spaces-inside-empty: -1
    max-spaces-inside-empty: -1
```

Examples

1. With `brackets: {forbid: true}`

   the following code snippet would **PASS**:

```
object:
  - 1
  - 2
  - abc
```

the following code snippet would **FAIL**:

```
object: [ 1, 2, abc ]
```

2. With `brackets: {forbid: non-empty}`

   the following code snippet would **PASS**:

   ```
   object: []
   ```

   the following code snippet would **FAIL**:

   ```
   object: [ 1, 2, abc ]
   ```

3. With `brackets: {min-spaces-inside: 0, max-spaces-inside: 0}`

   the following code snippet would **PASS**:

   ```
   object: [1, 2, abc]
   ```

   the following code snippet would **FAIL**:

   ```
   object: [ 1, 2, abc ]
   ```

4. With `brackets: {min-spaces-inside: 1, max-spaces-inside: 3}`

   the following code snippet would **PASS**:

   ```
   object: [ 1, 2, abc ]
   ```

   the following code snippet would **PASS**:

   ```
   object: [ 1, 2, abc   ]
   ```

   the following code snippet would **FAIL**:

   ```
   object: [    1, 2, abc   ]
   ```

   the following code snippet would **FAIL**:

   ```
   object: [1, 2, abc ]
   ```

5. With `brackets: {min-spaces-inside-empty: 0, max-spaces-inside-empty: 0}`

   the following code snippet would **PASS**:

   ```
   object: []
   ```

   the following code snippet would **FAIL**:

   ```
   object: [ ]
   ```

6. With `brackets: {min-spaces-inside-empty: 1, max-spaces-inside-empty: -1}`

   the following code snippet would **PASS**:

```
object: [         ]
```

the following code snippet would **FAIL**:

```
object: []
```

2.3.3 colons

Use this rule to control the number of spaces before and after colons (`:`).

Options

- `max-spaces-before` defines the maximal number of spaces allowed before colons (use `-1` to disable).
- `max-spaces-after` defines the maximal number of spaces allowed after colons (use `-1` to disable).

Default values (when enabled)

```
rules:
  colons:
    max-spaces-before: 0
    max-spaces-after: 1
```

Examples

1. With `colons: {max-spaces-before: 0, max-spaces-after: 1}`

   the following code snippet would **PASS**:

   ```
   object:
     - a
     - b
   key: value
   ```

2. With `colons: {max-spaces-before: 1}`

   the following code snippet would **PASS**:

   ```
   object :
     - a
     - b
   ```

   the following code snippet would **FAIL**:

   ```
   object  :
     - a
     - b
   ```

3. With `colons: {max-spaces-after: 2}`

   the following code snippet would **PASS**:

```
first:  1
second: 2
third:  3
```

the following code snippet would **FAIL**:

```
first: 1
2nd:   2
third: 3
```

2.3.4 commas

Use this rule to control the number of spaces before and after commas (`,`).

Options

- `max-spaces-before` defines the maximal number of spaces allowed before commas (use `-1` to disable).
- `min-spaces-after` defines the minimal number of spaces required after commas.
- `max-spaces-after` defines the maximal number of spaces allowed after commas (use `-1` to disable).

Default values (when enabled)

```
rules:
  commas:
    max-spaces-before: 0
    min-spaces-after: 1
    max-spaces-after: 1
```

Examples

1. With `commas: {max-spaces-before: 0}`

   the following code snippet would **PASS**:

   ```
   strange var:
     [10, 20, 30, {x: 1, y: 2}]
   ```

   the following code snippet would **FAIL**:

   ```
   strange var:
     [10, 20 , 30, {x: 1, y: 2}]
   ```

2. With `commas: {max-spaces-before: 2}`

   the following code snippet would **PASS**:

   ```
   strange var:
     [10  , 20 , 30,  {x: 1  , y: 2}]
   ```

3. With `commas: {max-spaces-before: -1}`

   the following code snippet would **PASS**:

```
strange var:
  [10,
   20   , 30
   ,   {x: 1, y: 2}]
```

4. With `commas: {min-spaces-after: 1, max-spaces-after: 1}`

   the following code snippet would **PASS**:

```
strange var:
  [10, 20, 30, {x: 1, y: 2}]
```

   the following code snippet would **FAIL**:

```
strange var:
  [10, 20,30,   {x: 1,   y: 2}]
```

5. With `commas: {min-spaces-after: 1, max-spaces-after: 3}`

   the following code snippet would **PASS**:

```
strange var:
  [10, 20,  30,  {x: 1,   y: 2}]
```

6. With `commas: {min-spaces-after: 0, max-spaces-after: 1}`

   the following code snippet would **PASS**:

```
strange var:
  [10, 20,30, {x: 1, y: 2}]
```

2.3.5 comments

Use this rule to control the position and formatting of comments.

Options

- Use `require-starting-space` to require a space character right after the `#`. Set to `true` to enable, `false` to disable.
- Use `ignore-shebangs` to ignore a shebang at the beginning of the file when `require-starting-space` is set.
- `min-spaces-from-content` is used to visually separate inline comments from content. It defines the minimal required number of spaces between a comment and its preceding content.

Default values (when enabled)

```
rules:
  comments:
    require-starting-space: true
    ignore-shebangs: true
    min-spaces-from-content: 2
```

Examples

1. With `comments: {require-starting-space: true}`

   the following code snippet would **PASS**:

```
# This sentence
# is a block comment
```

   the following code snippet would **PASS**:

```
##############################
## This is some documentation
```

   the following code snippet would **FAIL**:

```
#This sentence
#is a block comment
```

2. With `comments: {min-spaces-from-content: 2}`

   the following code snippet would **PASS**:

```
x = 2 ^ 127 - 1  # Mersenne prime number
```

   the following code snippet would **FAIL**:

```
x = 2 ^ 127 - 1 # Mersenne prime number
```

2.3.6 comments-indentation

Use this rule to force comments to be indented like content.

Examples

1. With `comments-indentation: {}`

   the following code snippet would **PASS**:

```
# Fibonacci
[0, 1, 1, 2, 3, 5]
```

   the following code snippet would **FAIL**:

```
  # Fibonacci
[0, 1, 1, 2, 3, 5]
```

   the following code snippet would **PASS**:

```
list:
    - 2
    - 3
    # - 4
    - 5
```

   the following code snippet would **FAIL**:

```
list:
    - 2
    - 3
#    - 4
    - 5
```

the following code snippet would **PASS**:

```
# This is the first object
obj1:
  - item A
  # - item B
# This is the second object
obj2: []
```

the following code snippet would **PASS**:

```
# This sentence
# is a block comment
```

the following code snippet would **FAIL**:

```
# This sentence
 # is a block comment
```

2.3.7 document-end

Use this rule to require or forbid the use of document end marker (`...`).

Options

- Set `present` to `true` when the document end marker is required, or to `false` when it is forbidden.

Default values (when enabled)

```
rules:
  document-end:
    present: true
```

Examples

1. With `document-end: {present: true}`

   the following code snippet would **PASS**:

```
---
this:
  is: [a, document]
...
---
- this
```

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```
- is: another one
...
```

the following code snippet would **FAIL**:

```
---
this:
  is: [a, document]
---
- this
- is: another one
...
```

2. With `document-end: {present: false}`

   the following code snippet would **PASS**:

```
---
this:
  is: [a, document]
---
- this
- is: another one
```

   the following code snippet would **FAIL**:

```
---
this:
  is: [a, document]
...
---
- this
- is: another one
```

2.3.8 document-start

Use this rule to require or forbid the use of document start marker (`---`).

Options

- Set `present` to `true` when the document start marker is required, or to `false` when it is forbidden.

Default values (when enabled)

```
rules:
  document-start:
    present: true
```

Examples

1. With `document-start: {present: true}`

the following code snippet would **PASS**:

```
---
this:
  is: [a, document]
---
- this
- is: another one
```

the following code snippet would **FAIL**:

```
this:
  is: [a, document]
---
- this
- is: another one
```

2. With `document-start: {present: false}`

   the following code snippet would **PASS**:

```
this:
  is: [a, document]
...
```

   the following code snippet would **FAIL**:

```
---
this:
  is: [a, document]
...
```

2.3.9 empty-lines

Use this rule to set a maximal number of allowed consecutive blank lines.

Options

- `max` defines the maximal number of empty lines allowed in the document.
- `max-start` defines the maximal number of empty lines allowed at the beginning of the file. This option takes precedence over `max`.
- `max-end` defines the maximal number of empty lines allowed at the end of the file. This option takes precedence over `max`.

Default values (when enabled)

```
rules:
  empty-lines:
    max: 2
    max-start: 0
    max-end: 0
```

Examples

1. With `empty-lines: {max: 1}`

   the following code snippet would **PASS**:

```
- foo:
    - 1
    - 2

- bar: [3, 4]
```

   the following code snippet would **FAIL**:

```
- foo:
    - 1
    - 2


- bar: [3, 4]
```

2.3.10 empty-values

Use this rule to prevent nodes with empty content, that implicitly result in `null` values.

Options

- Use `forbid-in-block-mappings` to prevent empty values in block mappings.
- Use `forbid-in-flow-mappings` to prevent empty values in flow mappings.

Default values (when enabled)

```
rules:
  empty-values:
    forbid-in-block-mappings: true
    forbid-in-flow-mappings: true
```

Examples

1. With `empty-values: {forbid-in-block-mappings: true}`

   the following code snippets would **PASS**:

```
some-mapping:
  sub-element: correctly indented
```

```
explicitly-null: null
```

   the following code snippets would **FAIL**:

```
some-mapping:
sub-element: incorrectly indented
```

```
implicitly-null:
```

2. With `empty-values: {forbid-in-flow-mappings: true}`

   the following code snippet would **PASS**:

```
{prop: null}
{a: 1, b: 2, c: 3}
```

   the following code snippets would **FAIL**:

```
{prop: }
```

```
{a: 1, b:, c: 3}
```

2.3.11 float-values

Use this rule to limit the permitted values for floating-point numbers. YAML permits three classes of float expressions: approximation to real numbers, positive and negative infinity and "not a number".

Options

- Use `require-numeral-before-decimal` to require floats to start with a numeral (ex `0.0` instead of `.0`).
- Use `forbid-scientific-notation` to forbid scientific notation.
- Use `forbid-nan` to forbid NaN (not a number) values.
- Use `forbid-inf` to forbid infinite values.

Default values (when enabled)

```
rules:
  float-values:
    forbid-inf: false
    forbid-nan: false
    forbid-scientific-notation: false
    require-numeral-before-decimal: false
```

Examples

1. With `float-values: {require-numeral-before-decimal: true}`

   the following code snippets would **PASS**:

```
anemometer:
  angle: 0.0
```

   the following code snippets would **FAIL**:

```
anemometer:
  angle: .0
```

2. With `float-values: {forbid-scientific-notation: true}`

   the following code snippets would **PASS**:

   ```
   anemometer:
     angle: 0.00001
   ```

   the following code snippets would **FAIL**:

   ```
   anemometer:
     angle: 10e-6
   ```

3. With `float-values: {forbid-nan: true}`

   the following code snippets would **FAIL**:

   ```
   anemometer:
     angle: .NaN
   ```

   1. With `float-values: {forbid-inf: true}`

      the following code snippets would **FAIL**:

      ```
      anemometer:
        angle: .inf
      ```

2.3.12 hyphens

Use this rule to control the number of spaces after hyphens (-).

Options

- `max-spaces-after` defines the maximal number of spaces allowed after hyphens.

Default values (when enabled)

```
rules:
  hyphens:
    max-spaces-after: 1
```

Examples

1. With `hyphens: {max-spaces-after: 1}`

   the following code snippet would **PASS**:

   ```
   - first list:
       - a
       - b
   - - 1
     - 2
     - 3
   ```

   the following code snippet would **FAIL**:

```
-  first list:
     - a
     - b
```

the following code snippet would **FAIL**:

```
- - 1
  -  2
  - 3
```

2. With `hyphens: {max-spaces-after: 3}`

   the following code snippet would **PASS**:

```
-   key
-  key2
- key42
```

   the following code snippet would **FAIL**:

```
-    key
-   key2
-  key42
```

2.3.13 indentation

Use this rule to control the indentation.

Options

- `spaces` defines the indentation width, in spaces. Set either to an integer (e.g. `2` or `4`, representing the number of spaces in an indentation level) or to `consistent` to allow any number, as long as it remains the same within the file.
- `indent-sequences` defines whether block sequences should be indented or not (when in a mapping, this indentation is not mandatory – some people perceive the `-` as part of the indentation). Possible values: `true`, `false`, `whatever` and `consistent`. `consistent` requires either all block sequences to be indented, or none to be. `whatever` means either indenting or not indenting individual block sequences is OK.
- `check-multi-line-strings` defines whether to lint indentation in multi-line strings. Set to `true` to enable, `false` to disable.

Default values (when enabled)

```
rules:
  indentation:
    spaces: consistent
    indent-sequences: true
    check-multi-line-strings: false
```

Examples

1. With `indentation: {spaces: 1}`

   the following code snippet would **PASS**:

```
history:
 - name: Unix
   date: 1969
 - name: Linux
   date: 1991
nest:
 recurse:
  - haystack:
     needle
```

2. With `indentation: {spaces: 4}`

   the following code snippet would **PASS**:

```
history:
    - name: Unix
      date: 1969
    - name: Linux
      date: 1991
nest:
    recurse:
        - haystack:
              needle
```

   the following code snippet would **FAIL**:

```
history:
  - name: Unix
    date: 1969
  - name: Linux
    date: 1991
nest:
  recurse:
    - haystack:
        needle
```

3. With `indentation: {spaces: consistent}`

   the following code snippet would **PASS**:

```
history:
   - name: Unix
     date: 1969
   - name: Linux
     date: 1991
nest:
   recurse:
      - haystack:
          needle
```

   the following code snippet would **FAIL**:

```
some:
  Russian:
      dolls
```

4. With `indentation: {spaces: 2, indent-sequences: false}`

   the following code snippet would **PASS**:

```
list:
- flying
- spaghetti
- monster
```

   the following code snippet would **FAIL**:

```
list:
  - flying
  - spaghetti
  - monster
```

5. With `indentation: {spaces: 2, indent-sequences: whatever}`

   the following code snippet would **PASS**:

```
list:
- flying:
  - spaghetti
  - monster
- not flying:
    - spaghetti
    - sauce
```

6. With `indentation: {spaces: 2, indent-sequences: consistent}`

   the following code snippet would **PASS**:

```
- flying:
  - spaghetti
  - monster
- not flying:
  - spaghetti
  - sauce
```

   the following code snippet would **FAIL**:

```
- flying:
    - spaghetti
    - monster
- not flying:
  - spaghetti
  - sauce
```

7. With `indentation: {spaces: 4, check-multi-line-strings: true}`

   the following code snippet would **PASS**:

```
Blaise Pascal:
    Je vous écris une longue lettre parce que
    je n'ai pas le temps d'en écrire une courte.
```

the following code snippet would **PASS**:

```
Blaise Pascal: Je vous écris une longue lettre parce que
               je n'ai pas le temps d'en écrire une courte.
```

the following code snippet would **FAIL**:

```
Blaise Pascal: Je vous écris une longue lettre parce que
  je n'ai pas le temps d'en écrire une courte.
```

the following code snippet would **FAIL**:

```
C code:
    void main() {
        printf("foo");
    }
```

the following code snippet would **PASS**:

```
C code:
    void main() {
    printf("bar");
    }
```

2.3.14 key-duplicates

Use this rule to prevent multiple entries with the same key in mappings.

Examples

1. With `key-duplicates: {}`

   the following code snippet would **PASS**:

```
- key 1: v
  key 2: val
  key 3: value
- {a: 1, b: 2, c: 3}
```

   the following code snippet would **FAIL**:

```
- key 1: v
  key 2: val
  key 1: value
```

   the following code snippet would **FAIL**:

```
- {a: 1, b: 2, b: 3}
```

   the following code snippet would **FAIL**:

```
duplicated key: 1
"duplicated key": 2

other duplication: 1
```

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```
? >-
    other
    duplication
: 2
```

2.3.15 key-ordering

Use this rule to enforce alphabetical ordering of keys in mappings. The sorting order uses the Unicode code point number as a default. As a result, the ordering is case-sensitive and not accent-friendly (see examples below). This can be changed by setting the global `locale` option. This allows one to sort case and accents properly.

Examples

1. With `key-ordering: {}`

   the following code snippet would **PASS**:

```
- key 1: v
  key 2: val
  key 3: value
- {a: 1, b: 2, c: 3}
- T-shirt: 1
  T-shirts: 2
  t-shirt: 3
  t-shirts: 4
- hair: true
  hais: true
  haïr: true
  haïssable: true
```

   the following code snippet would **FAIL**:

```
- key 2: v
  key 1: val
```

   the following code snippet would **FAIL**:

```
- {b: 1, a: 2}
```

   the following code snippet would **FAIL**:

```
- T-shirt: 1
  t-shirt: 2
  T-shirts: 3
  t-shirts: 4
```

   the following code snippet would **FAIL**:

```
- haïr: true
  hais: true
```

2. With global option `locale: "en_US.UTF-8"` and rule `key-ordering: {}`

   as opposed to before, the following code snippet would now **PASS**:

```
- t-shirt: 1
  T-shirt: 2
  t-shirts: 3
  T-shirts: 4
- hair: true
  haïr: true
  hais: true
  haïssable: true
```

2.3.16 line-length

Use this rule to set a limit to lines length.

Options

- `max` defines the maximal (inclusive) length of lines.
- `allow-non-breakable-words` is used to allow non breakable words (without spaces inside) to overflow the limit. This is useful for long URLs, for instance. Use `true` to allow, `false` to forbid.
- `allow-non-breakable-inline-mappings` implies `allow-non-breakable-words` and extends it to also allow non-breakable words in inline mappings.

Default values (when enabled)

```
rules:
  line-length:
    max: 80
    allow-non-breakable-words: true
    allow-non-breakable-inline-mappings: false
```

Examples

1. With `line-length: {max: 70}`

   the following code snippet would **PASS**:

   ```
   long sentence:
     Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do
     eiusmod tempor incididunt ut labore et dolore magna aliqua.
   ```

   the following code snippet would **FAIL**:

   ```
   long sentence:
     Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod
     tempor incididunt ut labore et dolore magna aliqua.
   ```

2. With `line-length: {max: 60, allow-non-breakable-words: true}`

   the following code snippet would **PASS**:

```
this:
  is:
    - a:
        http://localhost/very/very/very/very/very/very/very/very/long/url

# this comment is too long,
# but hard to split:
# http://localhost/another/very/very/very/very/very/very/very/very/long/url
```

the following code snippet would **FAIL**:

```
- this line is waaaaaaaaaaaaaay too long but could be easily split...
```

and the following code snippet would also **FAIL**:

```
- foobar: http://localhost/very/very/very/very/very/very/very/very/long/url
```

3. With `line-length: {max: 60, allow-non-breakable-words: true, allow-non-breakable-inline-mappings: true}`

   the following code snippet would **PASS**:

   ```
   - foobar: http://localhost/very/very/very/very/very/very/very/very/long/url
   ```

4. With `line-length: {max: 60, allow-non-breakable-words: false}`

   the following code snippet would **FAIL**:

   ```
   this:
     is:
       - a:
           http://localhost/very/very/very/very/very/very/very/very/long/url
   ```

2.3.17 new-line-at-end-of-file

Use this rule to require a new line character (`\n`) at the end of files.

The POSIX standard requires the last line to end with a new line character. All UNIX tools expect a new line at the end of files. Most text editors use this convention too.

2.3.18 new-lines

Use this rule to force the type of new line characters.

Options

- Set `type` to `unix` to enforce UNIX-typed new line characters (`\n`), set `type` to `dos` to enforce DOS-typed new line characters (`\r\n`), or set `type` to `platform` to infer the type from the system running yamllint (`\n` on POSIX / UNIX / Linux / Mac OS systems or `\r\n` on DOS / Windows systems).

Default values (when enabled)

```
rules:
  new-lines:
    type: unix
```

2.3.19 octal-values

Use this rule to prevent values with octal numbers. In YAML, numbers that start with `0` are interpreted as octal, but this is not always wanted. For instance `010` is the city code of Beijing, and should not be converted to `8`.

Options

- Use `forbid-implicit-octal` to prevent numbers starting with `0`.
- Use `forbid-explicit-octal` to prevent numbers starting with `0o`.

Default values (when enabled)

```
rules:
  octal-values:
    forbid-implicit-octal: true
    forbid-explicit-octal: true
```

Examples

1. With `octal-values: {forbid-implicit-octal: true}`

   the following code snippets would **PASS**:

   ```
   user:
     city-code: '010'
   ```

   the following code snippets would **PASS**:

   ```
   user:
     city-code: 010,021
   ```

   the following code snippets would **FAIL**:

   ```
   user:
     city-code: 010
   ```

2. With `octal-values: {forbid-explicit-octal: true}`

   the following code snippets would **PASS**:

   ```
   user:
     city-code: '0o10'
   ```

   the following code snippets would **FAIL**:

```
user:
  city-code: 0o10
```

2.3.20 quoted-strings

Use this rule to forbid any string values that are not quoted, or to prevent quoted strings without needing it. You can also enforce the type of the quote used.

Options

- `quote-type` defines allowed quotes: `single`, `double` or `any` (default).
- `required` defines whether using quotes in string values is required (`true`, default) or not (`false`), or only allowed when really needed (`only-when-needed`).
- `extra-required` is a list of PCRE regexes to force string values to be quoted, if they match any regex. This option can only be used with `required: false` and `required: only-when-needed`.
- `extra-allowed` is a list of PCRE regexes to allow quoted string values, even if `required: only-when-needed` is set.
- `allow-quoted-quotes` allows (`true`) using disallowed quotes for strings with allowed quotes inside. Default `false`.

Note: Multi-line strings (with `|` or `>`) will not be checked.

Default values (when enabled)

```
rules:
  quoted-strings:
    quote-type: any
    required: true
    extra-required: []
    extra-allowed: []
    allow-quoted-quotes: false
```

Examples

1. With `quoted-strings: {quote-type: any, required: true}`

   the following code snippet would **PASS**:

   ```
   foo: "bar"
   bar: 'foo'
   number: 123
   boolean: true
   ```

   the following code snippet would **FAIL**:

   ```
   foo: bar
   ```

2. With `quoted-strings: {quote-type: single, required: only-when-needed}`

   the following code snippet would **PASS**:

```
foo: bar
bar: foo
not_number: '123'
not_boolean: 'true'
not_comment: '# comment'
not_list: '[1, 2, 3]'
not_map: '{a: 1, b: 2}'
```

the following code snippet would **FAIL**:

```
foo: 'bar'
```

3. With `quoted-strings: {required: false, extra-required: [^http://, ^ftp://]}`

   the following code snippet would **PASS**:

```
- localhost
- "localhost"
- "http://localhost"
- "ftp://localhost"
```

   the following code snippet would **FAIL**:

```
- http://localhost
- ftp://localhost
```

4. With `quoted-strings: {required: only-when-needed, extra-allowed: [^http://, ^ftp://], extra-required: [QUOTED]}`

   the following code snippet would **PASS**:

```
- localhost
- "http://localhost"
- "ftp://localhost"
- "this is a string that needs to be QUOTED"
```

   the following code snippet would **FAIL**:

```
- "localhost"
- this is a string that needs to be QUOTED
```

5. With `quoted-strings: {quote-type: double, allow-quoted-quotes: false}`

   the following code snippet would **PASS**:

```
foo: "bar\"baz"
```

   the following code snippet would **FAIL**:

```
foo: 'bar"baz'
```

6. With `quoted-strings: {quote-type: double, allow-quoted-quotes: true}`

   the following code snippet would **PASS**:

```
foo: 'bar"baz'
```

2.3.21 trailing-spaces

Use this rule to forbid trailing spaces at the end of lines.

Examples

1. With `trailing-spaces: {}`

   the following code snippet would **PASS**:

```
this document doesn't contain
any trailing
spaces
```

   the following code snippet would **FAIL**:

```
this document contains
trailing spaces
on lines 1 and 3
```

2.3.22 truthy

Use this rule to forbid non-explicitly typed truthy values other than allowed ones (by default: `true` and `false`), for example `YES` or `off`.

This can be useful to prevent surprises from YAML parsers transforming `[yes, FALSE, Off]` into `[true, false, false]` or `{y: 1, yes: 2, on: 3, true: 4, True: 5}` into `{y: 1, true: 5}`.

Options

- `allowed-values` defines the list of truthy values which will be ignored during linting. The default is `['true', 'false']`, but can be changed to any list containing: `'TRUE'`, `'True'`, `'true'`, `'FALSE'`, `'False'`, `'false'`, `'YES'`, `'Yes'`, `'yes'`, `'NO'`, `'No'`, `'no'`, `'ON'`, `'On'`, `'on'`, `'OFF'`, `'Off'`, `'off'`.
- `check-keys` disables verification for keys in mappings. By default, `truthy` rule applies to both keys and values. Set this option to `false` to prevent this.

Default values (when enabled)

```
rules:
  truthy:
    allowed-values: ['true', 'false']
    check-keys: true
```

Examples

1. With `truthy: {}`

   the following code snippet would **PASS**:

```
boolean: true

object: {"True": 1, 1: "True"}

"yes":  1
"on":   2
"True": 3

 explicit:
   string1: !!str True
   string2: !!str yes
   string3: !!str off
   encoded: !!binary |
              True
              OFF
              pad==  # this decodes as 'N»8Qii'
   boolean1: !!bool true
   boolean2: !!bool "false"
   boolean3: !!bool FALSE
   boolean4: !!bool True
   boolean5: !!bool off
   boolean6: !!bool NO
```

the following code snippet would **FAIL**:

```
object: {True: 1, 1: True}
```

the following code snippet would **FAIL**:

```
yes:  1
on:   2
True: 3
```

2. With `truthy: {allowed-values: ["yes", "no"]}`

   the following code snippet would **PASS**:

```
- yes
- no
- "true"
- 'false'
- foo
- bar
```

   the following code snippet would **FAIL**:

```
- true
- false
- on
- off
```

3. With `truthy: {check-keys: false}`

   the following code snippet would **PASS**:

```
yes:  1
on:   2
true: 3
```

the following code snippet would **FAIL**:

```
yes:  Yes
on:   On
true: True
```

2.4 Disable with comments

2.4.1 Disabling checks for a specific line

To prevent yamllint from reporting problems for a specific line, add a directive comment (`# yamllint disable-line ...`) on that line, or on the line above. For instance:

```
# The following mapping contains the same key twice,
# but I know what I'm doing:
key: value 1
key: value 2  # yamllint disable-line rule:key-duplicates

- This line is waaaaaaaaaay too long but yamllint will not report anything about it.
↪# yamllint disable-line rule:line-length
  This line will be checked by yamllint.
```

or:

```
# The following mapping contains the same key twice,
# but I know what I'm doing:
key: value 1
# yamllint disable-line rule:key-duplicates
key: value 2

# yamllint disable-line rule:line-length
- This line is waaaaaaaaaay too long but yamllint will not report anything about it.
  This line will be checked by yamllint.
```

It is possible, although not recommend, to disabled **all** rules for a specific line:

```
# yamllint disable-line
-  {    all : rules ,are disabled   for this line}
```

You can't make yamllint ignore invalid YAML syntax on a line (which generates a *syntax error*), such as when templating a YAML file with Jinja. In some cases, you can workaround this by putting the templating syntax in a YAML comment. See *Putting template flow control in comments*.

If you need to disable multiple rules, it is allowed to chain rules like this: `# yamllint disable-line rule:hyphens rule:commas rule:indentation`.

2.4.2 Disabling checks for all (or part of) the file

To prevent yamllint from reporting problems for the whole file, or for a block of lines within the file, use `# yamllint disable ...` and `# yamllint enable ...` directive comments. For instance:

```
# yamllint disable rule:colons
- Lorem       : ipsum
```

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```
  dolor       : sit amet,
  consectetur : adipiscing elit
# yamllint enable rule:colons

- rest of the document...
```

It is possible, although not recommend, to disabled **all** rules:

```
# yamllint disable
- Lorem       :
        ipsum:
          dolor : [   sit,amet]
-         consectetur : adipiscing elit
# yamllint enable
```

If you need to disable multiple rules, it is allowed to chain rules like this: `# yamllint disable rule:hyphens rule:commas rule:indentation`.

2.4.3 Disabling all checks for a file

To prevent yamllint from reporting problems for a specific file, add the directive comment `# yamllint disable-file` as the first line of the file. For instance:

```
# yamllint disable-file
# The following mapping contains the same key twice, but I know what I'm doing:
key: value 1
key: value 2

- This line is waaaaaaaaaay too long but yamllint will not report anything about it.
```

or:

```
# yamllint disable-file
# This file is not valid YAML because it is a Jinja template
{% if extra_info %}
key1: value1
{% endif %}
key2: value2
```

Putting template flow control in comments

Alternatively for templating you can wrap the template statements in comments to make it a valid YAML file. As long as the templating language doesn't use the same comment symbol, it should be a valid template and valid YAML (pre and post-template processing).

Example of a Jinja2 code that cannot be parsed as YAML because it contains invalid tokens `{%` and `%}`:

But it can be fixed using YAML comments:

```
# This file IS valid YAML because the Jinja is in a YAML comment
# {% if extra_info %}
key1: value1
# {% endif %}
key2: value2
```

2.5 Development

yamllint provides both a script and a Python module. The latter can be used to write your own linting tools.

Basic example of running the linter from Python:

```
import yamllint

yaml_config = yamllint.config.YamlLintConfig("extends: default")
for p in yamllint.linter.run("example.yaml", yaml_config):
    print(p.desc, p.line, p.rule)
```

class yamllint.linter.**LintProblem**(*line*, *column*, *desc='<no description>'*, *rule=None*)

Represents a linting problem found by yamllint.

column = None

Column on which the problem was found (starting at 1)

desc = None

Human-readable description of the problem

line = None

Line on which the problem was found (starting at 1)

rule = None

Identifier of the rule that detected the problem

yamllint.linter.**run**(*input*, *conf*, *filepath=None*)

Lints a YAML source.

Returns a generator of LintProblem objects.

Parameters

- **input** – buffer, string or stream to read from
- **conf** – yamllint configuration object

2.6 Integration with text editors

Most text editors support syntax checking and highlighting, to visually report syntax errors and warnings to the user. yamllint can be used to syntax-check YAML source, but a bit of configuration is required depending on your favorite text editor.

2.6.1 Vim

Assuming that the ALE plugin is installed, yamllint is supported by default. It is automatically enabled when editing YAML files.

If you instead use the syntastic plugin, add this to your `.vimrc`:

```
let g:syntastic_yaml_checkers = ['yamllint']
```

2.6.2 Neovim

Assuming that the neomake plugin is installed, yamllint is supported by default. It is automatically enabled when editing YAML files.

2.6.3 Emacs

If you are flycheck user, you can use flycheck-yamllint integration.

2.6.4 Visual Studio Code

https://marketplace.visualstudio.com/items?itemName=fnando.linter

2.6.5 IntelliJ

https://plugins.jetbrains.com/plugin/15349-yamllint

2.6.6 Other text editors

Help wanted!

Your favorite text editor is not listed here? Help us improve by adding a section (by opening a pull-request or issue on GitHub).

2.7 Integration with other software

2.7.1 Integration with pre-commit

You can integrate yamllint in pre-commit tool. Here is an example, to add in your .pre-commit-config.yaml

```
---
# Update the rev variable with the release version that you want, from the yamllint␣
↪repo
# You can pass your custom .yamllint with args attribute.
- repo: https://github.com/adrienverge/yamllint.git
  rev: v1.17.0
  hooks:
    - id: yamllint
      args: [-c=/path/to/.yamllint]
```

2.7.2 Integration with GitHub Actions

yamllint auto-detects when it's running inside of GitHub Actions and automatically uses the suited output format to decorate code with linting errors. You can also force the GitHub Actions output with `yamllint --format github`.

A minimal example workflow using GitHub Actions:

```
---
on: push  # yamllint disable-line rule:truthy

jobs:
  lint:
    runs-on: ubuntu-latest
    steps:
      - uses: actions/checkout@v3

      - name: Install yamllint
        run: pip install yamllint

      - name: Lint YAML files
        run: yamllint .
```

2.7.3 Integration with Arcanist

You can configure yamllint to run on `arc lint`. Here is an example `.arclint` file that makes use of this configuration.

```
{
  "linters": {
    "yamllint": {
      "type": "script-and-regex",
      "script-and-regex.script": "yamllint",
      "script-and-regex.regex": "/^(?P<line>\\d+):(?P<offset>\\d+) +(?P<severity>
↪warning|error) +(?P<message>.*) +\\((?P<name>.*)\\)$/m",
      "include": "(\\.(yml|yaml)$)"
    }
  }
}
```

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