
i18nspector

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CHAPTER 1

Synopsis

i18nspector [*options*] *file* [*file* ...]

CHAPTER 2

Description

i18nspector is a tool for checking translation templates (POT), message catalogues (PO) and compiled message catalogues (MO) files for common problems. These files are used by the GNU gettext translation functions and tools in many different development environments.

CHAPTER 3

Options

- l lang, --language lang** Assume this language. *lang* should be a 2- or 3-letter ISO 639 language code, possibly followed by underscore and a 2-letter ISO 3166 territory code.
- unpack-deb** Allow unpacking Debian (binary or source) packages.
- j n, --jobs n** Use *n* processes in parallel. *n* can be a positive integer, or `auto` to determine the number automatically. The default is to use only a single process.
- h, --help** Show the help message and exit.
- version** Show the program's version information and exit.

CHAPTER 4

Output format

The following format is used for all the reported problems:

code: *file*: *tag* [*extra*]

where:

- *code* is a letter indicating type of the message: **E** (error), **W** (warning), **I** (informative message), or **P** (pedantic message);
- *tag* is a name of the problem that was discovered;
- *extra* can contain additional information about the problem.

ancient-date

The date refers to the time before the first GNU gettext release. As such, it's extremely unlikely to be correct.

References:

<http://git.savannah.gnu.org/cgit/gettext.git/tree/ChangeLog.0#n1767>

Severity, certainty:

normal, certain

arithmetic-error-in-plural-forms

Computing a plural form value triggers division by zero or integer overflow. This normally indicates an error in the plural form expression.

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, possible

arithmetic-error-in-unused-plural-forms

Computing a plural form value triggers division by zero or integer overflow. (But there are no translated messages which use plural forms.) This normally indicates an error in the plural form expression.

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

normal, possible

boilerplate-in-content-type

The Content-Type header field contains xgettext boilerplate. It should be in the form `text/plain; charset=encoding`.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html#index-encoding-of-PO-files

Severity, certainty:

important, certain

boilerplate-in-date

The date header field contains xgettext boilerplate. The date format should be `YYYY-MM-DD hh:mm+ZZzz`, e.g. `2011-11-05 10:14+0100`.

Severity, certainty:

normal, certain

boilerplate-in-initial-comments

The initial comments contain xgettext or msginit boilerplate.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, possible

boilerplate-in-language-team

The Language-Team header field contains xgettext boilerplate. It should contain English name of the language, and the email address or homepage URL of the language team.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, certain

boilerplate-in-last-translator

The Last-Translator header field contains xgettext boilerplate. It should contain the last translator's name and email address.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

normal, certain

boilerplate-in-project-id-version

The Project-Id-Version header field contains xgettext boilerplate. It should contain the name and the version of the package.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, certain

boilerplate-in-report-msgid-bugs-to

The Report-Msgid-Bugs-To header field contains xgettext boilerplate. It should contain an email address or URL where one can report bugs in the untranslated strings.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

normal, certain

broken-encoding

Header fields and messages contained by this file couldn't be decoded to Unicode. The usual cause of this is incorrect or missing encoding declaration.

Note that in the absence of encoding declaration, i18nspector assumes ASCII encoding.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html#index-encoding-of-PO-files
<https://tools.ietf.org/html/rfc2045#section-5>

Severity, certainty:

serious, possible

c-format-string-argument-type-mismatch

There's a type mismatch between a C format argument in `msgid` and the corresponding format argument in `msgid_plural`; or between a C format argument in `msgstr` and `msgid`; or between a C format argument in `msgstr[N]` and corresponding `msgid` or `msgid_plural`.

References:

printf(3)

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, possible

c-format-string-error

A C format string could not be parsed.

References:

printf(3)

Severity, certainty:

serious, possible

c-format-string-excess-arguments

A C format string for `msgid` consumes more arguments than `msgid_plural`; or `msgstr` consumes more arguments than `msgid`; or `msgstr[N]` consumes more arguments than corresponding `msgid` or `msgid_plural`.

References:

printf(3)

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, possible

c-format-string-missing-arguments

A C format string for `msgid` consumes fewer arguments than `msgid_plural`; or `msgstr` consumes fewer arguments than `msgid`; or `msgstr[N]` consumes fewer arguments than corresponding `msgid` or `msgid_plural`.

Note that in some languages, the commonly used Plural-Forms expression evaluates to the same value for `n=1` and `n=21`, `n=31`, and so on. Take this Serbian translation for example:

```
Plural-Forms: nplurals=3; plural=n%10==1 && n%100!=11 ? 0 : n%10>=2 && n%10<=4 && (n
↪%100<10 || n%100>=20) ? 1 : 2;
...
msgid "one byte"
msgid_plural "%d bytes"
msgstr[0] "%d bajt"
```

```
msgstr[1] "%d bajta"
msgstr[2] "%d bajtova"
```

Here %d should not be replaced with the spelled-out form `jedan`. Either %d should be kept, or the Plural-Forms expression should be amended, so that there is a special case for `n=1`:

```
Plural-Forms: nplurals=4; plural=n==1 ? 3 : n%10==1 && n%100!=11 ? 0 : n%10>=2 && n%10
↳ <=4 && (n%100<10 || n%100>=20) ? 1 : 2
...
msgid "one byte"
msgid_plural "%d bytes"
msgstr[0] "%d bajt"
msgstr[1] "%d bajta"
msgstr[2] "%d bajtova"
msgstr[3] "jedan bajt"
```

References:

printf(3)

https://www.gnu.org/software/gettext/manual/html_node/Translating-plural-forms.html

Severity, certainty:

serious, possible

c-format-string-non-portable-conversion

A C format string uses a conversion specified or length modifier, for which a more portable replacement exists:

- For integer conversions (%d, %i, %o, %u, %x, and %X), use the `ll` length modifier instead of `L` or `q`.
- For floating-point conversions (%a, %A, %e, %E, %f, %F, %g, and %G), don't use the `l` length modifier.
- Use the `z` length modifier instead of `Z`.
- Use `%lc` instead of `%C`.
- Use `%ls` instead of `%S`.

References:

printf(3)

Severity, certainty:

pedantic, possible

c-format-string-redundant-flag

A C format string includes a redundant character flag. Either it's a duplicate, or it has no effect:

- The `+` flag overrides the *space* flag.
- The `-` flag overrides the `0` flag.
- If a precision is given, the `0` flag has no effect on integer conversions (%d, %i, %o, %u, %x, and %X).

References:

printf(3)

Severity, certainty:

pedantic, possible

codomain-error-in-plural-forms

Either a plural form value is outside the declared range, or some values within the declared range can never be reached. This normally indicates an error in the plural form expression.

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, certain

codomain-error-in-unused-plural-forms

Either a plural form value is outside the declared range, or some values within the declared range can never be reached. (But there are no translated messages which use plural forms.) This normally indicates an error in the plural form expression.

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

normal, certain

conflict-marker-in-header-entry

The header contains a conflict marker (`#-#-#-#-# ... #-#-#-#-#`). The conflict will have to be resolved manually.

References:

https://www.gnu.org/software/gettext/manual/html_node/Creating-Compendia.html#Creating-Compendia

Severity, certainty:

serious, certain

conflict-marker-in-translation

One of the translated messages appear to contain a conflict marker (`#-#-#-#-# ... #-#-#-#-#`). The conflict will have to be resolved manually.

References:

https://www.gnu.org/software/gettext/manual/html_node/Creating-Compendia.html#Creating-Compendia

Severity, certainty:

serious, possible

conflicting-message-flags

Two flags with conflicting meanings are associated with one of the messages.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

Severity, certainty:

important, possible

date-from-future

The date refers to the future. As such, it's extremely unlikely to be correct.

Severity, certainty:

normal, certain

distant-header-entry

The header entry in this file is preceded by other entries. The header entry should be always the first one.

Severity, certainty:

important, certain

duplicate-flag-for-header-entry

Multiple identical flags are associated with the header entry.

Severity, certainty:

minor, certain

duplicate-header-entry

This file contains multiple header entries.

Severity, certainty:

serious, certain

duplicate-header-field

This file contains multiple header fields of the same name.

Severity, certainty:

minor, wild-guess

duplicate-header-field-content-transfer-encoding

This file contains multiple Content-Transfer-Encoding header fields.

Severity, certainty:

pedantic, certain

duplicate-header-field-content-type

This file contains multiple Content-Type header fields.

Severity, certainty:

serious, certain

duplicate-header-field-date

This file contains multiple date header fields of the same name.

Severity, certainty:

normal, certain

duplicate-header-field-language

This file contains multiple Language header fields.

Severity, certainty:

important, certain

duplicate-header-field-language-team

This file contains multiple Language-Team header fields.

Severity, certainty:

normal, certain

duplicate-header-field-last-translator

This file contains multiple Last-Translator header fields.

Severity, certainty:

normal, certain

duplicate-header-field-mime-version

This file contains multiple MIME-Version header fields.

Severity, certainty:

pedantic, certain

duplicate-header-field-plural-forms

This file contains multiple Plural-Forms header fields.

Severity, certainty:

serious, certain

duplicate-header-field-project-id-version

This file contains multiple Project-Id-Version header fields.

Severity, certainty:

minor, certain

duplicate-header-field-report-msgid-bugs-to

This file contains multiple Report-Msgid-Bugs-To header fields.

Severity, certainty:

normal, certain

duplicate-header-field-x-poedit

This file contains multiple X-Poedit-* header fields.

Severity, certainty:

normal, certain

duplicate-message-definition

This file contains multiple definitions of the same message.

Severity, certainty:

serious, certain

duplicate-message-flag

Multiple identical flags are associated with one of the messages.

Severity, certainty:

minor, certain

empty-file

This file doesn't contain any messages.

Severity, certainty:

normal, certain

empty-msgid-message-with-plural-forms

The message with empty msgid contains plural forms. Such messages are reserved by GNU gettext for header entries, and your code should not call `gettext("", ...)`.

Severity, certainty:

serious, certain

empty-msgid-message-with-source-code-references

The message with empty msgid contains plural forms. Such messages are reserved by GNU gettext for header entries, and your code should not call `gettext("")`.

Severity, certainty:

serious, possible

encoding-in-language-header-field

The language header field contains encoding declaration. Such information shouldn't be included in this field.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, certain

fuzzy-header-entry

The header entry is marked as fuzzy. For compatibility with very old (<< 0.11) **msgfmt(1)** versions, which didn't support fuzzy header entries, it shouldn't be marked as such.

References:

<http://git.savannah.gnu.org/cgit/gettext.git/tree/NEWS?id=v0.11#n44>

Severity, certainty:

pedantic, certain

inconsistent-leading-newlines

Some strings in an entry start with a newline, but some don't. Either all of them should start with a newline, or none of them should.

Severity, certainty:

important, possible

inconsistent-number-of-plural-forms

Number of plural forms in a message definition doesn't match number of plural forms declared in another message definition.

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

https://www.gnu.org/software/gettext/manual/html_node/Translating-plural-forms.html

Severity, certainty:

serious, certain

inconsistent-trailing-newlines

Some strings in an entry end with a newline, but some don't. Either all of them should end with a newline, or none of them should.

Severity, certainty:

important, possible

incorrect-number-of-plural-forms

Number of plural forms in a message definition doesn't match number of plural forms declared in the header.

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

https://www.gnu.org/software/gettext/manual/html_node/Translating-plural-forms.html

Severity, certainty:

serious, certain

invalid-content-transfer-encoding

Value of the Content-Transfer-Encoding header field is invalid. It should be 8bit.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

<https://tools.ietf.org/html/rfc2045#section-6.1>

Severity, certainty:

pedantic, certain

invalid-content-type

Value of the Content-Type header field should is invalid. It should be in the form `text/plain; charset=encoding`.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html#index-encoding-of-PO-files

<https://tools.ietf.org/html/rfc2045#section-5>

Severity, certainty:

important, possible

invalid-date

The date is invalid or in an invalid format. The format should be `YYYY-MM-DD hh:mm+ZZzz`, e.g. `2011-11-05 10:14+0100`.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

normal, certain

invalid-language

The Language header field couldn't be parsed, or it contains an unknown language.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

important, possible

invalid-language-team

The Language-Team header field contains an e-mail address that uses a reserved domain name, or a partially qualified domain name.

References:

<https://tools.ietf.org/html/rfc2606>

Severity, certainty:

normal, possible

invalid-last-translator

The Last-Translator header field could neither be parsed as an e-mail, or the e-mail address uses a reserved domain name, or a partially qualified domain name.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

<https://tools.ietf.org/html/rfc2606>

Severity, certainty:

normal, possible

invalid-mime-version

Value of the MIME-Version header field is invalid. It should be 1 . 0 .

References:

<https://tools.ietf.org/html/rfc2045#section-4>

Severity, certainty:

pedantic, certain

invalid-mo-file

This file couldn't be parsed a MO file.

Severity, certainty:

serious, certain

invalid-range-flag

A `range :` flag couldn't be parsed, or the designated range contained fewer than two numbers. The syntax is `range : min . . max`, where both values are non-negative integers.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

Severity, certainty:

important, certain

invalid-report-msgid-bugs-to

The Report-Msgid-Bugs-To header field could neither be parsed as an e-mail nor as a URL, or the e-mail address uses a reserved domain name, or a partially qualified domain name.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

<https://tools.ietf.org/html/rfc2606>

Severity, certainty:

normal, possible

language-disparity

Language of this file has been declared in multiple places, but the declarations don't match.

Severity, certainty:

normal, possible

language-team-equal-to-last-translator

Language-Team and Last-Translator header fields contain the same e-mail address.

Severity, certainty:

minor, possible

language-variant-does-not-affect-translation

The Language header field contains a variant designator that is not relevant for the message translation.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, possible

leading-junk-in-plural-forms

The Plural-Forms header field contains unexpected text before the `nplurals=` string.

GNU gettext runtime ignores such leading junk, but other header parsers might be less liberal in what they accept.

Severity, certainty:

important, certain

malformed-xml

The original string or the translated string contains an XML fragment, which is not well-formed.

References:

<https://www.w3.org/TR/REC-xml/#sec-well-formed>

Severity, certainty:

serious, possible

no-content-transfer-encoding-header-field

The Content-Transfer-Encoding header field doesn't exist. It should be set to `8bit`.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

<https://tools.ietf.org/html/rfc2045#section-6.1>

Severity, certainty:

pedantic, certain

no-content-type-header-field

The Content-Type header field doesn't exist. It should be set to `text/plain; charset=encoding`.

Note that in the absence of encoding declaration, i18nspector assumes ASCII encoding.

References:

[https:](https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html#index-encoding-of-PO-files)

[//www.gnu.org/software/gettext/manual/html_node/Header-Entry.html#index-encoding-of-PO-files](https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html#index-encoding-of-PO-files)

<https://tools.ietf.org/html/rfc2045#section-5>

Severity, certainty:

important, certain

no-date-header-field

The date header field doesn't exist.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, certain

no-language-header-field

The Language header field doesn't exist.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

pedantic, certain

no-language-team-header-field

The Language-Team header field does not exist. It should contain English name of the language, and the email address or homepage URL of the language team.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

pedantic, certain

no-last-translator-header-field

The Last-Translator header field doesn't exist. It should contain the last translator's name and email address.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

normal, certain

no-mime-version-header-field

The MIME-Version header field doesn't exist. It should be set to 1.0.

References:

<https://tools.ietf.org/html/rfc2045#section-4>

Severity, certainty:

pedantic, certain

no-package-name-in-project-id-version

The Project-Id-Version header field doesn't appear to contain any name. It should contain both the name and the version of the package.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, possible

no-plural-forms-header-field

The Plural-Forms header field does not exist, even though some of the messages use plural forms (although none of them have been translated).

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

minor, certain

no-project-id-version-header-field

The Project-Id-Version header field does not exist. It should contain the name and the version of the package.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

minor, certain

no-report-msgid-bugs-to-header-field

The Report-Msgid-Bugs-To header field does not exist or it is empty. It should contain an email address or URL where one can report bugs in the untranslated strings.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

normal, certain

no-required-plural-forms-header-field

The Plural-Forms header field does not exist, even though some of the translated messages use plural forms.

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, certain

no-version-in-project-id-version

The Project-Id-Version header field doesn't appear to contain any version. It should contain both the name and the version of the package.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html

Severity, certainty:

pedantic, possible

non-ascii-compatible-encoding

This file uses an encoding that is not compatible with ASCII.

Severity, certainty:

serious, certain

non-portable-encoding

This file uses an encoding that is not widely supported by software.

References:

https://www.gnu.org/software/gettext/manual/html_node/Header-Entry.html#index-encoding-list

Severity, certainty:

important, certain

os-error

An input/output error or another operating system error occurred while checking this file.

Severity, certainty:

serious, certain

partially-translated-message

Translation is missing for some plural forms of a message.

Severity, certainty:

serious, possible

python-brace-format-string-argument-type-mismatch

There's a type mismatch between a Python format argument in `msgid` and the corresponding format argument in `msgid_plural`; or between a Python format argument in `msgstr` and `msgid`; or between a Python format argument in `msgstr[N]` and `msgid` or `msgid_plural`.

References:

<https://docs.python.org/2/library/string.html#formatstrings>

Severity, certainty:

serious, possible

python-brace-format-string-error

A Python format string could not be parsed.

References:

<https://docs.python.org/2/library/string.html#formatstrings>

Severity, certainty:

serious, possible

python-brace-format-string-missing-argument

A Python format string for `msgid` doesn't use a named argument that is used in `msgid_plural`; or `msgstr` doesn't use a named argument that is used in `msgid`; or `msgstr[N]` doesn't use a named argument that is used in corresponding `msgid` or `msgid_plural`.

Note that in some languages, the commonly used Plural-Forms expression evaluates to the same value for `n=1` and `n=21`, `n=31`, and so on. Take this Serbian translation for example:

```
Plural-Forms: nplurals=3; plural=n%10==1 && n%100!=11 ? 0 : n%10>=2 && n%10<=4 && (n
↪ %100<10 || n%100>=20) ? 1 : 2;
...
msgid "one byte"
msgid_plural "{n} bytes"
msgstr[0] "{n} bajt"
msgstr[1] "{n} bajta"
msgstr[2] "{n} bajtova"
```

Here `{n}` should not be replaced with the spelled-out form `jedan`. Either `{n}` should be kept, or the Plural-Forms expression should be amended, so that there is a special case for `n=1`:

```
Plural-Forms: nplurals=4; plural=n==1 ? 3 : n%10==1 && n%100!=11 ? 0 : n%10>=2 && n%10
↪<=4 && (n%100<10 || n%100>=20) ? 1 : 2
...
msgid "one byte"
msgid_plural "{n} bytes"
msgstr[0] "{n} bajt"
msgstr[1] "{n} bajta"
msgstr[2] "{n} bajtova"
msgstr[3] "jedan bajt"
```

References:

<https://docs.python.org/2/library/string.html#formatstrings>

https://www.gnu.org/software/gettext/manual/html_node/Translating-plural-forms.html

Severity, certainty:

serious, possible

python-brace-format-string-unknown-argument

A Python format string for `msgid` uses a named argument that isn't used in `msgid_plural`; or `msgstr` uses a named argument that isn't used in `msgid`; or `msgstr[N]` uses a named argument that isn't used in corresponding `msgid` or `msgid_plural`. This indicates that the conversion would try to consume an argument that weren't supplied.

References:

<https://docs.python.org/2/library/string.html#formatstrings>

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, possible

python-format-string-argument-number-mismatch

A Python format string for `msgid` consumes more arguments than `msgid_plural`; or `msgstr` consumes more arguments than `msgid`; or `msgstr[N]` consumes more arguments than `msgid` or `msgid_plural`.

Python, unlike C, requires that all unnamed arguments are consumed during conversion.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

https://www.gnu.org/software/gettext/manual/html_node/Python.html#Python

Severity, certainty:

serious, possible

python-format-string-argument-type-mismatch

There's a type mismatch between a Python format argument in `msgid` and the corresponding format argument in `msgid_plural`; or between a Python format argument in `msgstr` and `msgid`; or between a Python format argu-

ment in `msgstr[N]` and `msgid` or `msgid_plural`.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

Severity, certainty:

serious, possible

python-format-string-error

A Python format string could not be parsed.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

Severity, certainty:

serious, possible

python-format-string-missing-argument

A Python format string for `msgid` doesn't use a named argument that is used in `msgid_plural`; or `msgstr` doesn't use a named argument that is used in `msgid`; or `msgstr[N]` doesn't use a named argument that is used in corresponding `msgid` or `msgid_plural`.

Note that in some languages, the commonly used Plural-Forms expression evaluates to the same value for `n=1` and `n=21`, `n=31`, and so on. Take this Serbian translation for example:

```
Plural-Forms: nplurals=3; plural=n%10==1 && n%100!=11 ? 0 : n%10>=2 && n%10<=4 && (n
↳ %100<10 || n%100>=20) ? 1 : 2;
...
msgid "one byte"
msgid_plural "%(n)d bytes"
msgstr[0] "%(n)d bajt"
msgstr[1] "%(n)d bajta"
msgstr[2] "%(n)d bajtova"
```

Here `%d` should not be replaced with the spelled-out form `jedan`. Either `%d` should be kept, or the Plural-Forms expression should be amended, so that there is a special case for `n=1`:

```
Plural-Forms: nplurals=4; plural=n==1 ? 3 : n%10==1 && n%100!=11 ? 0 : n%10>=2 && n%10
↳ <=4 && (n%100<10 || n%100>=20) ? 1 : 2
...
msgid "one byte"
msgid_plural "%(n)d bytes"
msgstr[0] "%(n)d bajt"
msgstr[1] "%(n)d bajta"
msgstr[2] "%(n)d bajtova"
msgstr[3] "jedan bajt"
```

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

https://www.gnu.org/software/gettext/manual/html_node/Translating-plural-forms.html

Severity, certainty:

serious, possible

python-format-string-multiple-unnamed-arguments

A Python format string uses multiple unnamed arguments (such as `%d`). The translator might need to reorder the arguments to properly translate the message, but this is not possible with unnamed arguments. Named arguments (such as `%(num)d`) should be used instead.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>
https://www.gnu.org/software/gettext/manual/html_node/Python.html#Python

Severity, certainty:

serious, possible

python-format-string-obsolete-conversion

A Python format string uses an obsolete conversion specifier:

- Use `%d` instead of `%u`.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

Severity, certainty:

pedantic, possible

python-format-string-redundant-flag

A Python format string includes a redundant character flag. Either it's a duplicate, or it has no effect:

- The `+` flag overrides the *space* flag.
- The `-` flag overrides the `0` flag.
- If a precision is given, the `0` flag has no effect on integer conversions (`%d`, `%i`, `%o`, `%u`, `%x`, and `%X`).

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

Severity, certainty:

pedantic, possible

python-format-string-redundant-length

A Python format string includes a redundant length modifier. Length modifiers (`h`, `l`, or `L`) have no effect in Python.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

Severity, certainty:

pedantic, possible

python-format-string-redundant-precision

A C format string includes precision that has no effect on the conversion.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

Severity, certainty:

pedantic, possible

python-format-string-unknown-argument

A Python format string for `msgid` uses a named argument that isn't used in `msgid_plural`; or `msgstr` uses a named argument that isn't used in `msgid`; or `msgstr[N]` uses a named argument that isn't used in corresponding `msgid` or `msgid_plural`. This indicates that the conversion would try to consume an argument that weren't supplied.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, possible

python-format-string-unnamed-plural-argument

A Python format string uses an unnamed arguments (such as `%d`) in the context of plural forms. The translator might want not to use the numeric argument in the singular form; but this is not possible if the argument is unnamed, because python, unlike C, requires that all unnamed arguments are consumed during conversion. Named arguments (such as `%(n)d`) should be used instead.

References:

<https://docs.python.org/2/library/stdtypes.html#string-formatting-operations>

https://www.gnu.org/software/gettext/manual/html_node/Python.html#Python

Severity, certainty:

wishlist, possible

qt-plural-format-mistaken-for-c-format

A `c-format` flag is associated with the message, but `qt-plural-format` should be used instead.

The only C format directive that the message uses is %n. It is very atypical to use it alone in a C format string.

References:

<http://doc.qt.io/qt-5/i18n-source-translation.html#handling-plurals>

printf(3)

Severity, certainty:

important, possible

range-flag-without-plural-string

A `range:` flag is associated with a message that doesn't have plural string. `range:` flags only make sense for translations involving plural forms.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

Severity, certainty:

normal, certain

redundant-message-flag

A flag associated with one of the messages is redundant, because it's implied by another flag.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

Severity, certainty:

pedantic, certain

stray-header-line

The header contains a line that does not belong to any header field. Note that RFC-822-style folding of long headers is not supported.

References:

<https://lists.gnu.org/archive/html/bug-gettext/2012-12/msg00010.html>

Severity, certainty:

important, certain

stray-previous-msgid

The message entry contains annotations about previous untranslated string (`#| msgid ...`), even though the message is not marked as fuzzy. These annotations are only useful for fuzzy messages, and should be removed when unfuzzifying.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

Severity, certainty:

minor, certain

syntax-error-in-plural-forms

Value of the Plural-Forms header field could not be parsed. It should be in the form `nplurals=n;`
`plural=expression.`

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

serious, certain

syntax-error-in-po-file

This file couldn't be parsed a PO file. In some rare cases this is due to incorrect or missing encoding declaration.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

<https://bugs.debian.org/692283>

Severity, certainty:

serious, possible

syntax-error-in-unused-plural-forms

Value of the Plural-Forms header field could not be parsed. (But there are no translated messages which use plural forms.) It should be in the form `nplurals=n;` `plural=expression.`

References:

https://www.gnu.org/software/gettext/manual/html_node/Plural-forms.html

Severity, certainty:

important, certain

trailing-junk-in-plural-forms

The Plural-Forms header field contains unexpected text after the plural expression.

GNU gettext runtime ignores such trailing junk, but other header parsers might be less liberal in what they accept.

Severity, certainty:

important, certain

translation-in-template

The PO template file contains a translated message.

Severity, certainty:

minor, certain

unable-to-determine-language

i18nspector was unable to determine language of this file. Absence of this information will prevent it from performing further checks.

Severity, certainty:

normal, wild-guess

unexpected-flag-for-header-entry

An unexpected flag is associated with the header entry. The only flag that makes sense for the header entry is `fuzzy`.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

Severity, certainty:

normal, possible

unknown-encoding

This file declares an encoding that couldn't be recognized by i18nspector. It might be a typo. Absence of encoding information will prevent i18nspector from performing further checks.

Severity, certainty:

important, possible

unknown-file-type

File format of this file couldn't be recognized. It might be a bug in i18nspector.

Severity, certainty:

normal, wild-guess

unknown-header-field

The header field name is unknown to i18nspector. It might be a typo or a capitalization error (header field names are case-sensitive).

References:

<https://lists.gnu.org/archive/html/bug-gettext/2012-12/msg00010.html>

Severity, certainty:

minor, wild-guess

unknown-message-flag

An unknown flag is associated with one of the messages. It might be a typo.

References:

https://www.gnu.org/software/gettext/manual/html_node/PO-Files.html

Severity, certainty:

normal, wild-guess

unknown-poedit-language

Language declared in X-Poedit-Language couldn't be recognized. It might be a bug in i18nspector.

Severity, certainty:

minor, wild-guess

unrepresentable-characters

The declared encoding cannot represent all characters commonly used in this language. This is a strong indication that the declared encoding is incorrect.

Severity, certainty:

serious, possible

unusual-character-in-header-entry

The header entry contains an unusual character. This is usually an indication of an encoding problem, such as:

- using ISO 2022 escape sequences, or
- using UTF-8 despite declaring an 8-bit encoding.

References:

http://www.unicode.org/faq/utf_bom.html#bom6

Severity, certainty:

important, certain

unusual-character-in-translation

One of the translated messages contains an unusual character. This is usually an indication of an encoding problem, such as:

- using ISO 2022 escape sequences, or
- using UTF-8 despite declaring an 8-bit encoding.

References:

http://www.unicode.org/faq/utf_bom.html#bom6

Severity, certainty:

important, possible

unusual-plural-forms

The Plural-Forms declaration is incorrect (or unusual), according to i18nspector's linguistic data.

Severity, certainty:

serious, possible

unusual-unused-plural-forms

The Plural-Forms declaration is incorrect (or unusual), according to i18nspector's linguistic data. (But there are no translated messages which use plural forms.)

Severity, certainty:

normal, possible

CHAPTER 6

See also

msgfmt(1), particularly the `-c` option