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GObject Introspection bindings written in pure Python using [ctypes](#) and [cffi](#) (optional). API compatible with [PyGObject](#).

### Development Status:

WARNING: Lots of things are not implemented/supported.

See the ‘examples’ directory for working examples. Anything else will probably not work.

**Code:** <https://github.com/lazka/pgi>

**License:** LGPL 2.1+

### Requirements:

- CPython 2.7 or CPython 3.3+ or PyPy 1.9+ or PyPy3 2.3+
- [libgirepository](#) 1.0
- [cffi](#) 0.8+ (optional, but needed for tests)

- [cairocffi 0.4+](#) (optional, for cairo support)

## 1 Usage

```
from pgi.repository import Gtk, GObject
```

or (preferred)

```
import pgi
pgi.install_as_gi()
from gi.repository import Gtk, GObject
```

### 1.1 Search paths

Typelibs will be loaded from paths in the environment variable `GI_TYPELIB_PATH` and `/usr/lib/girepository-1.0/`.  
Shared libraries from paths in `LD_LIBRARY_PATH` and the default system search paths (see `dlopen(3)`).

## 2 Documentation

**PGI docs:**

- <https://pgi.readthedocs.org>

**Autogenerated GI docs:**

- <https://github.com/lazka/pgi-docgen>
- <http://lazka.github.io/pgi-docs>

## 3 Tests

- `./setup.py test` will run unit tests using PGI and PyGObject
- `./setup.py test --pgi-only` to skip PyGObject tests
- `./setup.py test --filter=StructTest` to run tests which include *StructTest* (regexp)

`./tests/libs/` includes additional libraries that will be used for testing if present. Call *make* in `./tests/libs/` to build them.

- `./setup.py quality` will run pep8 and pyflakes tests
- `./setup.py coverage` will create a test coverage report

## 4 Changelog

### 4.1 0.0.11.1 (2016-02-07)

- Fix sdist (Sunil Mohan Adapa) [pr 30]

### 4.2 0.0.11 (2016-01-31)

- Various fixes..
- Oldest supported Ubuntu is now 14.04 (was 12.04)

### 4.3 0.0.10.1 (2015-04-07)

- fix tests

### 4.4 0.0.10 (2015-03-23)

- Fix lib filenames using OS X (Benjamin Henne) [pr 16]
- Reduce PyGObject overrides diff
- tools: new tdump tool to print the typelib content as json
- docs: GArray return, GList out args, Unichar fields, GError fields, GStrv
- docs: include signal owner type in signal signature

### 4.5 0.0.9 (2014-08-08)

- Memory leak fixes (Petter Waller)
- Work around for broken Poppler.Page.get\_text\_layout (Petter Waller)
- Some small fixes/improvements

### 4.6 0.0.8 (2014-07-03)

- Support for PyPy3
- Improved error messages (in generated code)
- Use namedtuple-like for multiple return values ([https://bugzilla.gnome.org/show\\_bug.cgi?id=727374](https://bugzilla.gnome.org/show_bug.cgi?id=727374))
- Remove Gst overrides to match PyGObject
- Some minor compatibility fixes, performance improvements

### 4.7 0.0.7 (2014-03-24)

- Python 3 support
- Clutter overrides removed to match PyGObject
- Implement GObject.list\_properties
- Multiple docstring fixes for pgi-docgen
- Expose callback types as dummy functions with docstrings
- Sync GLib overrides with PyGObject trunk

### 4.8 0.0.6.3 (2013-11-29)

- Marshalling fixes: GList[int], gunichar, foreign structs, cairo.Surface,
- Match pygobject signatures for functions taking a callback
- Docstring improvements (needed for pgi-docgen)

### 4.9 0.0.6.2 (2013-11-16)

- Various fixes for new cffi/pygobject releases

#### **4.10 0.0.6.1 (2013-04-24)**

- Fix packaging

#### **4.11 0.0.6 (2013-04-24)**

- Basic cairo support (using cairocffi)
- Faster object creation
- Basic argument marshaling with signals
- New API documentation: <http://lazka.github.io/pgi-docs/>

#### **4.12 0.0.5 (2013-03-20)**

- Various fixes

#### **4.13 0.0.4 (2013-02-04)**

- Various fixes

#### **4.14 0.0.3 (2013-02-02)**

- Initial release