The GNOME™ Conference
GUADEC

The State of Python in GNOME

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Brescia

About Us

Arjan Molenaar
- From The Netherlands
- PyGObject and Gaphor
- GTK on macOS

Dan Yeaw (pronounced: Yaw)
- Originally from California, now live in Michigan
- PyGObject and Gaphor
- Gvsbuild

Hi, I'm Dan Yeaw and I'm Arjan Molenaar, and we are sooo excited to talk to you about Showing up for Python in GNOME!!

We have been helping to maintain PyGObject and have been GNOME Foundation members for the last couple years.
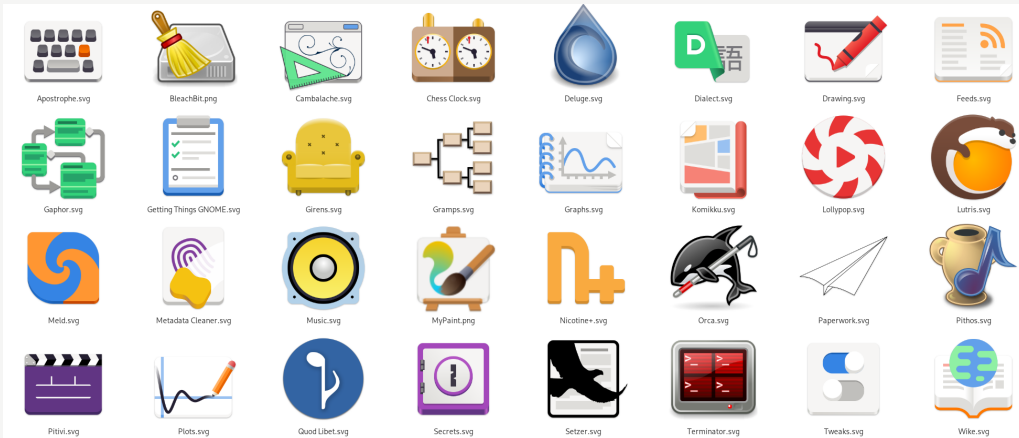
Arjan: I'm a software consultant by day, open source hacker by night. Live in The Netherlands. Since roughly a year I've been maintaining PyGObject. Apart from that I try to improve the support for GTK on macOS.

Dan: As Engineering Manager for Open Source Software at Anaconda, I lead teams working on projects including BeeWare, PyScript, Jupyter, and fsspec. Over the past seven years, I've been actively contributing to open source projects while building the Michigan Python community as a leader and organizer.

We also help maintain a Python GTK app called Gaphor which is a GNOME Circle app for doing SysML and UML modeling. I also help maintain Gvsbuild which is a build system for GTK on Windows.

GNOME Python

PyGObject is the GTK and related library bindings for Python

What's New in GNOME Python

- Improvements to AsyncIO support
- Enhanced documentation and examples
- Code formatting and linting
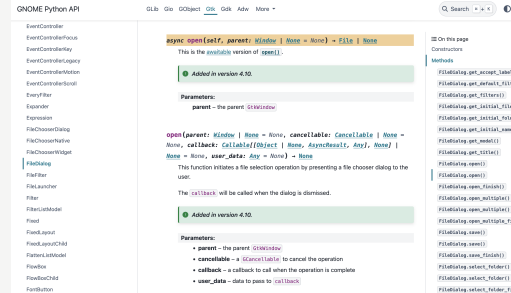- Migration to girepository 2.0
- Automatic release pipeline
- Other notable improvements

Improvements to AsyncIO support

It's easier to start using `asyncio`:

```
app = Adw.Application(...)

with gi.events.GLibEventLoopPolicy():
    app.run()
```

Kudos to Benjamin Berg

Enhanced documentation and examples

- The documentation is built using PyGObject.
- Only GNOME core libs.
- Recently added docs for async methods.
- GTK 3 docs are still available on https://lazka.github.io/pgi-docs/

https://api.pygobject.gnome.org

Migration to girepository 2.0

- Improved the code base

- Unfortunate fallout: apps not able to upgrade due to dependency on gobject-introspection

What's Next in GNOME Python

- Continuing to improve APIs and Python API doc examples

- Reduce the amount of custom code (pygtkcompat, option parser)

Vision and roadmap for the future

- PyGObject is mature
- Take advantage of new Python features
- A local documentation browser for all GI libraries on your system?

Call to Action

https://gitlab.gnome.org/GNOME/pygobject

- ⚬ Contributions of any kind will help continue to help the community thrive
- ⚬ Submit and help triage issues
- ⚬ Continue to help us improve the docs
- ⚬ Help us fix bugs and implement features
- ⚬ Add examples to Workbench
- ⚬ Build projects with PyGObject
- ⚬ Chat with us at #python:gnome.org
- ⚬ Blog and create videos

Many of you have even more ideas on what we could improve next, and we would love to have your contributions!

Wrap Up

Thank you so much to everyone who has contributed to PyGObject!

Slides:
https://github.com/gaphor/presentations/tree/main/state-of-python-in-gnome-2025

Questions?