What do you need from pip, PyPI, and packaging?

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Python Language Summit 2020
Last year’s “Batteries Included, but They're Leaking” talk by Amber Brown
  - Idea/plan: put more functionality into packages on PyPI
    - Question: Is this in progress?

2017-now: increased directed funding for packaging
  - Warehouse, security, localization, accessibility, pip resolver & user experience
  - Seeking more sponsorships, grants

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What do you need?

1. Quick summary of work in progress
2. Some ideas we could seek funding for
3. Feedback?

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Work in progress

- Malware detection on PyPI
- The Update Framework on PyPI (PEP 458)
- Pip dependency resolver
- Pip user experience, & maintainer sustainability
- Pipenv release
- Virtualenv revamp
- Independent library `installer` for installing wheels
- See notes for more

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No formal roadmap but ideas include:

- Better specifications, toolchain, & services for building distributions
- Robust interoperability testing
- Revamp PyPI API
- Make setuptools the reference implementation of the distutils API
- Provide more standardized editable installations
- Add support for pyproject.toml as a way to configure setuptools
- Create & maintain a generic wheel-builder
- PEP 480: secure the developer-to-user supply chain
- Implement perennial manylinux (PEP 600)

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My request

- Look at [https://wiki.python.org/psf/Fundable Packaging Improvements](https://wiki.python.org/psf/Fundable Packaging Improvements)

- Suggest: What should we add to that list/a packaging roadmap? What would help your plans? Reduce your pain?
  - [https://github.com/pypa/packaging-problems/](https://github.com/pypa/packaging-problems/)
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Next steps

• I want to:
  − update the Fundable Packaging Improvements list
  − get help applying for grants