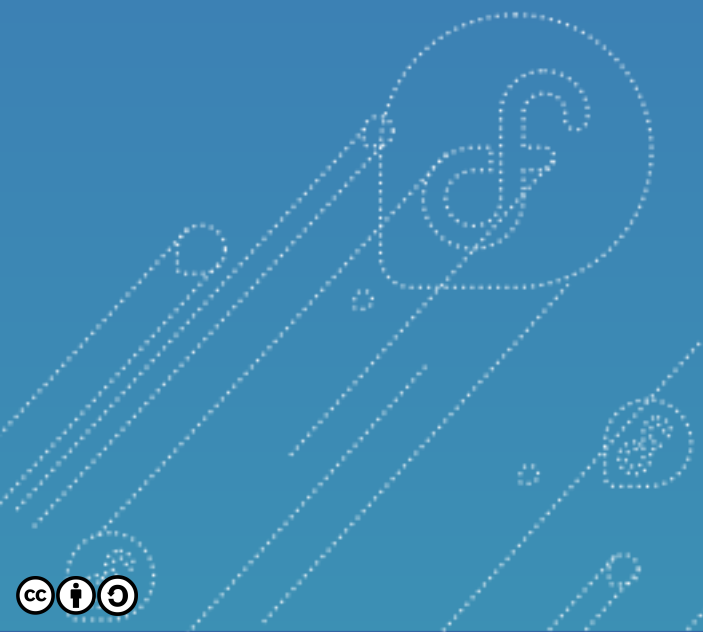




GoLang packaging in Fedora

Fabio Alessandro “Fale” Locati

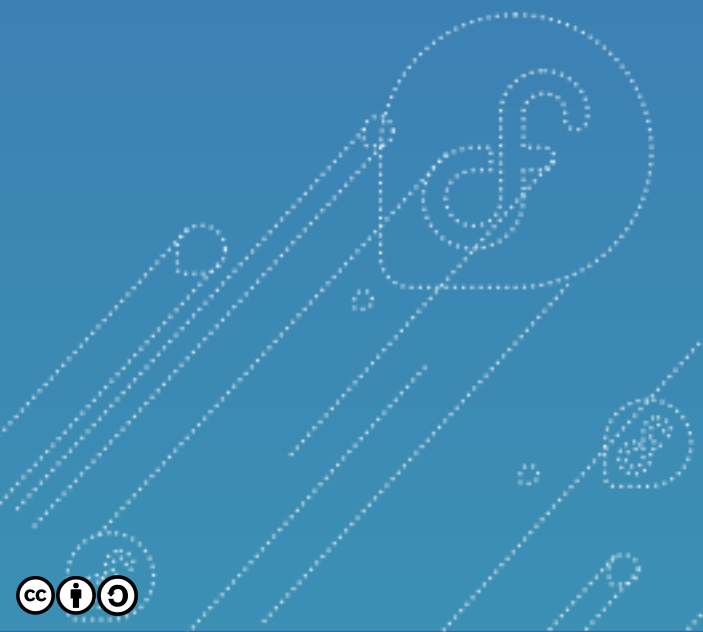
The “classic way”



This is the default slide.

- `go2rpm -d github.com/opencontainers/runc --name runc`
- Review and modify the produced file

The problems



Conflicting dependencies

- A requires $X < v0.10$
- B requires $X > v0.15$
- C requires $X > v1.0$

Dependency hell

- Easily need tens of new packages for a new package
- Easily need a few new packages for a new version
- Example: doctl (a CLI app to manage DigitalOcean resources)
 - 122 dependencies listed in the go.mod file
 - requires 752 packages to be installed to build it

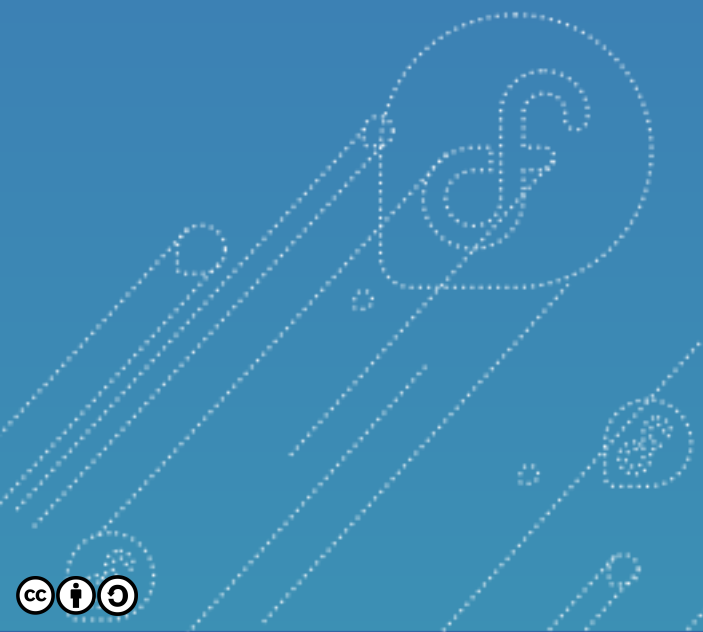
Many more packages than needed

- 1898 packages tracked by the Go SIG
- 484 include a binary
- 1400+ packages could be potentially removed

Other issues

- No Golang module support
- Bootstrap

A better way?



Enter GoLang Vendoring proposal

- The idea: vendor the dependencies
- Already discussed multiple times:
 - [FESCo ticket](#)
 - [devel-list discussion](#)
 - [LWN news + discussion](#)
- Change submitted for F43:
<https://discussion.fedoraproject.org/t/f43-change-proposal-golang-packages-vended-by-default-system-wide/154986>

Create a new package

- `go2rpm --profile vendor -d github.com/opencontainers/runc --name runc`
- `fedpkg new-sources runc-1.3.0.tar.gz runc-1.3.0-vendor.tar.bz2`
- `git commit ...`
- `git push ...`

Update package

- Modify the spec file (bump the version)
- `spectool -g runc.spec`
- `go_vendor_archive create --config go-vendor-tools.toml runc.spec`
- `fedpkg new-sources runc-1.3.0.tar.gz runc-1.3.0-vendor.tar.bz2`
- `git commit ...`
- `git push ...`

Override dependency

- `go_vendor_archive override --config go-vendor-tools.toml golang.org/x/sys v0.33.0`
- `go_vendor_archive create --config go-vendor-tools.toml runc.spec`
- `fedpkg new-sources runc-1.3.0.tar.gz runc-1.3.0-vendor.tar.bz2`
- `git commit ...`
- `git push ...`

Thanks

