Packaging in the containerized world
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- https://medium.com/quantum-integration
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who am i

bookwar @ IRC

https://telegram.me/bookwar
bookwar@fedoraproject.org
DevOps
sad reality

Ops  devops  Dev
even more real and even more sad reality
Packaged distribution
Venue for cross-ecosystem, cross-functional integration
business value

- inhouse development

Shared environment
- Metadata, versioning and dependency management
- Human verification and signing
- CVE tracking
- Integration testing and releases
- Long-term support
- Legal verification for licenses and patents
- ...

how
Fedora Initiatives
# dnf module list nodejs

<table>
<thead>
<tr>
<th>Name</th>
<th>Stream</th>
<th>Profiles</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>nodejs</td>
<td>8</td>
<td>default [d], development, minimal</td>
<td>Javascript runtime</td>
</tr>
<tr>
<td>nodejs</td>
<td>10</td>
<td>default [d], development, minimal</td>
<td>Javascript runtime</td>
</tr>
<tr>
<td>nodejs</td>
<td>11</td>
<td>default [d], development, minimal</td>
<td>Javascript runtime</td>
</tr>
</tbody>
</table>

# dnf module install nodejs:8

https://docs.fedoraproject.org/en-US/modularity/installing-modules/
- Parallel **availability** of several versions of the software stack
- No parallel **installability**
Fedora Minimization
minimization

- Define use-cases
- Estimate sizes of the footprint
- Track changes and highlight them to maintainers
minimization - caveats

- Comparizon of a base image is not a reliable data
- Modularization of systemd toolset
Container tools
# containerId=$(buildah from scratch)
# mountpath=$(buildah mount $containerId)
# dnf install --installroot $mountpath --release=29 buildah \
#   --setopt install_weak_deps=false -y
# dnf --installroot $mountpath clean all
# buildah umount $containerId
# buildah commit $containerId myimage
# podman run myimage buildah --help

man buildah-mount
Ecosystem-specific packaging
• Autogenerated dependencies for Rust, Go, Python packaging systems
Packit!
Autopackage the GitHub update to Fedora update
Test GitHub pull-request in Fedora environment

https://packit.dev/
Contribute
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