

An abstract graphic consisting of several overlapping shapes in shades of blue and grey. The shapes are rounded and organic, creating a modern, minimalist aesthetic. The background is a dark grey gradient.

Specfiles

guidelines update
best practices
tips & tricks

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Summary

- frequent mistakes
- FAQ
- news from Packaging Guidelines



Create specfile

- create your own specfile
 - skeleton specfile

rpmdev-newspec package.spec

Create specfile

- generate by tool:
 - cpanspec for Perl
 - gem2rpm for ruby gems

cpanspec Module::Build

gem2rpm rails

Epoch is not evil

- when use epoch?
 - package was already built in koji
 - new version of program doesn't work
 - dependent packages don't work
- even if not defined, it's set to 0
- epoch is usually hidden in name of pkg
 - vixie-cron-4.3, but it's vixie-cron-4:4.3



Version

- proper nvr of snapshot

- snapshot 20110102git9e88d7e

- date of release of snapshot – git/svn/cvs – git hash

- package-1.1-1.20110102git9e88d7e.fc17*

- apply patch:

- package-1.1-2.20110102git9e88d7e.fc17*

- [NamingGuidelines#Package_Version](#)



Version

- rpmdev-vercmp (rpmdevtools)

- snapshots

```
rpmdev-vercmp a-1.1-1.20110203git9e88d7e.fc17 a-1.1-2.20110203git9e88d7e.fc17
```

```
0:a-1.1-2.20110203git9e88d7e.fc17 is newer
```

- Zstream version

```
rpmdev-vercmp perl-5.8.8-44.el5_7.1 perl-5.8.8-44.el5_7.3
```

```
0:perl-5.8.8-44.el5_1.3 is newer
```



Requires

- require *provides* of package, not package
 - Requires: syslog
 - not rsyslog or syslog-ng
- require binary with path:
 - Requires: /usr/sbin/sendmail
 - exim, postfix, sendmail, ...



Requires

- Requires(preun|postun)
 - before|after uninstall of package
 - Requires(postun): systemd-units
- Requires(post)
 - break cyclic dependency
 - Requires(post): perl-libs



Provides/Obsoletes

- Replace or rename existing package
obsolete all lower
Obsoletes: vixie-cron < 4:4.3
provide last released version
Provides: vixie-cron = 4:4.4
- package must be obsoleted, not *provides* of package



Provides/Obsoletes

- kill old (sub)package

Obsoletes: perl-suidperl <= 4:5.12.2

- version is very important for possible future reborn of package
- obsoletes/provides should be in package for 2 releases of Fedora or for *ever*
- **Renaming.2FReplacing_Existing_Packages**



Files section

- exclusion of directory %exclude
#main package
%files
%{_bindir}/*
%exclude %{bindir}/h2xs
...
sub-package
%files devel
%{_bindir}/h2xs

Files section

- Why using noreplace:

- example from bind:

- ```
%config(noreplace) %{_sysconfdir}/sysconfig/named
```

# Files section

- verify
  - do *not* verify files, which are changed during run-time

```
%config(noreplace) %verify(not md5 size mtime)
```

```
%{_sysconfdir}/sysconfig/named
```

- **Rpm-files-section**

# Macros

- `macros.dist` - define distro tag
- `macros.jpckage` - define Java directories

# Macros

- dependency generator (RPM4.9)
- macros.perl - filter unneeded provides/requires

```
%global __provides_exclude_from %
{perl_vendorarch}/auto/*\.\.so$|%{perl_archlib}/.*\.\.so$|%
{_docdir}
```

```
%global __requires_exclude_from %{_docdir}
```

- macros

# Units in specfiles

- units need special care in scriptlets
- example: `cronie.spec`
- **Packaging:Systemd**