

# RPM and friends: what's new? 2024.

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# Big change - spec-file is considered as a template.

- Previously:

```
1 Name:          fuse-encfs
2 Version:       1.7.4
3 Release:       24%{?dist}
4 Summary:       Encrypted pass-thru filesystem in userspace
5 License:       GPLv3+
6 Group:         System Environment/Kernel
7 Url:           http://www.arg0.net/encfs
8 Source0:       http://encfs.googlecode.com/files/encfs-%{version}.tgz
9 Source1:       http://encfs.googlecode.com/files/encfs-%{version}.tgz.asc
10 %if 0%{?el5}
11 BuildRoot:     %{_tmppath}/%{name}-%{version}-%{release}-root-%(%{__id_u} -n)
12 %endif
13 Requires:      fuse >= 2.6
14 Provides:      encfs = %{version}-%{release}
15 BuildRequires: rlog-devel >= 1.3
16 BuildRequires: openssl-devel
17 %if 0%{?el5}
18 BuildRequires: boost141-devel
19 %else
20 BuildRequires: boost-devel >= 1.34
21 %endif
22 BuildRequires: fuse-devel >= 2.6
23 BuildRequires: gettext
24
```

- Now it is used to generate 'real' spec-files uploaded to Mock-buildroots.

## RPM templates: currently supports (0):

- %autorelease tag which accepts various versioning schemes - pre-releases, post-releases, etc.

```
1 %global realname amf
2 %global git_commit 8fea004e61c746c16271476c190a9c01e398a2d5
3 %global git_date 20110224
4 %global git_short_commit %(c=%{git_commit}; echo ${c:0:7})
5
6
7 Name:          erlang-%{realname}
8 Version:       0
9 Release:       %autorelease -p -s %{git_date}git%{git_short_commit}
10 BuildArch:    noarch
11 Summary:      Erlang Action Message Format Library
12 License:      BSD-2-Clause
13 URL:          https://github.com/abuibrahim/erlang-%{realname}
14 VCS:          scm:git:%{url}.git
15 Source0:      %{url}/archive/%{git_commit}/%{realname}-%{version}.tar.gz
16 BuildRequires: erlang-rebar3
17
18
19 %description
20 Erlang Action Message Format Library.
21
22
23 %prep
24 %autosetup -p1 -n erlang-%{realname}-%{git_commit}
```

- Pre-release

## RPM templates: currently supports (1):

- %autorelease tag which accepts various versioning schemes - pre-releases, post-releases, etc.

```
1 %global realname egeoip
2 %global git_commit 4efda2c2b5b0084d3e77b8f0bbdec78514706b34
3 %global git_date 20140111
4 %global git_short_commit %(c=%{git_commit}; echo ${c:0:7})
5
6
7 Name:          erlang-%{realname}
8 Version:       1.1
9 Release:       %autorelease -s %{git_date}git%{git_short_commit}
10 BuildArch:    noarch
11 Summary:      Erlang IP Geolocation module
12 License:      MIT
13 URL:          https://github.com/mochi/%{realname}
14 VCS:          git:%{url}.git
15 Source0:      %{url}/archive/%{git_commit}/%{realname}-%{version}.tar.gz
16 Patch1:       erlang-egeoip-0001-FIXME-an-old-DB-in-Fedora.patch
17 Patch2:       erlang-egeoip-0002-Fix-for-Rebar3.patch
18 BuildRequires: erlang-rebar3
19 BuildRequires: GeoIP-GeoLite-data-extra
20 Requires:     GeoIP-GeoLite-data-extra
21
22
23 %description
24 Erlang IP Geolocation module, currently supporting the MaxMind GeoLite City
```

- Post-release

## RPM templates: currently supports (2):

- %autochangelog tag.

```
commit 7cf6f7d7b5f55ec198a756cabb5a57fda537f753
Author: Peter Lemenkov <lemenkov@gmail.com>
Date:   Wed Apr 17 14:51:58 2024 +0200

    Convert to %autorelease and %autochangelog

    [skip changelog]

changelog | 159 +++++
erlang-basho_metrics.spec | 162 +-
2 files changed, 161 insertions(+), 160 deletions(-)

commit 9cdcc945f1c7ba167b23f8b27b4f60cd88f0e30b (origin/f40)
Author: Fedora Release Engineering <releng@fedoraproject.org>
Date:   Wed Jan 24 10:33:01 2024 +0000

    Rebuilt for https://fedoraproject.org/wiki/Fedora_40_Mass_Rebuild

erlang-basho_metrics.spec | 5 ++++-
1 file changed, 4 insertions(+), 1 deletion(-)

commit e185ae987b7101358e0c95d86374aea36938bf66
Author: Fedora Release Engineering <releng@fedoraproject.org>
Date:   Fri Jan 19 18:19:48 2024 +0000
```

- Only 2 of 3 changelog entries now - big progress.

# BuildRequires autogeneration (already used in Python packages)

```
Name:      dynamic-buildrequires
Version:    1
Release:    1%{?dist}
Summary:    Demonstration of Dynamic BuildRequires
License:    GPLv3+

# static buildrequires
BuildRequires: bash

%description
This package demonstrate Dynamic BuildRequires
https://fedoraproject.org/wiki/Changes/DynamicBuildRequires

%generate_buildrequires
echo fruit-cake

%files

%changelog
* Thu Jun 13 2019 Miroslav Suchy <msuchy@redhat.com> - 1-2
- initial version
```

- [Changes/DynamicBuildRequires](https://fedoraproject.org/wiki/Changes/DynamicBuildRequires) (<https://fedoraproject.org/wiki/Changes/DynamicBuildRequires>)

# Sysusers systemd support with compatibility macros (0)

```
1 #Type Name      ID  GECOS      Home directory  Shell
2 u      rtpproxy  -   "RTPProxy service" /var/lib/rtpproxy -
~
```

- Contents of sysusers file

# Sysusers systemd support with compatibility macros (1)

```
10 Source2:      https://github.com/sobomax/libelperiodic/archive/b04de2fc34d73f4d0aba43ad2ae02e0857234393/libe
11 Source3:      rtpproxy.sysusers
12 +-- 49 строка: Patch1: rtpproxy-0001-Remove-more-autogenerated-stuff.patch-----
61
62
63 %install
64 %make_install
65 +-- 7 строка: install -D -p -m 0644 rpm/%{name}.sysconfig %{buildroot}%{_sysconfdir}/sysconfig/%{name}-----
72 install -p -D -m 0644 %{SOURCE3} %{buildroot}%{_sysusersdir}/%{name}.conf
73
74
75 %pre
76 %sysusers_create_compat %{SOURCE3}
77
78
79 %post
80 %systemd_post %{name}.service
81
82
83 %preun
84 %systemd_preun %{name}.service
85
86
87 %files
88 +-- 15 строка: %doc AUTHORS README.md README.remote-----
103 %{_sysusersdir}/%{name}.conf
104 %{_libdir}/rtpproxy/*.so
105 %{_mandir}/man8/rtpproxy.8*
106 %dir %attr(0750, rtpproxy, rtpproxy) %{_localstatedir}/lib/%{name}
107
108
109 %changelog
110 %autochangelog
```

- How to handle it in spec-file
- [Changes/SystemdSysusers](https://fedoraproject.org/wiki/Changes/SystemdSysusers) (<https://fedoraproject.org/wiki/Changes/SystemdSysusers>)



## SPDX tags

- We started doing BoM for software packages
- Should be autogenerated from upstream sources (but not now).

```
Nostromo ~: license-fedora2spdx GPLv2+
GPL-2.0-or-later
Nostromo ~: license-fedora2spdx BSD
Warning: more options on how to interpret BSD. Possible options: ['BSD-1-Clause', 'BSD-2-Clause-FreeBS
{{pick BSD choice}}
Nostromo ~: license-fedora2spdx "ASL 2.0"
Apache-2.0
Nostromo ~:
```

# Thank you

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<https://github.com/lemenkov> (https://github.com/lemenkov)

