

Neal Gompa

✉ ngompa@opensuse.org

[m] @conan_kudo:matrix.org

🐦 [@Det_Conan_Kudo](https://twitter.com/Det_Conan_Kudo)

📧 @Conan_Kudo@fosstodon.org

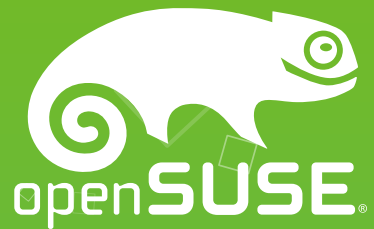
The Geeko View of DNF 5

Looking at the next generation of
DNF for openSUSE

Who am I?



- Open Source Advocate
- Contributor and Package Maintainer in Fedora, Mageia, and openSUSE
- Contributor to RPM, DNF, KIWI, Open Build Service, and various other similar projects
- Member of the Fedora Engineering Steering Committee (FESCo)
- Member of Fedora Workstation, Fedora Cloud, and Fedora Server WGs
- Chair of Fedora KDE SIG
- Member of the Mageia Council and Mageia.org Board
- KDE, e.V. Member
- Co-chair of the CentOS Hyperscale SIG
- Member of the openSUSE Board
- Member of the openSUSE Heroes
- Co-host of the Sudo Show podcast
- Senior Black Belt, Managed OpenShift at Red Hat, Inc.
 - Previously Senior DevOps Engineer at Datto, Inc.



DNF and DNF 5

DNF package manager

- Successor of YUM (Yellowdog Updater, Modified)
- Forked from YUM to adapt to use libsolv and offer a useful API as well as a plugin architecture
- Used in Fedora, Mageia, OpenMandriva, ROSA, Yocto, RHEL/CentOS, and many others
- Available in openSUSE since Leap 15.0

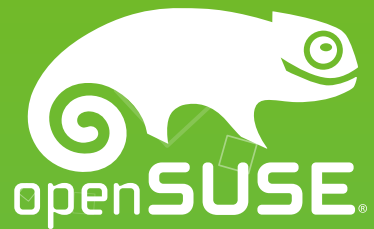


See my previous talk for details: <https://youtu.be/bTFI9n7JJXw>

DNF v5



- Rewrite of Python code to C++
- Simplifies internal architecture
 - Everything is now available through two libraries
 - libdnf5 (core library)
 - libdnf5-cli (terminal frontend library)
- First class API binding support to a number of languages:
 - C/C++
 - Python
 - Perl
 - Ruby
- Optional D-Bus based client-server model supported with dnf5daemon
- Replaced Micro DNF in Fedora Linux 38
 - <https://fedoraproject.org/wiki/Changes/MajorUpgradeOfMicrodnf>
- Replacing DNF v4 in Fedora Linux 39
 - <https://fedoraproject.org/wiki/Changes/ReplaceDnfWithDnf5>
- Coming to openSUSE Tumbleweed soon!



Demonstration

DNF v5 for openSUSE next steps

For inclusion into
openSUSE Factory:

- Fix failing unit test (for multilib)
 - <https://github.com/rpm-software-management/dnf5/issues/547>
- Fix build for Ruby bindings
 - <https://github.com/rpm-software-management/dnf5/issues/562>

After inclusion into
openSUSE Factory:

- Port snapper plugin
- Port txnupd plugin
- Write PackageKit backend plugin

Questions?



openSUSE®