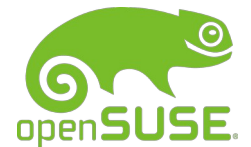


openSUSE® Leap

The Current and Future strategy

2020

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openSUSE Leap introduction

Let's have a look at
where are we right now.

How do we develop openSUSE Leap?

Processes, features,
bugs, OBS, co-op.

Agenda

How do we build distribution?

How is Leap
distribution build
today? Any planned
changes?

What's in the box?

KDE Highlights, GNOME
highlights, K8S, WSL,
Virt. Any plans to add
something to the box?

Ahoy, this is openSUSE Leap

openSUSE Leap is a brand new way of building openSUSE and is new type of a hybrid Linux distribution.

Leap uses source from SUSE Linux Enterprise (SLE), which gives Leap a level of **stability** unmatched by other Linux distributions, and combines that with community developments to give users, developers and sysadmins the best stable Linux experience available.

Contributor and enterprise efforts for Leap **bridge a gap** between matured packages and **newer packages** found in openSUSE's other distribution Tumbleweed.

<https://en.opensuse.org/Portal:Leap>

Can we get any better at this?

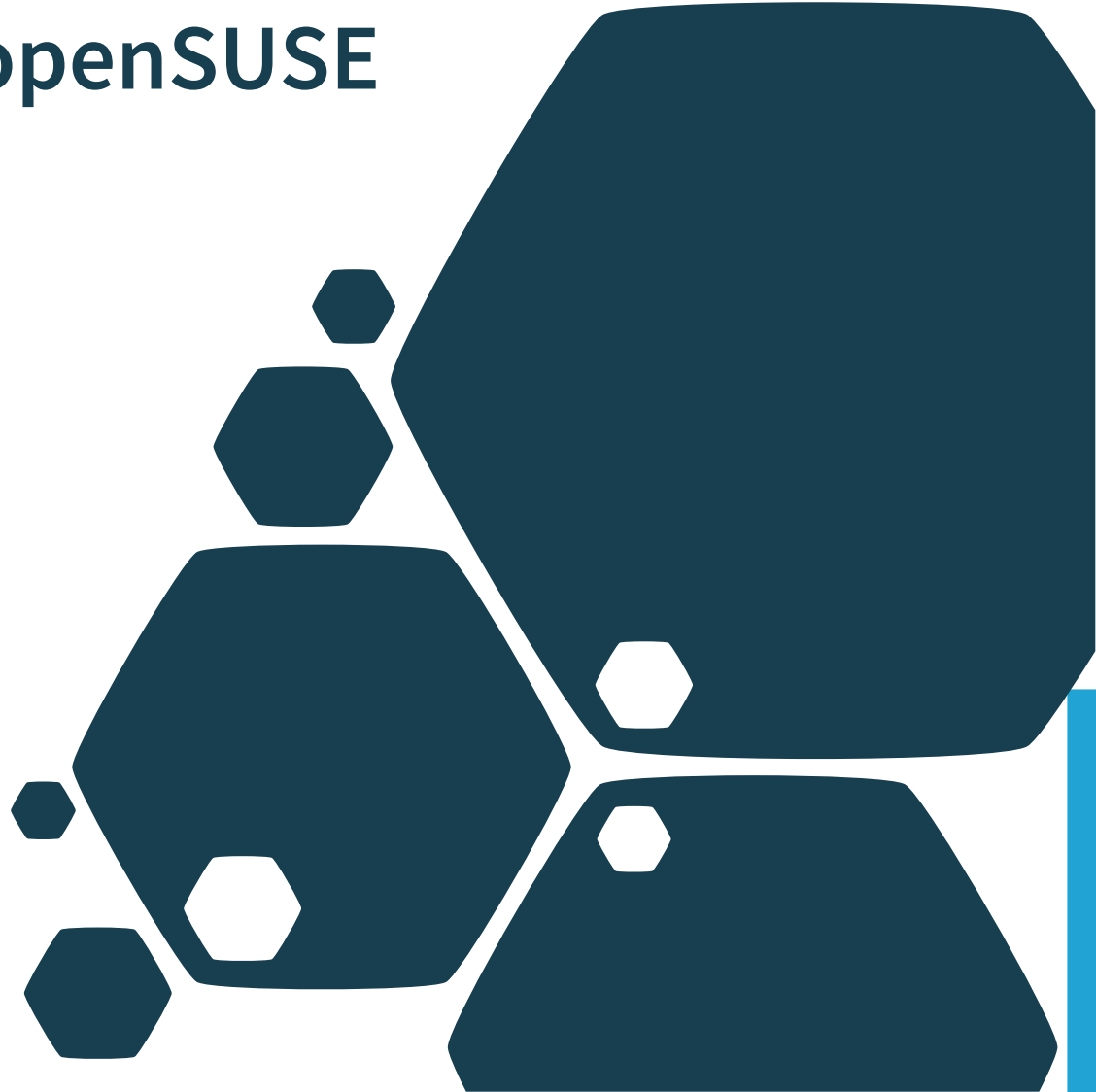


The way I see it is that mission is to bridge Community and Enterprise worlds and deliver the best possible result. **It's a unique partnership which comes with certain challenges.**

Can we be more up2date, keep up with the newest technologies and yet deliver the demanded stability?

Let's have a look!

How do we develop openSUSE Leap?



openSUSE Leap is 1/3 Enterprise 2/3 Community

~4000 packages

originates from SUSE
Linux Enterprise, these
represent 1/3 of
distribution.

Changes need to come
from SLE (origin-review)



~12k packages in total
~43600 rpms (on x86_64)

~8000 packages

Remaining 2/3 are
maintained by openSUSE
community.

We all try our best to keep
these in sync with
openSUSE Factory and
deliver the newest
greatest. But we have to
get it working with the 1/3
first.

How can we improve?

The hybrid model comes with a process hindrance.

This is not a new problem, It just gets more and more visible.

- A transparent and simple process for openSUSE Leap submissions targeting both worlds does not exist.
 - This really blocks more complex submissions targeting both Enterprise and Community package sets and rejecting submissions can demotivate people.
 - Some actions already took place, such as improving Documentation (see the link at the bottom), Providing weekly updates on requested changes in SLE as part of meeting minutes, making SUSE Bugzilla public.
 - Transparent Community SLE change request process is expected to be available **in Autumn 2020**.

https://en.opensuse.org/openSUSE:Release_team

<https://en.opensuse.org/Portal:Leap/SLEFeatureRequests>

How can we improve?

We can't be obviously newer than Factory, but we be a better fast-follower!

Release team could be more effective at refreshing 2/3 of the distribution, but we're currently not that many .

If we (openSUSE Release team) simplify handling of the 1/3, then we can focus more on the remaining 2/3. This is not just JUMP. It's being more effective in pre-integration testing and improved collaboration with Enterprise-y 1/3. Reduce duplication of efforts on the openSUSE Leap and Backports. Backports team and openSUSE Leap could join efforts and bring together Leap and Backports to the next level .

Simplifying the 1/3 would also result into significant reduction of adopting changes from SLE to big components such as GNOME (6 weeks → instant)

https://en.opensuse.org/openSUSE:Release_team

<https://en.opensuse.org/Portal:Leap/SLEFeatureRequests>

How do we build openSUSE Leap distribution?



How do we build openSUSE Leap distribution?

Open Build Service

openSUSE
Release Team

Pre-integration
testing

openQA

The build system
doing amazing job
with distro rebuilds
on code changes

Handing
Submit Requests to
every single package
in openSUSE Leap
with help from bots
on reviews.

Avoiding breakages
early in the process

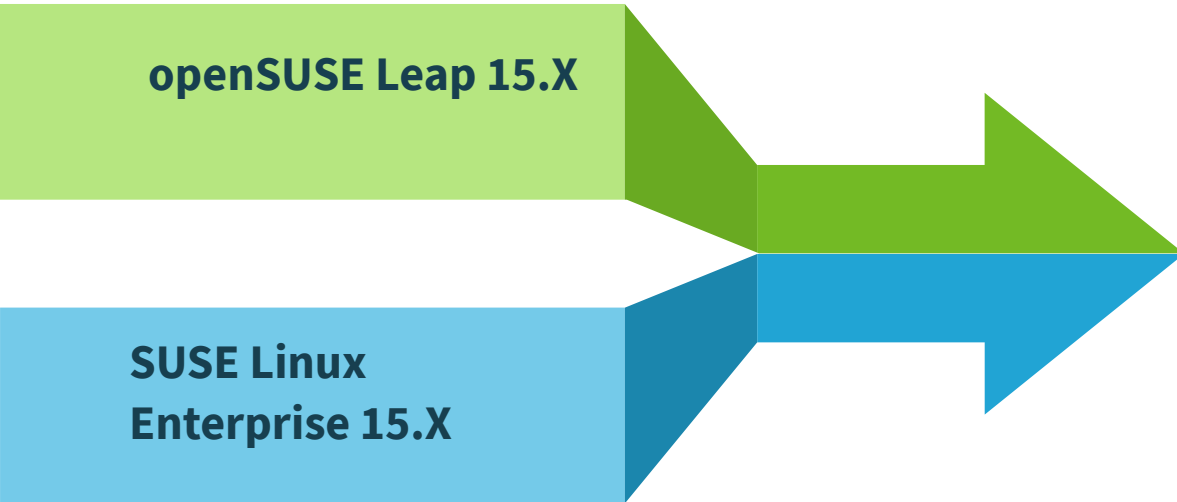
Our Quality Assurance
See
openqa.opensuse.org

The Jump! proposal

- The proposed change to openSUSE Leap distribution build was covered in previous a talk “JUMP! Current state and upcoming challenges” done by Adrian
- It’s essentially a proposal to re-use binaries from SUSE Linux Enterprise for the Enterprise-y 1/3 of openSUSE Leap and sync-them over rather than re-build, re-review and go again though pre-integration testing. This brings many challenges for sure!
 - <https://en.opensuse.org/Portal:Leap/FAQ/ClosingTheLeapGap> (check Weekly updates)
 - <https://lists.opensuse.org/opensuse-factory/2020-04/msg00165.html>



Syncing code-streams first!

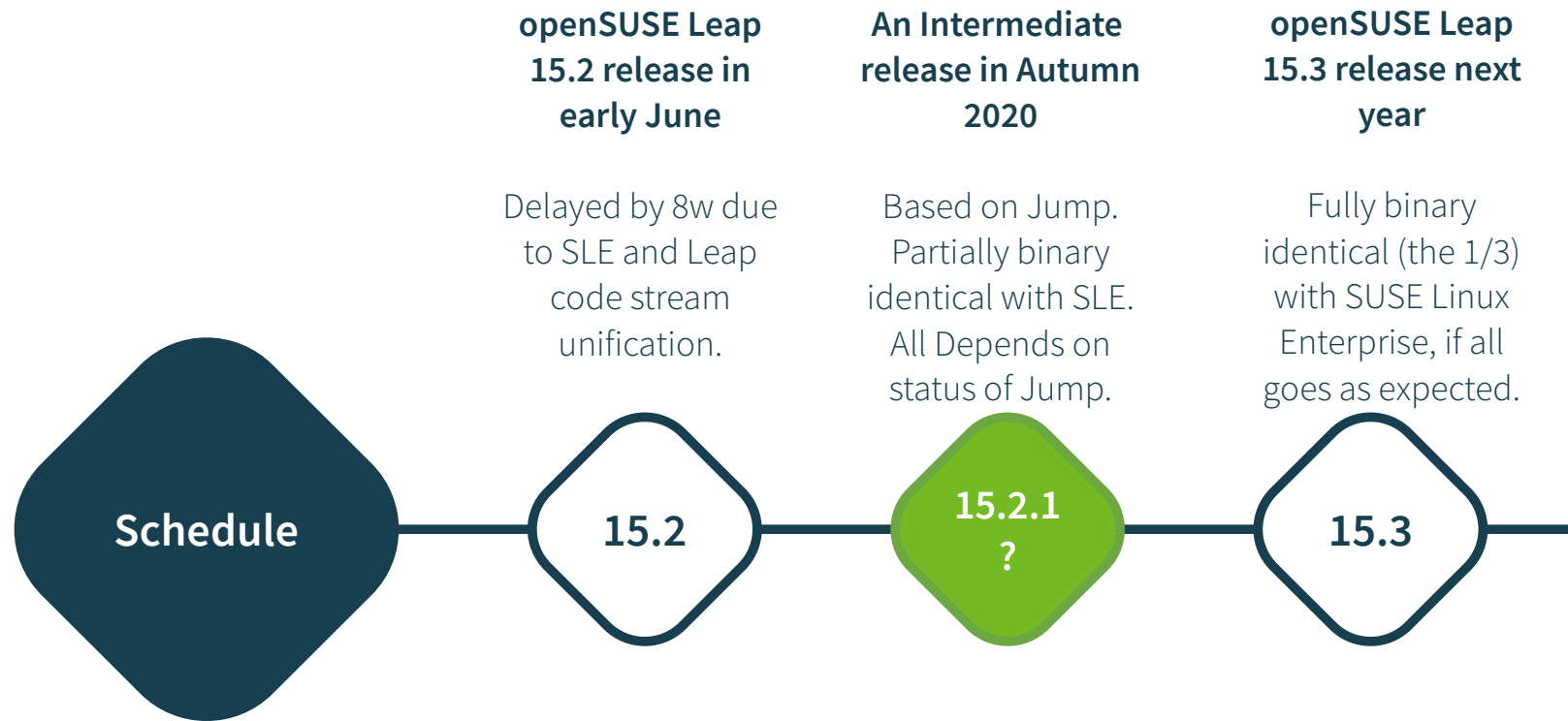


There is about 150 packages in the Enterprise-y 1/3 with a functional difference. Some differences are pretty significant (libvirt, qemu, KDE support, kernel, transaction-update-upstream, django support).

The entire SUSE is currently working on bringing all of these together! And we want to be done in 15.3!

This brings me to the 15.2 roadmap!

The current roadmap for openSUSE Leap



See <https://en.opensuse.org/openSUSE:Roadmap>
<https://lists.opensuse.org/opensuse-factory/2020-04/msg00282.html>

Available Architectures in openSUSE Leap

Can
community
support it?

15.1	15.2	15.3
x86_64 (primary)	x86_64 (primary)	x86_64 (primary)
ARMv8 64bit (secondary)	ARMv8 64bit (primary?)	ARMv8 64bit (primary?)
ppc64le (secondary)	ppc64le (secondary)	ppc64le (secondary)
ARMv7 32bit (secondary)	ARMv7 32bit (secondary)	ARMv7 32bit (secondary)
RISC V (secondary)	RISC V (secondary)	RISC V (secondary)
		s390x (secondary)?

- **Dirk Müller is putting together a policy for the first class citizen artefacts.**
- I'm gathering status of 64bit ARM support for the 2/3. The 1/3 is certain with SLE binaries.
- s390x comes as a benefit of the SLE source and binary sync.

What's in the box?



KDE Highlight for 15.2



- Plasma 5.18 LTS starts significantly faster. Night mode, official Plasma browser integration. Better support for public WIFI logins. Improved privacy in Plasma Notification system was fully rewritten. Flatpak portal support. New look and feel for lock screen.
- Konsole will help you be more productive with improved tab management.
- The video editor Kdenlive has gone through an extensive rewrite of its core code improving the architecture.
- KMail comes with support for languagetools (grammar checker) and grammalecte (French-only grammar checker).
- Kitinerary is Kontact's brand new travel assistant that will help you get to your location and advise you on your way.
- KDE Connect now includes a new SMS app that allows the user to read and write SMS messages with the full conversation history.
- Spectacle brings new ways how to take screenshots.
- Korganizer comes with a modernized look for events
- Calligra Plan, KDE's project planning and management tool has hit a huge milestone with many improvements.

Full changelog at <https://en.opensuse.org/Portal:15.2/Features:KDE>

Big thanks to Antonio Larossa and KDE community!

KDE plan for upcoming 15.3



- Deliver to openSUSE Leap users the latest greatest KDE version available to the date
- Wayland as the default option (optional in 15.2)

Full changelog at <https://en.opensuse.org/Portal:15.2/Features:KDE>

Big thanks to Antonio Larossa and KDE community!

GNOME Highlight



- GNOME updated to 3.34.2, we're following SLE-15-SP2 in this case.
- Wayland enabled by default
- GNOME is currently on the list of packages with feature differences in Leap and SLE, and Yifan Jang's team is doing some heavy lifting to bring them all together.
- The goal for openSUSE Leap 15.3 would to be identical with SLE 15 SP3, and fast follow any SLE updates. openSUSE Release team's goal would be then reduce previously mentioned effort to get GNOME updates to openSUSE Leap.

Full changelog at <https://download.gnome.org/core/3.34/3.34.2/NEWS>

Big thanks to Yifan Jiang and his team!

Virtualization highlights

- **Windows Subsystem for Linux 2.0 support**
 - More than 30 000 downloads of openSUSE Leap 15.1 images from Windows Store !
 - aarch64 support is being investigated
 - big thanks to Ludwig Nussel, Scott Reeves and Jeff Kowalczyk
- **Kubernetes** stack inclusion is almost finished!
 - Big thanks to the Richard and community!
- **libcontainers-common** allows the configuration of files and manpages shared by tools that are based on the github.com/containers libraries, such as Buildah, CRI-O, Podman and Skopeo.

Virtualization plans

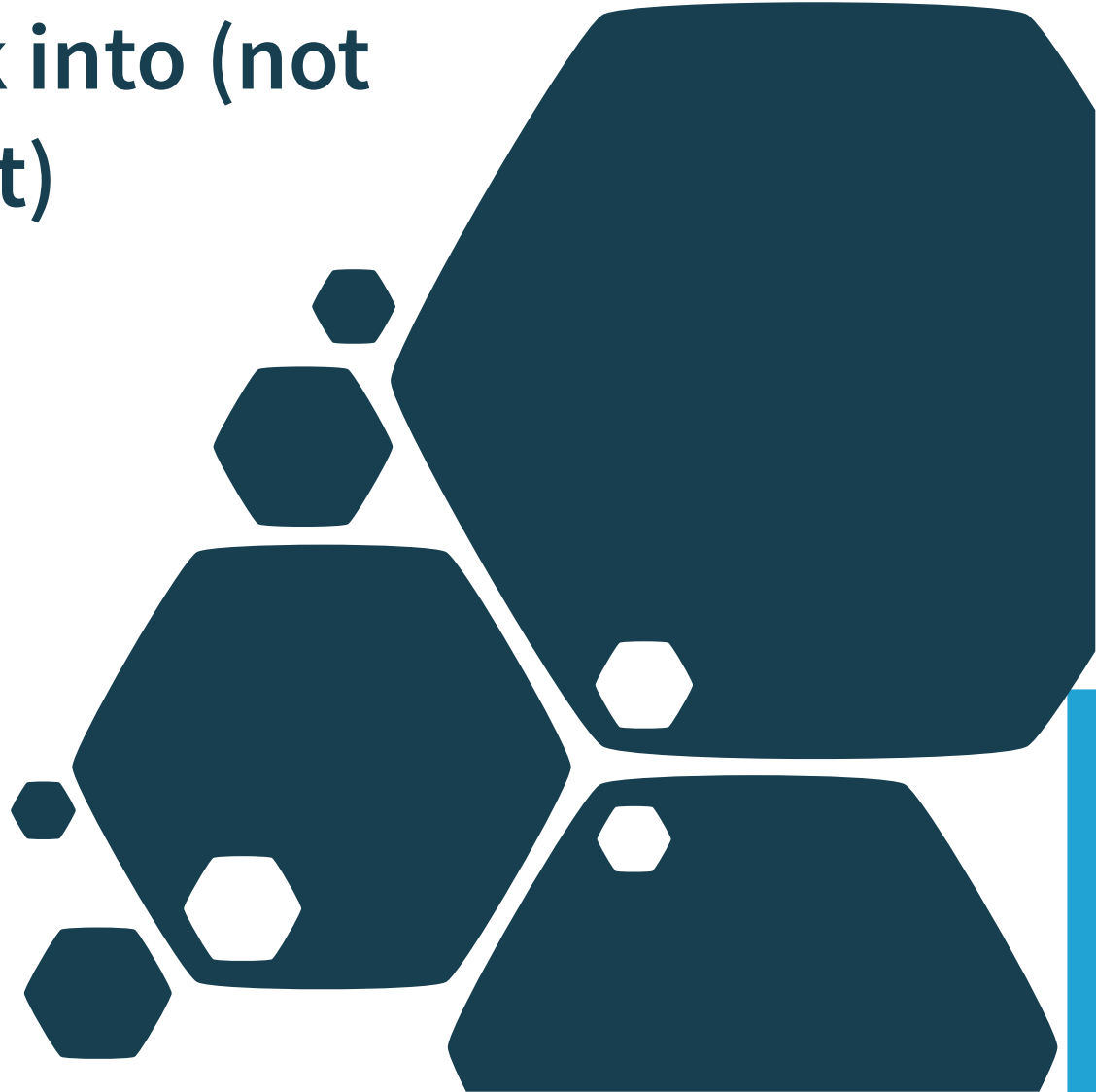
- We would like to unify virtualization stack with SUSE Linux Enterprise 15 SP3 in openSUSE Leap 15.3
- So far this has been one of the most challenging areas to address.

Any much more!

Read the release announcement for openSUSE Leap 15.2 in July or our landing page on wiki.

<https://en.opensuse.org/Portal:15.2>

**Further areas to look into (not
in the box yet)**



SUSE Developer Community highlight

SUSE's Developer community is excited about the upcoming narrowing of the Leap gap as they perceive it making easier for developers to adopt SUSE overall.

I'm personally having high expectations from this co-operation of openSUSE Leap and SUSE Developer Community, and generally bringing code-streams together as it might increase our visibility!

Let's see!

Real Time

openSUSE Leap kernel is relatively well suited for Real Time. I was told better than the default SUSE Linux Enterprise kernel (not the kernel-rt).

kernel-rt will be in near future available in the public OBS as a part of Leap MicroOS.

This might be a topic which we should to investigate for openSUSE Leap 15.3, possible real time support for few openSUSE Leap packages (lttng-modules, crash) is also part of addressing functional differences with SUSE Linux Enterprise (part of 1/3).

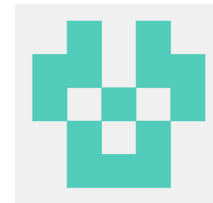
The Snapdragon 8cx laptop wave

I'm personally very interested and watching the aarch64-laptops project.

But I can't say it would be the focus for openSUSE Leap 15.2 or 15.3 as it requires a newer kernel to begin with. Might be better fit for our rolling release openSUSE Tumbleweed.

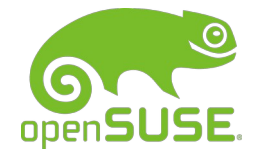
Is there anybody else interested in openSUSE involvement?

Let me know!



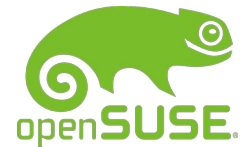
<https://github.com/aarch64-laptops>

Any questions?



Join the conversation,
contribute & have a lot of fun!

www.opensuse.org





Finish

Thank You

