Adaptable Linux Platform

openSUSE Asia Summit 2022 – Installing ALP "Les Droites" prototype

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WHOAMI(1)

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Working remotely from **Mikulov, Czech republic** for the Early Enablement Team at SUSE
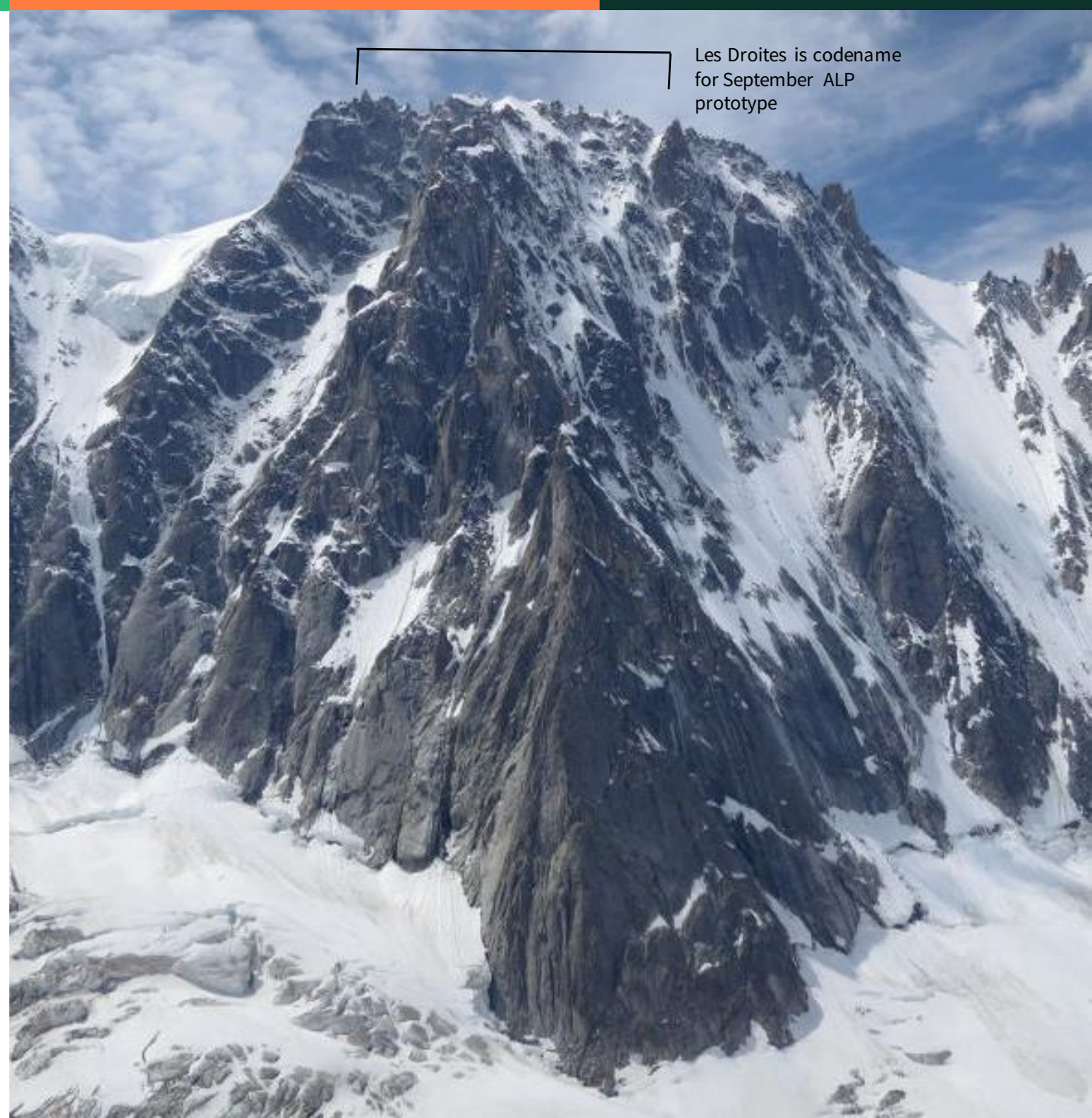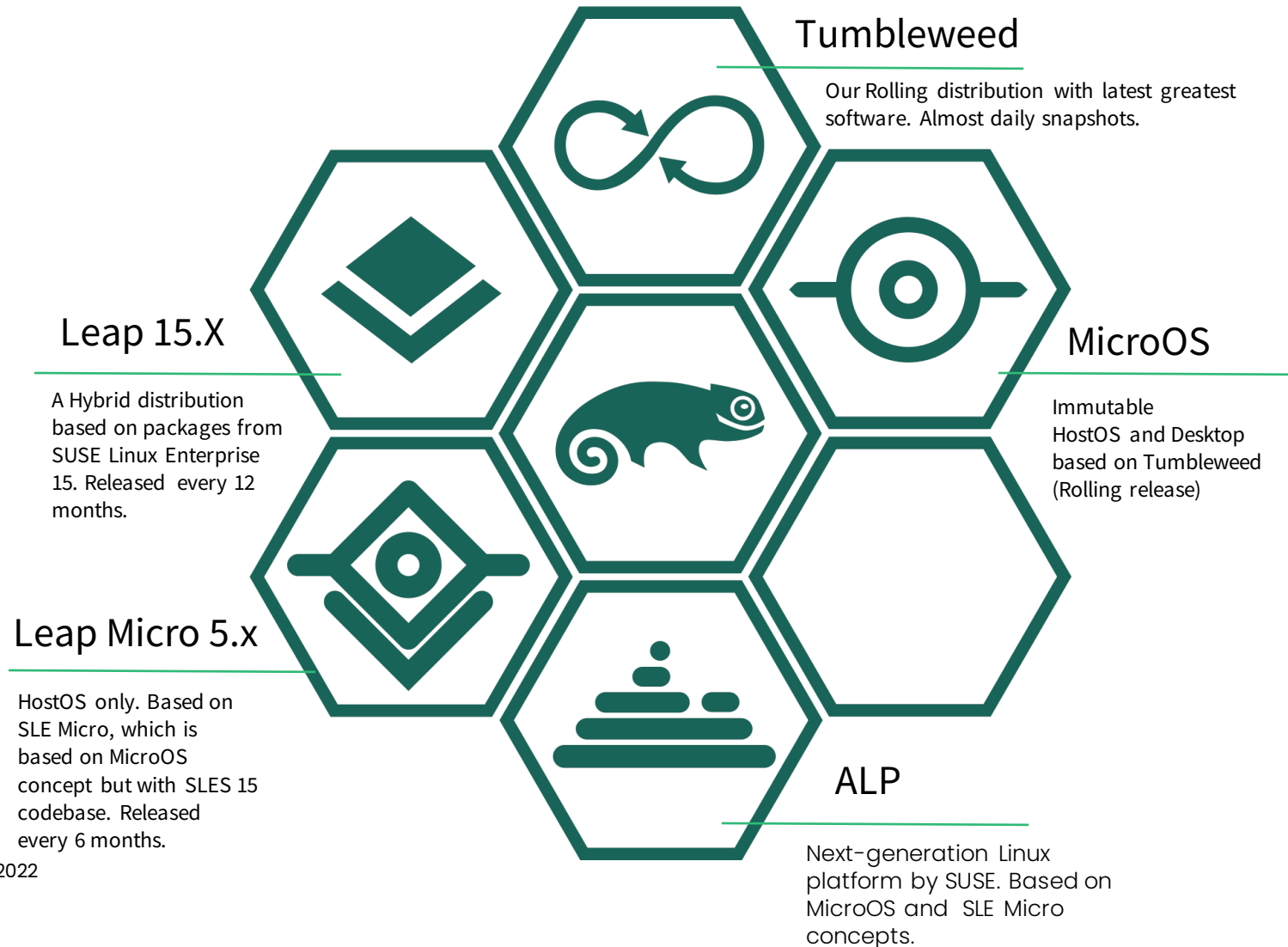
Driver of ALP Community WG

What is ALP?

Adaptable Linux Platform (ALP) is a codename for the next-gen Linux platform by SUSE.

The idea is simple! Users should spend their time managing the application instead of managing the underlying Host.

Les Droites is codename for September ALP prototype

Overview of openSUSE distributions

Tumbleweed

Our Rolling distribution with latest greatest software. Almost daily snapshots.

Leap 15.X

A Hybrid distribution based on packages from SUSE Linux Enterprise 15. Released every 12 months.

MicroOS

Immutable HostOS and Desktop based on Tumbleweed (Rolling release)

Leap Micro 5.x

HostOS only. Based on SLE Micro, which is based on MicroOS concept but with SLES 15 codebase. Released every 6 months.

ALP

Next-generation Linux platform by SUSE. Based on MicroOS and SLE Micro concepts.

Focus of the Adaptable Linux Platform

Application Centric

Easy deployment of any workload, be it a package, container, VM.

User worries only about the workload application; the system manages itself.

Zero Touch host with self-management, self-healing, as well as self-tuning. Full Disk Encryption (FDE) with TPM chip enablement by default on x86.

Decoupling lifecycles

Decoupling system components of the base OS by, e.g., containerization of individual ALP Workloads such as YaST, GDM/Desktop stack, language stacks, and others provide more flexibility for setting the lifecycle per bits and pieces.

This enables us to meet customer expectations for an Ultra-long lifecycle and provide the latest and greatest MariaDB, Node.Js, or python.
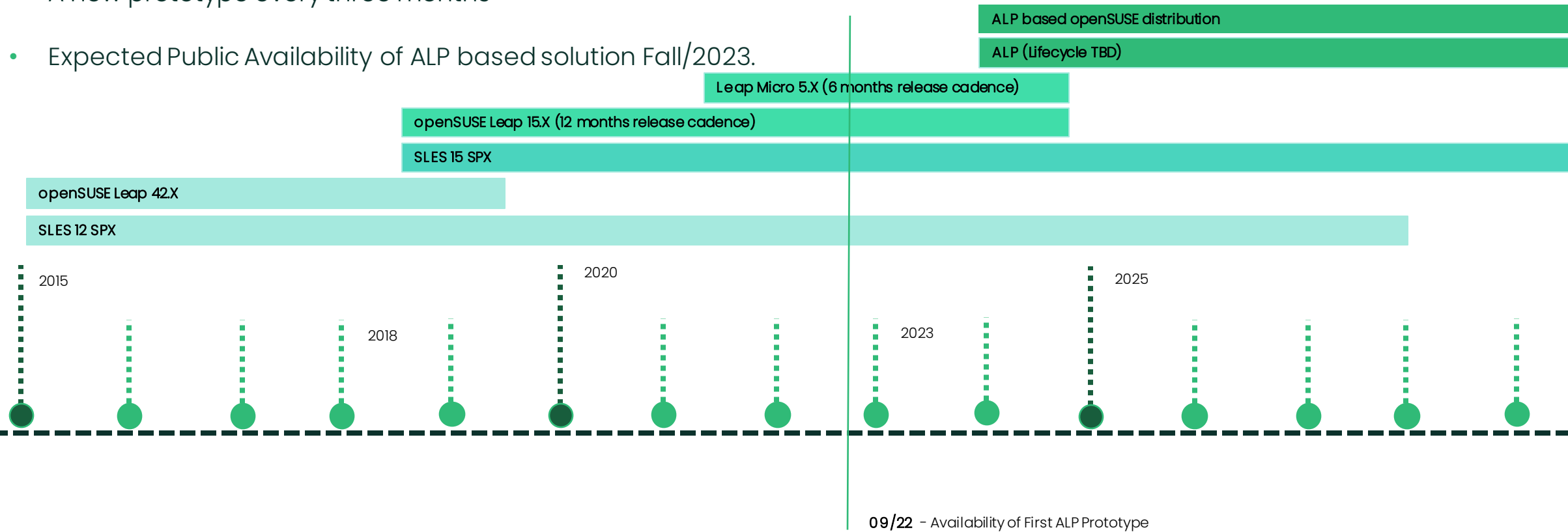
Built and tested in an open way

ALP is **planned**, built and tested in public. You can already have a look at OpenBuildService and openQA ALP projects. This simplifies cooperation with partners as well as the community and makes contributions straightforward and transparent.

High level Roadmap

- The first ALP prototype availability later this month (09/2022).

- A new prototype every three months

- Expected Public Availability of ALP based solution Fall/2023.

ALP based openSUSE distribution

ALP (Lifecycle TBD)

Leap Micro 5.X (6 months release cadence)

openSUSE Leap 15.X (12 months release cadence)

SLES 15 SPX

openSUSE Leap 42.X

SLES 12 SPX

2015

2020

2018

2023

2025

09/22 – Availability of First ALP Prototype

What's part of the "Les Droites" prototype?

Similar HostOS to SLE Micro but built from fresh codebase with initial container workloads

- Encrypted and non-encrypted qcow image with JeOS first boot experience

- TPM (Trusted Platform Module) based FDE (Full Disk Encryption) https://github.com/okirch/fdepoc

- Container and VM runtimes (podman, docker, k3s, gdm)

- Cockpit for web-based management

- Containerized workloads YaST, gdm (SUSE:ALP:Workloads)
  - See yast-report-2022-7, yast-report-2022-8, and Cockpit_at_ALP
  - SELinux in permissive mode

- Documentation - lasted build is available at https://susedoc.github.io/doc-modular

Let's play some demos!

https://www.youtube.com/watch?v=_Zf3ILgUUuo&list=PLLOj_Y4wWj_m8Bm1cBk6sh8FkW6FWljzL

Wait? What about desktop?

MicroOS Desktop, which is ImmutableOS utilizing flatpaks currently serves as a prototype for an ALP-based Desktop solution.

We've already done Immutable Desktop Workshop - task-list for the event

Full Desktop stack is not part of September prototype.

Forming openSUSE ALP community

Join our Community Workgroup and help us define the next-gen distribution bridging Community and the Enterprise.

Meeting every Tuesday at 14:30 UTC at https://meet.opensuse.org/meeting

Most of our updates can be found at https://news.opensuse.org/tag/alp

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Summary

Let's recap all that we were talking about

- This of ALP solution family as a new parallel offering rather than successor of SLES 15 product portfolio.

- APP/Workload focused self-managing Host OS.

- Decoupling Lifecycle of system workloads/components to allow users to define their own pace of updates.

- The very first prototype is out now!

- General Availability of ALP based solution in Fall 2023

- Build and tested in open. Images can be downloaded from public OBS (build.opensuse.org)

- Make sure to join Tuesday's ALP Community Workgroup meetings.

![SUSE]

Thank you

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