Release Notes

SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 15 SP1

SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension is an enterprise-quality Linux desktop with market-leading usability and interoperability. This document provides an overview of high-level general features, capabilities, and limitations of SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 15 SP1 and important product updates.

These release notes are updated periodically. The latest version is always available at https://www.suse.com/releasenotes ↗. General documentation can be found at: https://www.suse.com/documentation/documentation/sled-15 ↗.

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1 About the Release Notes

The most recent version of the Release Notes is available online at https://www.suse.com/re-leasenotes ↗.

Entries can be listed multiple times if they are important and belong to multiple sections.

Release notes only list changes that happened between two subsequent releases. Always review all release notes documents that apply in your upgrade scenario.

2 SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension

SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension is the market's only enterprise-quality Linux desktop ready for routine business use. Developed and backed by SUSE, SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension provides market-leading usability, seamless interoperability with existing IT systems, and dozens of essential applications—all at a fraction of the price of proprietary operating systems.

2.1 Interoperability and Hardware Support

SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension comes bundled with the latest versions of leading applications such as LibreOffice office productivity suite, Mozilla Firefox Web browser, and Evolution e-mail and calendar suite. In addition, it integrates with Microsoft SharePoint for group collaboration and supports a wide range of multimedia file formats, wireless and networking standards, and plug-and-play devices.

Through the latest enhancements in power management and security, SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension also provides an environmentally friendly IT experience (Green IT) and an error-proof desktop. Finally, SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension offers unparalleled flexibility. You can deploy it on a wide range of thick client devices (including desktops, notebooks, netbooks, and workstations), on thin client devices, or as a virtual desktop. By leveraging the power of SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension, your business can dramatically reduce costs, improve end user security and increase workforce productivity.

2.2 What Is New?

SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 15 introduces many innovative changes compared to SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 12.

2.3 Important Sections of This Document

If you are upgrading from a previous SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension release, you should review at least the following sections:

- *Section 2.5, "Support Statement for SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension"*

2.4 Support and Life Cycle

SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension is backed by award-winning support from SUSE, an established technology leader with a proven history of delivering enterprise-quality support services.

SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 15 has a 10-year life cycle. The current version (15 SP1) will be fully maintained and supported until 6 months after the release of SUSE Linux Enterprise 15 SP2.

SUSE does not support skipping Service Packs of SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension when upgrading.

For more information, see:

- The support policy at https://www.suse.com/support/policy.html ↗

2.5 Support Statement for SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension

To receive support, you need an appropriate subscription with SUSE. For more information, see https://www.suse.com/support/programs/subscriptions/?id=SUSE_Linux_Enterprise_Desktop ↗.

The following definitions apply:

L1

Problem determination, which means technical support designed to provide compatibility information, usage support, ongoing maintenance, information gathering and basic troubleshooting using available documentation.

L2

Problem isolation, which means technical support designed to analyze data, reproduce customer problems, isolate problem area and provide a resolution for problems not resolved by Level 1 or prepare for Level 3.

L3

Problem resolution, which means technical support designed to resolve problems by engaging engineering to resolve product defects which have been identified by Level 2 Support.

For contracted customers and partners, SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 15 SP1 is delivered with L3 support for all packages, except for the following:

- Technology Previews

- Sound, graphics, fonts and artwork

- Packages that require an additional customer contract

SUSE will only support the usage of original packages. That is, packages that are unchanged and not recompiled.

2.6   Documentation and Other Information

2.6.1   On the Product Medium

- For general product information, see the file `README` in the top level of the product medium.

- For a chronological log of all changes made to updated packages, see the file `ChangeLog` in the top level of the product medium.

- Detailed change log information about a particular package is available using RPM:

```
rpm --changelog -qp FILE_NAME.rpm
```

(Replace *FILE_NAME.rpm* with the name of the RPM.)

- For more information, see the directory `docu` of the product medium of SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 15 SP1.

2.6.2 Externally Provided Documentation

- https://www.suse.com/documentation/documentation/sled-15 ↗ contains additional or updated documentation for SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension 15 SP1.

- Find a collection of White Papers in the SUSE Linux Enterprise Desktop/SUSE Linux Enterprise Workstation Extension Resource Library at https://www.suse.com/products/desktop/#resources ↗.

3 Related Products

This section lists related products. These products have own release notes documents that are available from https://www.suse.com/releasenotes ↗.

- SUSE Enterprise Storage: https://www.suse.com/products/suse-enterprise-storage ↗

- SUSE Linux Enterprise Server: https://www.suse.com/products/server ↗

- SUSE Linux Enterprise Server for SAP Applications: https://www.suse.com/products/sles-for-sap ↗

- SUSE OpenStack Cloud: https://www.suse.com/products/suse-openstack-cloud ↗

- SUSE Manager: https://www.suse.com/products/suse-manager ↗

Additionally, there is the following extension which is not covered by SUSE support agreements, available at no additional cost and without an extra registration key:

- SUSE Package Hub: https://packagehub.suse.com/ ↗

4 Systems Management

4.1 Support for Socket-Based Services Activation

Systemd allows for new ways of starting services, such as the so-called socket-based activation. Services which are configured to be started on demand will not run until it is needed, for example, when a new request comes in.

The YaST Services Manager has been extended to allow setting services to be started on-demand. Currently, only a subset of services supports this configuration. The current start mode is displayed in the column *Start* of the YaST Services Manager. In the drop-down box *Start Mode* of the YaST Services Manager, the mode *On-demand* will only be shown when it is available for the selected service.

Additionally, the table column *Active* has been adapted to show the correct value provided by Systemd.

5 Storage

5.1 Displaying Disk Space Used by Snapper Snapshots

Previously, it was hard to calculate the disk space consumption of an individual Btrfs snapshot when the qgroups (quota groups) feature was enabled.

Starting with SLE 15 SP1, Snapper shows the disk space used by individual snapshots when running `snapper list` even if Btrfs quotas are enabled.

6 Networking

6.1 resolv.conf Is Now Located in /run

Starting with SLE 15 SP1, both Wicked and NetworkManager will write the file `resolv.conf` into the `/run` directory instead of in `/etc`. `/etc/resolv.conf` will still exist as a symbolic link.

7 Miscellaneous

7.1 HiDPI support in GNOME

Starting with SLE 15 SP1, there are several improvements to HiDPI support. If the DPI of your display is greater than 144, GNOME will scale the Session to a 2:1 ratio automatically and deliver you a crisp and sharp user experience. You can adjust the scaling-factor value manually under GNOME Control Center's display panel.

However, there are limitations to this support:

- Fractional scaling is still considered experimental in GNOME 3.26.2, so you can only set the scaling factor to a whole number.

- X11 apps may appear blury under a HiDPI Wayland session (via XWayland), as per-display scaling is not supported on X11.

- Using multiple monitors with different DPI is not supported, scale-monitor-framebuffer is still an immature feature so you cannot set per-monitor scales in GNOME Control Center.

7.2 GNOME Initial Setup (gnome-initial-setup) Provides User Configuration

SLED 15 SP1 now uses the upstream GNOME Initial Setup tool (`gnome-initial-setup`) the first time a user logs in. However, as many settings for user are already made by the system installation (that is by YaST or autoyast), GNOME Initial Setup will only configure keyboard layout/IBus input methods.

Other screens of the tool have been disabled. GNOME Initial Setup will also not run prior to the initial login of the first user.

8 Obtaining Source Code

This SUSE product includes materials licensed to SUSE under the GNU General Public License (GPL). The GPL requires SUSE to provide the source code that corresponds to the GPL-licensed material. The source code is available for download at http://www.suse.com/download-linux/source-code.html ↗. Also, for up to three years after distribution of the SUSE product, upon request, SUSE will mail a copy of the source code. Requests should be sent by e-mail to mailto:sle_source_request@suse.com ↗ or as otherwise instructed at http://www.suse.com/download-linux/source-code.html ↗. SUSE may charge a reasonable fee to recover distribution costs.

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