SUSE Linux

SUSE Linux (/ˈsuːsə, ˈsuːzə/ *SOO-sə, SOO-zə*,[1][2] German: [ˈzuːzə]) is a computer operating system developed by SUSE. It is built on top of the free and open source Linux kernel and is distributed with system and application software from other open source projects. SUSE Linux is of German origin, its name being an acronym of "Software und System-Entwicklung" (software and systems development), and it was mainly developed in Europe. The first version appeared in early 1994, making SUSE one of the oldest existing commercial distributions. It is known for its YaST configuration tool.

Novell bought the SUSE (then "SuSE") brands and trademarks in 2003. Novell, one of the founding members of the Open Invention Network, decided to make the community an important part of their development process by opening widely the distribution development to outside contributors in 2005, creating the openSUSE distribution and the openSUSE Project. Novell employed more than 500 developers working on SUSE in 2004.[3] On 27 April 2011, Novell (and SUSE) were acquired by The Attachmate Group,[4] which made SUSE an independent business unit. Later, in October 2014, the entire Attachmate Group, including SUSE, was acquired by the British firm Micro Focus International.[5] SUSE continues to operate as an independent business unit.[6] On 2 July 2018, it was announced that Micro Focus would sell SUSE to Blitz 18-679 GmbH, a subsidiary of EQT Partners, for $2.535 billion.[7] The acquisition was completed on March 18, 2019.[8]

History

The developer

The developing *Gesellschaft für Software und System Entwicklung mbH* (Lit. Company for Software and System Development) was founded on 2 September 1992 in Nuremberg, Germany, by Roland Dyroff, Thomas Fehr, Burchard Steinbild, and Hubert Mantel. Three of the founders were still mathematics students at a university; Fehr had already graduated and was working as a software engineer.

SUSE at Linuxcon

The original idea was that the company would develop software and function as an advisory UNIX group. According to Mantel, the group decided to distribute Linux, offering support.

Their name at founding was "S.u.S.E." *(**S**oftware **u**nd **S**ystem-**E**ntwicklung* "Software and systems development"); however, the full name has never been used. "S.u.S.E." was shortened to "SuSE" in October 1998 and restyled to "SUSE" in 2003.[9]

The official logo and current mascot of the distribution is a veiled chameleon officially named GEEKO (a portmanteau of "gecko" and "geek"). As with the company's name, the GEEKO logo has evolved to reflect company name changes.

Origins

The company started as a service provider, regularly releasing software packages that included Softlanding Linux System (SLS, now defunct) and Slackware and printing UNIX and Linux manuals, and offering technical assistance.

These third-party products SUSE initially used had those characteristics and were managed by SUSE in different fashions:

SUSE GEEKO official plush toy

- In mid-1992, Peter MacDonald created the comprehensive Linux distribution known as SLS, which offered elements such as X and TCP/IP. This was distributed to people who wanted to get Linux via floppy disks.[6]
- In 1993, Patrick Volkerding cleaned up the SLS Linux distribution, releasing a newer version as Slackware.
- In 1994, with help from Patrick Volkerding, Slackware scripts were translated into German, which was marked as the first release of S.u.S.E. Linux 1.0 distribution. It was available first on floppies, and then on CDs.[6]

To build its own Linux distribution, S.u.S.E. used SLS in 1992 and jurix in 1996 as starting point.[10] This was created by Florian La Roche, who joined the S.u.S.E. team. He began to develop YaST, the installer and configuration tool that would become the central point of the distribution.[11][12]

In 1996, the first distribution under the name S.u.S.E. Linux was published as S.u.S.E. Linux 4.2, a reference to the answer to "The Ultimate Question of Life, the Universe and Everything" from the *Hitchhiker's Guide to the Galaxy*. YaST's first version number, 0.42, was a similar reference.

Expansion

Over time, SuSE Linux incorporated many aspects of Red Hat Linux, such as its RPM Package Manager and its file structure.

S.u.S.E. became the largest Linux distributor in Germany. In 1997, SuSE, LLC was established under the direction of president and managing partner James Gray in Oakland, California, which enabled the company to develop Linux markets in the Americas and Asia. While Red Hat was ubiquitous in the United States, SuSE Linux continued to grow in Germany as well as in Nordic countries such as Finland and Sweden. In October 1998, the name was changed officially to, SuSE (without dots). Linus Torvalds, the creator of the Linux kernel, used it fairly often. SuSE entered the UK in 1999.

FVWM running on SUSE 5.1

In 2001, the company was forced to reduce its staff significantly in order to survive.

Novell

On 4 November 2003, Novell announced it would acquire SuSE Linux AG for $210 million.[13] The acquisition was finalized in January 2004.[14]

In a move to reach its business audience more effectively, SuSE introduced the SUSE Linux Enterprise Server in 2001, and a few months before Novell's purchase, changed the company name to "SUSE Linux".[9] "SUSE" is now a name, not an acronym.

According to J. Philips, Novell's corporate technology strategist for the Asia Pacific region, Novell would not "in the medium term" alter the way in which SUSE was developed.[15] At Novell's annual BrainShare conference in 2004, for the first time, all of their computers were run with SUSE Linux and it was announced that the proprietary SUSE administration program YaST2 would be released under the GPL license.[16]

SUSE/Novell company building in Nürnberg

The openSUSE Project

On 4 August 2005, Novell announced that the SUSE Professional series would become more open, with the launch of the openSUSE Project community. The software always had been open source, but openSUSE opened the development process, allowing developers and users to test and develop it. Previously, all development work had been accomplished in-house by SUSE. Version 10.0 was the first version that offered public beta testing.

SUSE Linux 10.0 included both open source and proprietary applications and retail boxed-set editions. As part of the change, YaST Online Update server access became free for all SUSE Linux users, and also for the first time, the GNOME desktop was upgraded to equal status with the traditional KDE.

In November 2005, SUSE founder Hubert Mantel announced his resignation from the company. He stated that Novell's acquisition had changed SUSE beyond his expectations and that he did not believe it was the same company that he had founded 13 years earlier. The resignation apparently stemmed from a dispute over the implementation of Ximian products in the GNOME-based default desktop environment for the Linux distribution.[17] He re-joined only a year later.[18]

Microsoft agreement

On 3 November 2006 (renewed 25 July 2011), Novell signed an agreement with Microsoft covering improvement of SUSE's ability to interoperate with Microsoft Windows, cross-promotion/marketing of both products and patent cross-licensing. The agreement is considered controversial by some in the Free Software community.[19][20]

The Attachmate Group takeover

On 22 November 2010, Novell announced that it had agreed to acquisition by The Attachmate Group for $2.2 billion. The Attachmate Group plans to operate Novell as two units with SUSE becoming a stand-alone business,[21] and it anticipates no change to the relationship between the SUSE business and the openSUSE project as a result of this transaction.[22]

The U.S. Department of Justice announced that in order to proceed with the first phase of their acquisition of certain patents and patent applications from Novell Inc., CPTN Holdings LLC and its owners would have to alter their original agreements to address the department's antitrust concerns. The department said

that, as originally proposed, the deal would jeopardize the ability of open source software, such as Linux, to continue to innovate and compete in the development and distribution of server, desktop, and mobile operating systems as well as middleware and virtualization products.

Stipulations regarding the licensing the patents were:

- All of the Novell patents will be acquired subject to the GNU General Public License, Version 2, a widely adopted open-source license, and the Open Invention Network (OIN) License, a significant license for the Linux System;
- CPTN does not have the right to limit which of the patents, if any, are available under the OIN license; and
- Neither CPTN nor its owners will make any statement or take any action with the purpose of influencing or encouraging either Novell or Attachmate to modify which of the patents are available under the OIN license.

The acquisition was completed on 27 April 2011.[4] Subsequently, on 23 July 2011 The Attachmate Group launched a new website for the SUSE business.

Micro Focus merger

On 20 November 2014, the Attachmate Group merged with Micro Focus to form the Micro Focus Group. SUSE is operated as a separate business unit with a dedicated product portfolio.[23]

EQT Partners acquisition

On 2 July 2018, it was announced that Micro Focus would sell its SUSE business segment to EQT Partners for $2.535 billion.[24][25] The acquisition was completed on March 18, 2019.[8]
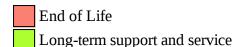
Versions

SUSE provides a thirteen-year product life cycle for SUSE Linux Enterprise 11 & 12.

SUSE distributions

Project	Version	Date of issue	End of General Support	End of LTSS	Linux kernel version
S.u.S.E. Linux (Slackware-based)	4/94	1994-03-29	????	????	1.0
	7/94	1994-07	????	????	1.0.9
	11/94	1994-11	????	????	1.1.62
	4/95	1995-04	????	????	1.2.9
	8/95	1995-08	????	????	1.1.12
	11/95	1995-11	????	????	1.2.13
S.u.S.E. Linux (jurix-based)	4.2	1996-05	????	????	2.0.0
	4.3	1996-09	????	????	2.0.18
	4.4	1997-04	????	????	2.0.24
	4.4.1	1997-04-24	????	????	2.0.28
	5.0	1997-07	????	????	2.0.30
	5.1	1997-10	????	????	2.0.32
	5.2	1998-03-23	2000	????	2.0.33
	5.3	1998-09-10	2000	????	2.0.35
SuSE Linux	6.0	1998-12-21	2000	????	2.0.36
	6.1	1999-04-07	2001	????	2.2.6
	6.2	1999-08-12	2001	????	2.2.10
	6.3	1999-11-25	2001-12-10[26]	????	2.2.13
	6.4	2000-03-09	2002-06-17[27]	????	2.2.14
	7.0	2000-09-27	2002-11-04[28]	????	2.2.16
	7.1	2001-04-21	2003-05-16[29]	????	2.2.18 / 2.4.0
	7.2	2001-06-15	2003-10-01[30]	????	2.2.19 / 2.4.4
	7.3	2001-10-13	2003-12-15[31]	????	2.4.9
	8.0	2002-04-22	2004-06-30[32]	????	2.4.18

		8.1	2002-09-30	2005-01-31[33]	????	2.4.19
		8.2	2003-04-07	2005-07-14[34]	????	2.4.20
SUSE Linux Enterprise		9.0	2003-10-15	2005-12-15[35]	????	2.4.21 / 2.6.1
		9.1	2004-04-23	2006-06-30[36]	????	2.6.4
		9.2	2004-10-25	2006-10-31[37]	????	2.6.8
		9.3	2005-04-16	2007-04-30[38]	????	2.6.11
		10.0	2006-07-17	2007-12-31	N/A	2.6.16
		10.1	2007-06-18	2008-11-30	2010-12-01	2.6.16.46
		10.2	2008-05-19	2010-04-11	2013-04-10	2.6.16.60
		10.3	2009-10-12	2011-10-11	2014-10-31	2.6.16.60
		10.4	2011-04-12	2013-07-31	2016-06-30	2.6.16.60
		11.0	2009-03-24	2010-12-31	N/A	2.6.27
		11.1	2010-06-02	2012-08-31	2015-08-30	2.6.32
		11.2	2012-02-29	2014-01-31	2017-01-30	3.0.13
		11.3	2013-07-01	2016-01-31[39]	2019-01-30	3.0.76
		11.4	2015-10-13	2019-03-31	2022-03-31	3.0.101
		12.0	2014-10-10	2016-06-30	2019-07-01	3.12
		12.1	2015-12-22	2017-05-31	2020-05-31	3.12
		12.2	2016-11-08	2018-03-31	2021-03-31	4.4
		12.3	2017-09-07	2019-06-30	2022-06-30	4.4
		12.4	2018-12-12	2020-06-30	2023-06-30	4.12
		12.5	2019-12-09	2024-10-31	2027-10-31	4.12
		15.0	2018-07-16	2019-12-31	2022-12-31	4.12
		15.1	2019-06-24	2021-01-31	2024-01-31	4.12

Project	Version	Date of issue	End of General Support	End of LTSS	Linux kernel version
	15.2	2020-07-21	2021-12-31	2024-12-31	5.3.18
	15.3	2021-06-21	2022-12-31	2025-12-31	5.3.18
	15.4	2022-06-08	2023-12-31	2026-12-31	5.14.21
	15.5	2023-06-20	6 months after SLES 15 SP5 release	TBD	5.14.21
	15 Overall	2018-07-16	2028-07-31	2031-07-31	4.12

■ End of Life
■ Long-term support and service

SUSE Linux Enterprise Server

SLES version	Latest SP	FCS Release date[40]	General Ends[40]	LTSS Ends[41]
first	—	31 October 2000	?	—
7	—	13 October 2001	?	—
8	4	1 October 2002	30 December 2007	30 December 2009
9	4	3 August 2004	31 August 2011	1 August 2014
10	4	17 June 2006	31 July 2013	30 July 2016
11	4	24 March 2009	31 March 2019	31 March 2022
12	5	27 October 2014	31 October 2024	31 October 2027
15	5	16 July 2018	31 July 2028	31 July 2031
■ Old version		■ Older version, still maintained		■ **Latest version**

SUSE family products

SUSE Linux is available under two brands, openSUSE and SUSE Linux Enterprise. openSUSE is a free, community distribution driven by the openSUSE Project. It includes some of the latest "bleeding edge" Linux technologies and is designed for home users and enthusiasts. SUSE Linux Enterprise is Suse's tested and certified open-source solution for major enterprises.

openSUSE vs SUSE Linux Enterprise

openSUSE is a freely available, community project that releases versions on a comparatively frequent basis, and generally uses the latest versions of the various open source projects that it includes.

SUSE Linux Enterprise is SUSE's commercial edition, which SUSE releases much less frequently, enabling it to offer support more effectively for enterprise and production deployments. It is certified for a wide variety of enterprise applications and offers a number of special enterprise features including, High

Availability and Point of Sale extensions. SUSE historically uses a heavily tested subset of packages from openSUSE Linux as the basis for SUSE Linux Enterprise. Starting with openSUSE 15, SUSE made its "Leap" variant directly upgradable to SUSE Linux Enterprise.[42][43][44]

SUSE Linux Enterprise Server vs Desktop

SUSE offers SUSE Linux Enterprise Server and SUSE Linux Enterprise Desktop. Each focuses on packages that fit its specific purpose. For example, SUSE Linux Enterprise Desktop does not include the Apache Web Server, and SUSE Linux Enterprise Server does not include Xgl/Compiz.

In contrast, openSUSE does not have separate distributions for server, desktop, and tablets. Rather, its repositories contain the needed software, and use installation patterns to accomplish the same.

openSUSE Linux

openSUSE is driven by the openSUSE Project community and sponsored by SUSE, to develop and maintain SUSE Linux components. It is the equivalent of the historic "SuSE Linux Professional". After their acquisition of SUSE Linux, Novell (now SUSE) decided to make the community central to their development process.[45][46]

It has a theoretical development cycle of 8 months and a lifetime (duration of the critical updates) of 18 months from the date of release. It is fully and freely available for immediate download.

openSUSE was the sixth most popular Linux distribution for 2013 and the fourth most popular for 2014, according to DistroWatch.[47][48]

SUSE Linux Enterprise

SUSE develops multiple products for its "enterprise" business line. These business products target corporate environments, with a higher life cycle (10 years, extendable to 13), a longer development cycle (6 to 18 months), a guarantee of stability at the potential expense of development speed, technical support, and certification by independent hardware and software vendors. SUSE Linux Enterprise products are only available for sale (updates fees).

SUSE Linux Enterprise has fewer packages than the openSUSE distribution. Most of the differences are desktop applications that are more suited to consumers than to business. The enterprise products are:

- SUSE Linux Enterprise Server (SLES) is a server-oriented operating system targeted at corporate environments.
- SUSE Linux Enterprise Real Time is a modified version of SLES supporting low-latency operations where the time factor is critical.
- SUSE Linux Enterprise Desktop (SLED) is a desktop-oriented operating system targeted at corporate environments.
- SUSE Linux Enterprise Thin Client (SLETC) is a modified version of SLED targeted at thin client terminals.

When installed using a Linux kernel, Novell Open Enterprise Server (OES) uses SUSE Linux Enterprise Server as a platform. This product is also known as OES-Linux.

SUSE Linux Enterprise was included with VMware's vSphere licensing, up until June 25, 2014 for 'free' (h ttps://www.vmware.com/au/products/sles-for-vmware/), as noted on SUSE Partners website (https://www.s use.com/partners/alliance-partners/vmware/)

SUSE Studio

SUSE's SUSE Studio product was a web interface (built using Ruby on Rails) to openSUSE's KIWI and the Open Build Service tools. It allowed users to put together a custom Linux distribution graphically and to generate output including a large variety of Virtual Machine and Disk Images. SUSE Studio merged with Open Build Service and the resulting project was renamed to SUSE Studio Express in September 2017.[49]

See also

- Linux on IBM Z
- List of Linux distributions
- Comparison of Linux distributions
- SUSE Studio
- Novell UnixWare
- Novell Corsair
- Novell Exposé
- Caldera OpenLinux and Caldera Network Desktop
- List of computing mascots

References

Citations

1. SUSE Linux Enterprise Desktop 10 Demo (http://www.novell.com/linux/demos/desktop.html) Archived (https://web.archive.org/web/20061108062509/http://www.novell.com/linux/demos/ desktop.html) November 8, 2006, at the Wayback Machine
2. Maria Saavedra (Executive Creative Director), Scott Worley (Director of Video Production). *SUSE - Rosetta Stone* (Marketing Video). Hewlett-Packard. (behance.net (https://www.beha nce.net/gallery/SUSE-Rosetta-Stone/14456815), YouTube (https://www.youtube.com/watch? v=TyI8JcW6uno))
3. Arthur Griffith, *CompTIA Linux+ Certification* (Virtual Training Company, 2004)
4. "Novell Completes Merger with Attachmate and Patent Sale to CPTN Holdings LLC" (http:// www.novell.com/news/press/2011/4/novell-completes-merger-with-attachmate-and-patent-s ale-to-cptn-holdings-llc.html). novell.com. Retrieved 28 April 2011.
5. "Micro Focus to Buy Attachmate in $1.2 Billion Share Deal" (https://www.bloomberg.com/ne ws/2014-09-15/micro-focus-to-acquire-attachmate-group-for-1-19-billion.html). *Bloomberg L.P.*. 15 September 2014. Retrieved 15 September 2014.
6. "View SUSE Through the Years" (https://www.suse.com/company/history/). SUSE. Retrieved 10 February 2015.
7. "Proposed sale of the SUSE Business" (https://otp.tools.investis.com/clients/uk/micro_focus/ rns/regulatory-story.aspx?cid=108&newsid=1096070). *otp.investis.com*. Retrieved 2018-07-02.

8. Ian Murphy (2019-03-18). "EQT completes aquisition [*sic*] of SUSE from Micro Focus" (http s://www.enterprisetimes.co.uk/2019/03/18/eqt-completes-aquisition-of-suse-from-micro-focu s/). *www.enterprisetimes.co.uk*. Retrieved 2020-05-02.

9. "SuSE Rebrands Ahead of 9.0 Launch" (http://www.internetnews.com/dev-news/article.php/3 085261). internetnews.com. Retrieved 2008-03-03.

10. "Archive:S.u.S.E. Linux 4.2 - openSUSE Wiki" (https://en.opensuse.org/Archive:S.u.S.E._Lin ux_4.2).

11. jurix Readme file (https://www.ibiblio.org/pub/historic-linux/distributions/jurix-19960501/REA DME.txt)

12. History of Jurix (https://linux2.mathematik.tu-darmstadt.de/pub/linux/distributions/jurix/docs/hi story.html).

13. "Novell to acquire SuSE Linux" (https://www.cnet.com/news/novell-to-acquire-suse-linux/). CNET news. Retrieved 2020-01-13.

14. Kennedy, D. (2003). *Novell's Linux buy opens road to top*. Retrieved December 20, 2003. (htt p://australianit.news.com.au/articles/0,7204,7942378%5E15382%5E%5Enbv%5E,00.html)

15. Ramesh, R. (2004). Novell: SuSE stays the same, for now. Retrieved 14 January 2004. (http s://star-techcentral.com/tech/story.asp?file=/2004/1/12/technology/7079523&sec=technolog y)

16. The previous YaST license allowed modification and redistribution, but not sale of the code.

17. "Why did SuSE Linux's founder resign from Novell?" (https://www.networkworld.com/article/2 315788/software/why-did-suse-linux-s-founder-resign-from-novell-.html). 2005-11-17.

18. "Suse founder returns to Novell" (https://www.zdnet.com/article/suse-founder-returns-to-nove ll/). *ZDNet*.

19. "Microsoft, Novell Extend Controversial Partnership" (https://www.wired.com/2008/08/micros oft-novell-extend-controversial-partnership/). *WIRED*. 2008-08-20. Retrieved 2018-06-26.

20. "Microsoft cannot declare itself exempt from the requirements of GPLv3" (https://www.fsf.org/ news/microsoft_response). Free Software Foundation. 2007-08-28.

21. *Novell Agrees to be Acquired by Attachmate Corporation* (http://www.novell.com/news/press/ novell-agrees-to-be-acquired-by-attachmate-corporation/), Novell, 22 November 2010, retrieved 2010-11-22

22. *Attachmate Corporation Statement on openSUSE project* (http://www.attachmate.com/Press/ PressReleases/nov-22-2010-SUSE.htm), Attachmate Corporation, 22 November 2010, retrieved 2010-11-23

23. "SUSE is now part of Micro Focus | SUSE" (https://www.suse.com/company/press/2015/sus e-is-now-part-of-micro-focus.html). *www.suse.com*. Retrieved 2016-05-01.

24. Burton, Graham (2 July 2018). "Micro Focus to sell SUSE Linux to private equity firm for US$2.5bn" (https://www.computing.co.uk/ctg/news/3035155/micro-focus-to-sell-suse-linux-to -private-equity-firm-for-usd25bn). *Computing*. Retrieved 29 August 2018.

25. "Proposed sale of the SUSE Business" (https://otp.tools.investis.com/clients/uk/micro_focus/ rns/regulatory-story.aspx?cid=108&newsid=1096070). *otp.investis.com*. Retrieved 2018-07-02.

26. "SuSE: Version 6.3 end-of-life announcement - The Community's Center for Security" (http s://web.archive.org/web/20170215114610/http://www.linuxsecurity.com/content/view/10347 7/112/). Archived from the original (http://www.linuxsecurity.com/content/view/103477/112/) on 2017-02-15. Retrieved 2010-08-28.

27. [SuSE] Support fuer SuSE Linux 6.4 wird eingestellt (https://lists.uni-koeln.de/pipermail/sec-i nfo/Week-of-Mon-20020610/001620.html) Archived (https://web.archive.org/web/201603031 65751/https://lists.uni-koeln.de/pipermail/sec-info/Week-of-Mon-20020610/001620.html) 2016-03-03 at the Wayback Machine

28. [suse-security] Supported Distributions (http://archive.cert.uni-stuttgart.de/suse-security/2002/10/msg00148.html)

29. "Re Discontinued 7/7.2/7.3 - msg#00105 - linux.suse.security" (https://web.archive.org/web/20160306165021/http://osdir.com/ml/linux.suse.security/2003-05/msg00105.html). Archived from the original (http://osdir.com/ml/linux.suse.security/2003-05/msg00105.html) on 2016-03-06. Retrieved 2010-08-28.

30. Linux Today - End of Life for SuSE Linux 7.2, Mandrake Linux 8.2 (https://www.linuxtoday.com/infrastructure/2003100201126NWMDSS)

31. Discontinued SuSE Linux Distributions [LWN.net] (https://lwn.net/Articles/61625/)

32. End of support for SUSE 8.0 [LWN.net] (https://lwn.net/Articles/89794/)

33. Discontinued SUSE Linux Distributions: 8.1 (https://lists.opensuse.org/opensuse-security-announce/2005-01/msg00008.html)

34. Discontinued SUSE Linux Distribution: 8.2 (https://lists.opensuse.org/opensuse-security-announce/2005-06/msg00027.html)

35. SuSE Security announcements: [suse-security-announce] Discontinued SUSE Linux Distribution: 9.0 (https://lists.opensuse.org/opensuse-security-announce/2005-Nov/0004.html) Archived (https://web.archive.org/web/20201205222013/https://lists.opensuse.org/opensuse-security-announce/2005-Nov/0004.html) 2020-12-05 at the Wayback Machine

36. "Discontinued SUSE Linux Distribution: 9.1" (https://web.archive.org/web/20201205213051/https://lists.opensuse.org/opensuse-security-announce/2006-05/msg00004.html). Archived from the original (https://lists.opensuse.org/opensuse-security-announce/2006-05/msg00004.html) on 2020-12-05. Retrieved 2020-01-13.

37. "Discontinued SUSE Linux Distribution: 9.2" (https://web.archive.org/web/20200113161224/https://lists.opensuse.org/opensuse-security-announce/2006-09/msg00001.html). Archived from the original (https://lists.opensuse.org/opensuse-security-announce/2006-09/msg00001.html) on 2020-01-13. Retrieved 2020-01-13.

38. "SUSE Linux 9.3 security support discontinued soon" (https://web.archive.org/web/20201205224502/https://lists.opensuse.org/opensuse-security-announce/2007-03/msg00001.html). Archived from the original (https://lists.opensuse.org/opensuse-security-announce/2007-03/msg00001.html) on 2020-12-05. Retrieved 2020-01-13.

39. "Release Notes for SUSE Linux Enterprise Server 11 Service Pack 4 (SP4)" (https://www.suse.com/releasenotes/x86_64/SUSE-SLES/11-SP4/). www.suse.com. Retrieved 2015-11-27.

40. SLES Lifecycle Dates (https://www.suse.com/lifecycle/)

41. SLES Long Term Service Pack Support (https://www.suse.com/products/long-term-service-pack-support)

42. Prakash, Abhishek (May 26, 2018). "openSUSE Leap 15 Released! See the New Features" (https://itsfoss.com/opensuse-leap-15). It's FOSS. Retrieved March 21, 2020.

43. Bhartiya, Swapnil (June 27, 2017). "openSUSE Leap Is Now 99.9% Enterprise Distribution" (https://www.linux.com/topic/distributions/opensuse-leap-enterprise-distribution). Linux.com. Retrieved March 21, 2020.

44. "Drive transformation of your IT infrastructure with Enterprise Linux" (https://www.suse.com/solutions/enterprise-linux) (Press release). Retrieved March 21, 2020.

45. Toulas, Bill (2012-01-23). "Interview with Jos Poortvliet from SUSE" (https://web.archive.org/web/20120509164004/http://en.osarena.net/editorial/interviews/interview-with-jos-poortvliet-from-suse.html). osarena.net. Archived from the original (http://en.osarena.net/editorial/interviews/interview-with-jos-poortvliet-from-suse.html) on 2012-05-09. Retrieved 2016-02-06.

46. "openSUSE:Factory development model - openSUSE" (https://en.opensuse.org/openSUSE:Factory_development_model). en.opensuse.org. Retrieved 2012-10-30.

47. "DistroWatch home page" (https://distrowatch.com/index.php?dataspan=52). DistroWatch. 2014-01-07. Retrieved 2014-01-07.
48. "DistroWatch home page" (https://distrowatch.com/index.php?dataspan=52). DistroWatch. 2015-01-21. Retrieved 2015-01-21.
49. *SUSE Studio online + Open Build Service = SUSE Studio Express* (https://www.suse.com/c/suse-studio-online-open-build-service-suse-studio-express/), September 22, 2017, retrieved 2018-06-12

General sources

- Naba Barkakati (2005-12-27). *SUSE Linux 10 For Dummies* (https://archive.org/details/suselinux10fordu00bark/page/356). Wiley. p. 356 (https://archive.org/details/suselinux10fordu00bark/page/356). ISBN 978-0-471-75493-0.
- Keir Thomas (2005-02-15). *Beginning SUSE Linux: From Novice to Professional*. Apress. p. 544. ISBN 978-1-59059-458-2.

External links

- SUSE (https://suse.com/)
- openSUSE.org (https://www.opensuse.org/)
- Planet SUSE (https://planet.opensuse.org/)
- suse (https://www.distrowatch.com/table.php?distribution=suse) at DistroWatch
- novell (https://www.distrowatch.com/table.php?distribution=novell) at DistroWatch

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