

# SUSE LINUX ENTERPRISE SERVER 8 – TECHNICAL DATASHEET

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Status: Final

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## PRODUCT SPECIFICATIONS

This document describes some of features of SuSE Linux Enterprise Server 8. As SuSE Enterprise Server is available on many platforms the datasheet is universal. Platform specific features are listed in brackets or shown separately. Feature enhancements due to releases of Service-packs can be found at

<http://www.suse.co.uk/uk/business/products/server/sles/platform.html>

under the appropriate hardware platform pages.

### Platform Support

SuSE Linux Enterprise Server 8 is available for the following processor architectures

- SuSE Linux Enterprise Server 8 for x86
  - supported CPU-architectures: x86, AMD64
- SuSE Linux Enterprise Server 8 for Itanium Processor Family (named IPF in that document)
  - supported CPU-architectures: Itanium2
- SuSE Linux Enterprise Server 8 for AMD64
  - supported CPU-architectures: AMD Opteron™
  - able to run applications compiled for Linux for x86 and AMD Opteron™ Series due to 32/64-bit support
- SuSE Linux Enterprise Server 8 for IBM pSeries and IBM iSeries
  - supported CPU-architectures: Power4 (32/64 bit)
  - able to run applications compiled for Linux for IBM pSeries and iSeries 32 bit and 64 bit due to 32/64-bit support
- SuSE Linux Enterprise Server 8 for IBM S/390
  - supported CPU-architectures: IBM S/390 hardware (31 bit / G5, G6), IBM zSeries hardware (64 bit, G7; SLES system layout and applications are 32bit; G8 aka z990 toleration)
- SuSE Linux Enterprise Server 8 for IBM zSeries
  - supported CPU-architectures: IBM zSeries hardware (64 bit; G7 aka z900, G8 aka z990)
  - able to run applications compiled for: Linux for IBM zSeries (64 bit), Linux for IBM S/390 (31 bit) due to 31/64bit compatibility mode

### National Language Support

- English
- French
- German
- Italian
- Japanese
- Korean
- Portuguese
- Simplified Chinese
- Spanish

### Certification

please find more detailed and current information at

<http://www.suse.de/de/business/certifications/index.html>

<http://www.suse.de/de/business/products/server/sles/certifications.html>

### Supportability of and through ISVs

- Plannable Platform and stable standard
- ISV Self-certification process
- SuSE guaranteed APIs
- ISV certified APIs

## FEATURES AND TECHNICAL SERVICES

- Web server
  - Apache web server
  - Apache extension modules
  - PHP
  - PHP Extensions
  - Tomcat
- File & Print
  - Windows: Samba 2.2.5
  - Macintosh: netatalk (via TCP/IP)
  - Printing: CUPS, lprng
  - Network filesystems: NFS
- Name server and internet / intranet connection server
  - DNS (bind)
  - WINS (Samba)
  - DHCP server and client
  - FTP, TFTP
  - zebra (dynamic routing)
- Mail and news server
  - SMTP (postfix and sendmail)
  - POP
  - IMAP
- Proxy server
  - Cacheing & filtering: squid
- SQL database server
  - mysql, postgres
  - appropriate standards based extension for heterogeneous OS
  - access support (ODBC, JDBC)
- Authentication server
  - Windows domain controller: Samba
  - Directory service: OpenLDAP
  - Single Sign-on: Kerberos 5
  - Logon: PAM modules
  - Yellow pages: NIS server
  - PAM support (PAM: Pluggable Authentication Module)
- Time server
  - NTP

- Text editors: vim, emacs, kwrite
- Volume manager: LVM, EVMS
- Acrobat Reader (only x86, AMD64)
- KDE 3.0.3 minimal system (kdebase and Konqueror)
- Mozilla 1.0.1 (not IPF)

## Security

- Secure shell: ssh
- Secure sockets: OpenSSL
- Encryption: GnuPG
- Only minimal services running at boot as the default
- Installing packages do not start services automatically
- Full strong crypto enabled (apache, openssl, IPSec, openssh, libcrypt, gpg, encrypted file system)
- GPG signed RPM packages
- Basic Firewall
- VPN: FreeSwan

## Libraries and core functionality

- LSB runtime environment
  - certified on x86 (v1.2), IPF (v1.3)
  - current information can be found:  
  
**<http://www.suse.de/de/business/products/server/sles/certifications.html>**
  - compliant on pSeries, iSeries, S/390 and zSeries
- glibc 2.2.5
- Standard Linux and Unix shells: bash, csh, ksh
- textutils
- fileutils
- sh-utils
- sharutils
- util-linux
- SysVinit
- vixie-cron
- Remote shell tools: ssh, scp
- Networking tools (ping, traceroute, nslookup, dig, host)
- IPv6 (basic tools like ifconfig / route and config location)
- Firewalling tools (ipchains, iptables, masquerading)
- Scripting languages: python, perl, PHP, Tcl/Tk, ruby
- Regina (for interaction with IBM REXX; only S/390 and zSeries)
- XFree86 4.2 (libs and server)
- X print service (libXp.so.6)
- Free fonts for wide character support
- Free input methods for wide character support
- KDE 3.0.3 libraries
- GNOME 2.0 libraries
- SNMP

## Kernel Features

- Kernel 2.4.19
- Memory Expansion Technology (MXT; x86 only)

- Async I/O
- Direct I/O
- Multipath I/O
- NGPT (x86, S/390 and zSeries) (NGPT: Next Generation Posix Threads)
- PCI-X support (only x86, AMD64) (for drivers that support it)
- USB Floppy (only x86, AMD64)
- USB CD-ROM (only x86, AMD64)
- Provision for High Availability (only x86)
  - SteelEye
  - PolyServe
- Logical Volume Manager (LVM) for use with all supported file systems
- Journaling file system support
  - ext3
  - reiserfs
  - jfs
  - xfs (x86, AMD64, IPF)
- POSIX-ACLs
  - ext2
  - ext3
  - reiserfs

## Development Environment

These include amongst others:

- C (gcc), Version 3.2
- C++ (g++), Version 3.2
- Perl
- Python
- Ruby
- Tcl/Tk
- diff
- patch
- make
- lex (flex)
- yacc (bison)
- autoconf
- automake
- binutils
- libtool
- GDB
- strace
- tar
- cpio
- gzip
- bzip2
- rpm
- ltrace (not IPF)

## Single Source Code for all versions and platforms

- Installation, Hardware Detection, Administration and Update (YaST2)
  - Auto Detection
    - Custom setup
    - Software setup

- System Administration
- Modular Concept
- User Interface
  - Console (TTY)
  - KDE 3
  - via network (X11 / vnc)
- Pluggable
  - Third Party Modules
  - User Interfaces
- YaST2 AutoInstall

## IBM Mainframe Capabilities

(only with SLES for S/390 and zSeries)

- Channel Architecture Support
  - IUCV, OSA, QDIO, LCS
  - VCTC, iQDIO (Hipersockets)
- Virtualisation
  - z/VM / LPAR
  - IFL
- CryptoHW Support
- IP Address take-over (VIPA)
- Fibre Channel H/W Support enabled
- Virtual LAN (VLAN)  
more efficient use of network bandwidth
- LVM Multipathing
- MD (MD: Multiple Devices)
- up to 2000 SCSI devices
- Hot plug tapes
- Hot plud DASDs
- 3490/3590 tape driver support

## General System Requirements for Installation and Operation

(depending on installation methodology)

- Main memory: 256 MB recommended
  - up to 512 MB on S/390 and zSeries
- Hard disk: minimum 2 GB recommended
- CD-ROM drive or TCP/IP connection enabled to computer with CD-ROM drive and NFS / FTP / Samba Server

## SuSE Production Environment (AutoBuild™)

- Allows for fastest release and update cycle times in the Linux Platform Industry
- Fully automated production of
  - HW architecture specific SLES versions
  - Language specific SLES Versions
  - Quality Control Processes
  - Quality assurance
- Enables
  - Well known application systems
  - Fast Support turn around times
  - Most current releases and fixes

## Maintenance Program

- access to bug fixes and functional enhancements together with detailed documentation for all maintained versions of the respective product.
- access to the SuSE Linux Maintenance Web at

<http://www.suse.de/maintenance>.

- prompt notifications regarding any changes and product innovations
- provide with the next product-versions
- web-based support
- email-based support for installation of product, patches, feature enhancements or new versions

Additional information can be found here:

<http://www.suse.com/us/business/services/support/maintenance/index.html>

## Support Program

- Call Interface
  - - Phone
  - - Fax
  - - e-Mail
  - - Web
- Service Level Agreements
  - Committed Phone Response Times
  - Defined Escalation Path
  - Defined Severity Levels
  - Communicated Incident Handling, Process and Timing
  - Availability on working days  
9am – 6pm CET or 24 x 7
  - Continuous incident handling until return to Code Stream
  - Available through Support Partners

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