

Release Notes for SUSE Linux Enterprise 11 SP3 Software Development Kit

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Version 11.3.11 (2013-05-27)

Abstract

These release notes are generic for all SDK 11 based products.

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1 General

The SUSE Linux Enterprise Software Development Kit (SDK) can be used for SUSE Linux Enterprise Server (SLES) and SUSE Linux Enterprise Desktop (SLED).

Several packages that are either only on SLES or only on SLED, but needed for the SDK, have been added to the SDK for convenience. The presence of those packages on the SDK does not indicate any support or maintenance entitlement. If you only have a support contract for SLED you are not automatically entitled to support for SLES packages on the SDK and vice versa.

You should be able to re-build any package on SLES or SLED with the SDK DVDs. If you are still using the deprecated CDs, please download the DVDs from http://developer.novell.com/wiki/index.php?title=SLES_SDK.

If you are missing packages on the DVD, please file a bug in the Novell Bugzilla system (<http://bugzilla.novell.com>). You may also find additional unsupported packages on openSUSE (<http://www.opensuse.org>).

Note: For various technical reasons not all SDK packages are available on all SLES hardware architectures.

The SDK does not come with a maintenance or support entitlement. From time to time SUSE may release package updates and security fixes online.

If you add the SDK during installation, online update sources for the SDK are added when you register your product.

If you have added the SDK later, please run the Novell Customer Center Configuration in YaST2. This will add the SDK update sources to your configuration. You will not have to re-enter your registration data for this.

2 Miscellaneous

2.1 unixODBC Updated to Version 2.3.1

unixODBC 2.3.1 provides the most recent upstream fixes; this helps for seamless population of DB2 data using automated tools and improves interoperability with MS SQL server.

3 SDK Features

3.1 Building Images with Kiwi

The kiwi main package itself does not contain all software components, which could be necessary to build the specified image. For building such an image, some of the packages listed below are required.

To build an image using kiwi, make sure to have either the online SDK repository or the media available so that kiwi can download the required packages.

- kiwi-tools
- memtest86+
- busybox
- atftp
- gfxboot
- gfxboot-devel

Note: Depending on the type of image you are building, only some of these packages may be required. All packages listed above are included either on SLES or SDK media and their respective online repositories.

While not bundling the package may involve additional steps when building an image, it brings the benefit of kiwi always using the most recent version of the packages. Additionally, it improves the size of the kiwi package significantly.

3.2 Building Kernel Module Packages across Enterprise Linux Distributions

In the past, building kernel module packages for different RPM-based Enterprise Linux distributions has been a challenge: There has been no way to use a single .spec file to build distro-specific kernel module RPMs.

Now, through the Linux Foundation Driver Backport Workgroup, key RPM-based distribution vendors have collaborated to support a standard .spec file format and RPM macros for building kernel module packages. Packagers will now be able to use a single .spec file to create distro-specific binary kernel module RPMs. An example kernel module package build structure, complete with the new standard .spec file and sampledriver source code, is available on the SUSE Linux Enterprise SDK 11 SP3 in the package "samplekmp-source".

3.3 32bit devel-packages missing from the SDK (x86_64)

Example: libpcap0-devel-32bit package was available in SDK 10, but is missing from SDK 11

Background

SUSE supports running 32bit applications on 64bit architectures; respective runtime libraries are provided with SLES 11 and fully supported. With SLE 10 we also provided 32bit devel packages on the 64bit SDK. Having 32bit devel packages and 64bit devel packages installed in parallel may lead to side-effects during the build process. Thus with SLE 11 we started to remove some of (but not yet all) the 32bit devel packages from the 64bit SDK.

Solution

With the development tools provided in the SDK 11, customers and partners have two options to build 32bit packages in a 64bit environment (see below). Beyond that, SUSE's appliance offerings provide powerful environments for software building, packaging and delivery.

- Use the "build" tool, which creates a chroot environment for building packages.
- The SDK contains the software used for the openSUSE buildservice. Here the abstraction is provided by virtualization.

4 New Features

4.1 Desktop

4.2 Other

4.2.1 Add Non-root Profiling Capability to OProfile

Normal (non-root) users are unable to use OProfile to profile their applications.

Update to OProfile 0.9.8 which includes new 'operf' tool that allows non-root profiling.

5 Other Updates

5.1 Package git updated to 1.7

6 Deprecated Functionality

The following packages were removed with the release of Software Development Kit 11 SP3:

6.1 PHP 5.2 Is Deprecated

Based on significant customer demand, we ship PHP 5.3 parallel to PHP 5.2 with SUSE Linux Enterprise 11 SP2.

PHP 5.2 is deprecated though, and will be removed with SLES 11 SP3.

7 Infrastructure, Package and Architecture Specific Information

7.1 Architecture Independent Information

7.1.1 Changes in Packaging and Delivery

7.1.1.1 Valgrind Updated to Version 3.8

Valgrind 3.8 supports complex System z instructions, such as unicode conversion, that are part of the glibc support in valgrind. These instructions are needed for debugging purposes.

7.2 POWER (ppc64) Specific Information

7.2.1 Enhance Valgrind to Support the Decimal Floating Point (DFP) Instructions of IBM POWER6/POWER7

Using Valgrind on an application that uses DFP instructions results in "unhandled instruction" error.

Update Valgrind to 3.8.1 release, which includes DFP support.

7.3 System z (s390x) Specific Information

7.3.1 Hardware

7.3.2 RAS

7.3.3 Performance

8 Providing Feedback to Our Products

On the top level of the first CD you will find a very detailed ChangeLog file. Please, also read the READMEs on the CD.


In case of encountering a bug, please report it through your support contact.

Your SUSE Linux Enterprise Team


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