

SUSE Driver Tools

The SUSE Driver Tools package is a suite of utilities to help users manage distribution and integration of driver updates with SUSE Linux distributions. The toolkit is an offering of the SUSE Partner Linux Driver Program (PLDP).

Given a set of packages, SUSE Driver Tools can perform the following tasks:

- Build a **standard driver kit** (*add-on product*) containing the packages.
- Build a **bootable driver kit** that boots using any updated kernel modules or kernel packages provided and acts as a standard installation repository.
- Make an existing add-on product **bootable**.
- Build a **kISO** to boot using the updated kernel modules and/or kernel packages.
- Build **Update Media (DUDs)** from provided kernel module packages.
- Build an **initrd** that integrates updated kernel modules from kernel module packages and/or kernel packages.

If terms like ‘driver kit’, ‘add-on product’, ‘kISO’ and ‘DUD’ are unfamiliar, please refer to the [SUSE Driver concepts](#) document.

The `sdt` command is the main command of the SUSE Driver Tools suite which provides a set of sub-commands for the specific tasks.

Examples

The following examples assume that kernel module packages (KMPs) or kernel packages themselves are located in a subdirectory called ‘updates’, and that ‘SLES-11-SP1-x86_64’ is a subdirectory containing the contents of the SUSE Linux Enterprise Server 11 Service Pack 1 installation media.

Standard Driver Kit Generation

```
sdt driverkit -u updates -o driverkit.iso
```

Generates an add-on product iso image called `driverkit.iso` in the current directory that includes the rpm packages found in the ‘updates’ directory.

Bootable Driver Kit Generation

```
sdt driverkit -b SLES-11-SP1-x86_64 -u updates -o driverkit.iso
```

Generates a bootable add-on product iso image called `driverkit.iso` in the current directory. The add-on repository is generated the same as the standard driver kit plus includes a boot loader that kicks off the installation of SUSE Linux Enterprise Server 11 Service Pack 1 with the add-on product automatically selected for installation.

The `-b/--base` option instructs the SUSE Driver Tools to include a boot loader based on the specified, standard installation media. Any kernel packages or kernel module packages included in the `'updates'` directory will be used to update the boot loader to include the new kernel bits. For further information and options, refer to the `sdt-driverkit.1` man page below, or enter `'man sdt-driverkit'` on the command line.

Making Add-On Product Bootable

```
sdt driverkit -b SLES-11-SP1-x86_64 -a addon -o driverkit.iso
```

Generates a bootable add-on product like the example above but uses an existing add-on product repository located under the `'addon/'` path. The `-a/--addon` option uses the existing add-on repository (without rebuilding it) and includes any kernel packages or kernel module packages as updates to the boot loader.

DUD Generation

```
sdt dud -b SLES-11-SP1-x86_64 -u updates
```

Generates a DUD structure in the current directory (`linux/suse/...`). The `-b` The base SLES media specified by the `-b` option is required to determine the correct DUD layout. For further information and options, refer to the `sdt-dud.1` man page below, or enter `'man sdt-dud'` on the command line.

kISO Generation

```
sdt kiso -b SLES-11-SP1-x86_64 -u updates
```

Generates a kISO for use with installing SUSE Linux Enterprise Server 11 Service Pack 1. Any kernel and/or kernel module packages contained in the `'updates/'` directory will be integrated into the boot section of the kISO and used for booting the system just before installing the SUSE product.

General Options

The `sdt` command takes the following general options that are commonly used.

- L LOGFILE, -logfile LOGFILE** File to write log output to.
- O OUTPUTDIR, -outputdir OUTPUTDIR** Directory to place command output (instead of current working directory).
- d, -debug** Turn on verbose messages. Useful for debugging the build process.

These options are placed on the command line between '`sdt`' and the sub-command. For example:

```
sdt -O DUD -d dud -b SLES-11-SP1-x86_64 -u updates
```

Generates an update media structure under the './DUD/' path and outputs verbose messages during the build.

For more information on further options, refer to the `sdt.1` man page below, or enter '`man sdt`' on the command line.

Command Usage Help

For a brief summary of general command usage and options enter

```
sdt --help
```

or for sub-command usage and options enter

```
sdt [subcommand] --help
```

i.e.

```
sdt driverkit --help
```

Automatic File Detection

The SUSE Driver Tools commands scan the directory provided by the `-u/-updates` option for files to act upon. Based on file detection, actions will be automatically triggered. For more information on the files that SUSE Driver Tools detects, refer to the `sdt-file-detection.1` man page below or enter '`man sdt-file-detection`' on the command line.

Man Pages

The following are links to the SUSE Driver Tools command man pages.

- [sdt.1](#) (*pdf*)
- [sdt-driverkit.1](#) (*pdf*)
- [sdt-dud.1](#) (*pdf*)
- [sdt-pxe.1](#) (*pdf*)
- [sdt-kiso.1](#) (*pdf*)
- [sdt-unpackinitrd.1](#) (*pdf*)
- [sdt-file-detection.1](#) (*pdf*)

Release Notes

- [Release Notes](#) (*pdf*)