

SUSE Studio

March 05, 2011

Novell®

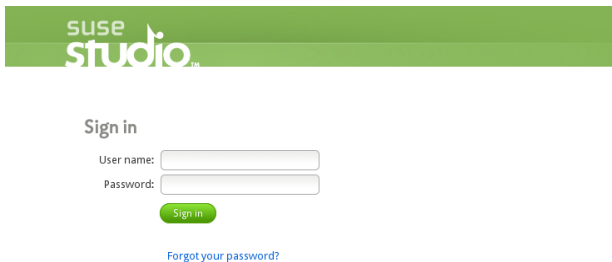
Quick Start

SUSE Studio® is a Web-based user interface to build software appliances. A software appliance is a pre-configured combination of an application (for example, a Web server) and its configuration, and includes an operating system (for example, SUSE Linux Enterprise Server.) All three parts are integrated into a single image and can be deployed on industry hardware or in a virtual environment.

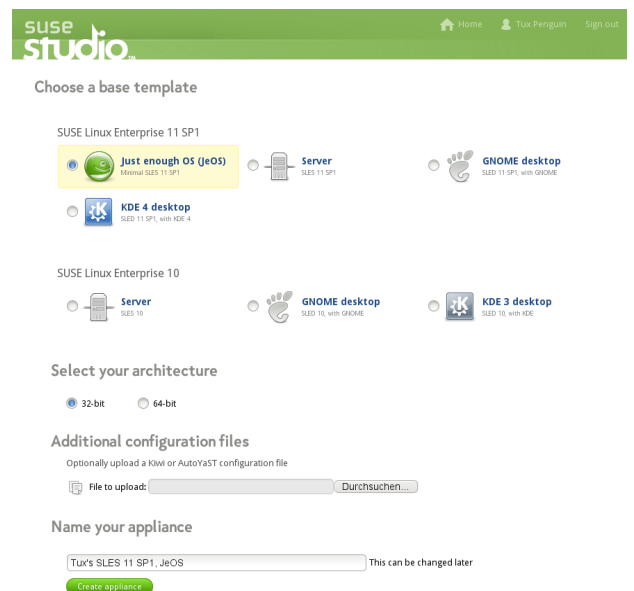
Getting Started

To build software appliances, follow these steps:

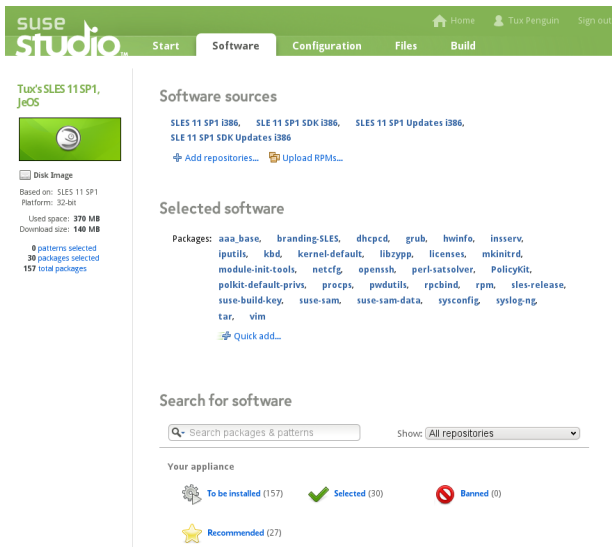
1. **Log In** Log in to your default SUSE Studio Web site given to you by your system administrator.



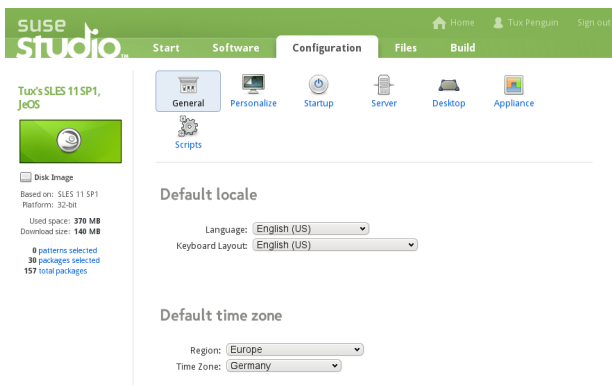
2. **Choosing a Base Template** The base template determines the operating system where your appliance is based upon. This can be any of the openSUSE, SUSE Linux Enterprise Desktop, or SUSE Linux Enterprise Server flavours for a 32- or 64-bit processor architecture depending on the server configuration.



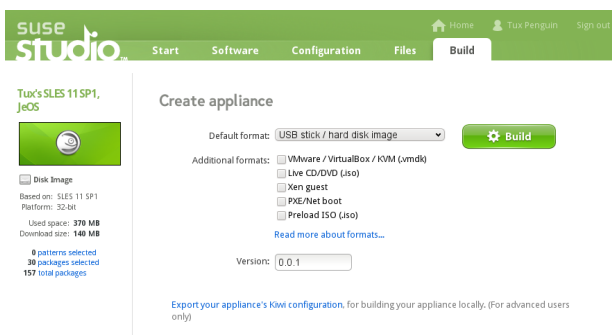
3. **Adding Software** Optionally extend the chosen base template with additional software from either your standard source or from an openSUSE repository. For more explanations, see Section “Adding Software” (page 2).



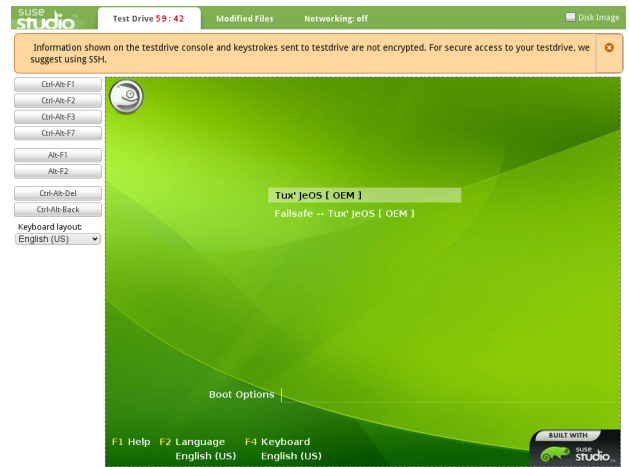
4. **Configuring Your Appliance** Personalize the appearance, locale, network, logo, background and other settings of your appliance.



5. **Creating Your Appliance** Build the appliance in different formats like ISO, USB stick, hard disk image, VMware/VirtualBox image, or as Xen guests.



6. **Testing Your Appliance** With the “testdrive” of SUSE Studio start a test session in your browser and optionally log in with SSH, or VNC. This is very helpful as it avoids excessive downloads and you can test your appliance immediately.



7. **Downloading Your Appliance** After a successful build, download the appliance and deploy it on your hardware or virtual machine.

Adding Software

Usually you derive your appliance from a base template and add missing software using *Software* link, if needed. Find the link in the second row of your browser window of your SUSE Studio Web page. Choose your software from three sources:

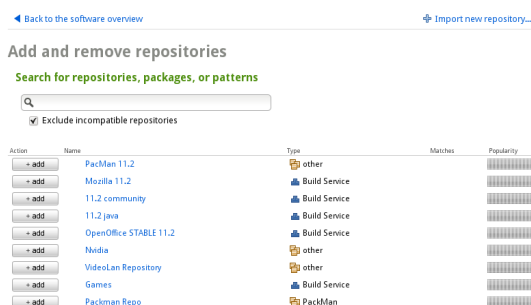
1. **From a Pre-Configured Base Template** Add software from the already available base template. For example, if you choose openSUSE 11.3, you can add everything that is available from this software collection.
2. **From External Repositories** Add additional repositories from the openSUSE Build Server or any other URL providing a software collection which is compatible with SUSE Studio and its template.
3. **Any Compatible RPMs** Upload any compatible RPM package from your hard disk or from the Web to SUSE Studio. Make sure it is built for your base template and its architecture is the same as your appliance.

SUSE Studio notifies you if any dependencies cannot be fully resolved.

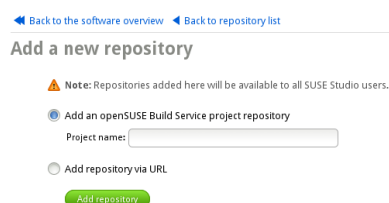
Adding External Repositories

To add an external repository from openSUSE Build Server to SUSE Studio, proceed as follows:

1. Switch to *Software* and click on *Add Repositories...* The page looks like this:



2. Enter a search word to reduce the list of shown repositories. Whenever a user adds a repository, the repository will be available for all users. If you have found a repository, click *Add* and you are finished.
3. If your repository is not available in the list, click *Import New Repository...*. The following page is shown:



4. Choose from a local or a remote source (usually openSUSE Build Server):
 - **From openSUSE Build Server** Enter the project name, for example `devel:languages:python`.
 - **From URL** Enter the URL pointing to your external repository.

Uploading RPMs

SUSE Studio allows you to upload individual packages as RPM format. If you have a couple of RPM packages, it is easier to create an archive (.tar, .tar.gz, .tgz, .tar.bz2, .tbz, or .zip) and upload this archive to SUSE Studio. SUSE Studio can extract this archive and add the individual RPM files to your software collection.

Click *Software* → *Upload RPMs...* and decide whether you want to upload an RPM or an archive with RPMs from your local hard disk or from an URL. In the first case click *Upload RPM...* and select your RPM package. In the second case, click *Add from the Web (URL)...* and enter your URL.

Regardless of the method, SUSE Studio adds the RPM(s) to your software selections and tries to resolve any dependencies. In case of an error, SUSE Studio will notify you. Resolve the errors by adding additional external repositories, importing other RPMs, or removing any problematic RPMs.

Configuring Appliances

Use the *Configuration* link on the SUSE Studio Web page to control several aspects about your appliances:

General

Change your default locale and timezone, configure your network, enable your firewall, and add users and groups.

Personalize

Add new logo and background for your appliance.

Start-Up

Define your default runlevel and any end user licence agreement. Usually this is empty, but if you choose it, the user has to agree to your licences the first time he uses your appliance.

Server

Set up a PostgreSQL or MySQL database configuration.

Desktop

Configure automatic login for users and any program which is automatically started during login.

Appliance

Set up advanced configuration for your appliance like disk, memory, and logical volume manager. Usually for the experts.

Scripts

Run custom scripts at the end of your build. Usually for experts only.

For example, if you want to change the logo or the background of your appliance, go to *Configuration* → *Personalize*. Select from pre-defined logos or upload your own. Do the same for changing the background. See an overview of how your appliance will look like during boot and login in the *Preview* section.

Appliance logo



Appliance background



Preview



Creating Appliances

SUSE Studio can create appliances in different formats. Each format is used for a different purpose:

Live CD/DVD (.iso)

Use this format, if you want to burn your appliance on CD or DVD. This is the easiest way and works on both Linux and Windows.

USB stick/hard disk image

Dump this format on your USB stick or hard disk and boot from it. You need knowledge about the `dd` command. This method works on both Linux and Windows.

VMware / VirtualBox (.vmdk)

Use this format, if you want to start your appliance on a virtual machine like VMware® or VirtualBox®. This is another method to test an appliance without formatting any hard disk. This method works on both Linux and Windows.

Xen guest

Use this format, if you want to run your appliance on a Xen host system. This is useful for experts only and is not covered in this manual. Xen guests works for Linux only.

Testing Appliances

SUSE Studio's testdrive allows testing your appliance without downloading it. After having built your appliance, choose from these methods:

1. Use the browser.
2. Use a VNC session.
3. Log in with SSH.

Click the *Build* tab and select *Testdrive* from your built appliance. A new window opens in your browser. Your appliance boots automatically and displays your login screen. If

you want to use a VNC session or log in with SSH, click on *Networking: off*. This page displays some explanations how to use these methods.

For More Information

Find detailed information about SUSE Studio in our User Guide.

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