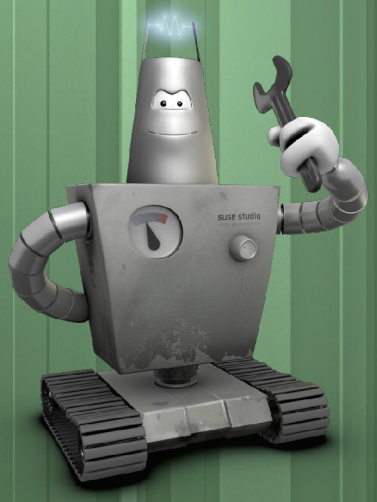
SUSE STUDIO

How to create a Bacula appliance in terms of minutes



21st September 2011
Cologne – Germany
Bacula Conference

Bruno Friedmann
openSUSE Member & Ambassador
Marketing & QA Team

bruno.friedmann@opensuse.org

openSUSE™

About me

Bruno Friedmann (tigerfoot)
bruno.friedmann@opensuse.org

openSUSE member & Ambassador

FOSS user since 1998

SuSE user since 2001

Bacula since vers 1.36

I'm going to osc '11
conference.opensuse.org


Sleepy?

suse studio™

Help | Create account/Sign in

We're Hiring!

Custom Linux, fast & simple

Build an appliance — or your own custom Linux distro — with a few mouse clicks. Customize it to your heart's content, and share it with the world!

Watch a screencast

SUSE Studio builds:

- Your software and everything it needs, in one appliance
- A custom distro, with your own software and branding
- Demo CDs, perfect for tradeshows and hand-outs
- Virtual machines, for the data center and the desktop
- All sorts of things you can dream up!

SUSE Appliance Toolkit

Take control of appliance building! Check out the SUSE Appliance Toolkit, featuring **SUSE Studio Onsite.**

The Dister Awards

Recent press mentions & awards

2010 SIIA //CODiE//

"A cool way to get the Linux configuration you want"

Send feedback

Jos'Smeegol2

Disk Image

Based on: openSUSE 11.3
Platform: 32-bit

Used space: **1.66 GB**
Download size: **430 MB**

3 patterns selected
46 packages selected
724 total packages

Take notes

Software sources

openSUSE 11.3 OSS, **openSUSE 11.3 Updates**, **Packman 11.3**, **Meego:Netbook 11.3**

Add repositories... Upload RPMs...

Selected software

Patterns: **base**, **Goblin**, **x11**

Packages: **a52dec**, **bootsplash-branding-openSUSE**, **ConsoleKit-x11**, **dbus-1-x11**, **glib2-branding-openSUSE**, **gstreamer-0_10-ffmpeg**, **gstreamer-0_10-fluendo-mpegdemux**, **gstreamer-0_10-plugin-gnomevfs**, **gstreamer-0_10-plugins-bad**, **gstreamer-0_10-plugins-good-extra**, **gstreamer-0_10-plugins-ugly**, **icewm**, **kernel-default**, **less**, **libdvdplay0**, **libdvdread3**, **libxine1**, **libxine1-codecs**, **mdadm**, **NetworkManager**, **recordmydesktop**, **SuSEfirewall2**, **syslog-ng**, **vim**, **vlc-gnome**, **x11-tools**, **x264**, **xine-browser-plugin**, **xine-ui**, **xorg-x11-driver-input**, **xorg-x11-driver-video**, **xorg-x11-fonts**, **xorg-x11-server**, **yast2**, **yast2-control-center**, **yast2-fingerprint-reader**, **yast2-firewall**, **yast2-firstboot**, **yast2-live-installer**, **yast2-ncurses**, **yast2-power-management**, **yast2-printer**, **yast2-scanner**, **yast2-sound**, **yast2-sudo**, **zypper**

Quick add...

Search for software

Search packages & patterns

Show: All repositories

Your appliance

To be installed (724) **Selected** (49) **Banned** (0) **Recommended** (358)

All available software

Send feedback

Tim's JeOS Demo

Disk Image

Based on: openSUSE 11.3
Platform: 32-bit

Used space: **350 MB**
Download size: **130 MB**

0 patterns selected
28 packages selected
147 total packages

Messages

Error: MySQL database configuration has been enabled, but MySQL is not installed.

Add mysql-community-server

Take notes

Database configuration

☐ Set up PostgreSQL

☑ Set up MySQL

Step 1: Upload MySQL database dump file (.bz2 only)

First, generate a dump of the database schema and data from your desired databases/tables. One way is to use the 'mysqldump' tool which is included with MySQL. For example, to generate a dump of the database 'mydb' (including both schema and data), use the following command:

```
mysqldump --databases mydb -u root -p > mydb.sql
```

This generates the database dump into the 'mydb.sql' file. Because this file can be rather large, please bzip it first using the following command:

```
bzip2 mydb.sql
```

Then upload the resulting 'mydb.sql.bz2' using the button below.

Upload MySQL dump...

Step 2: Configure MySQL users and permissions

Add MySQL databases users and specify the databases that they have acccess to here. Separate the list of databases by commas (i.e. mydb1, mydb2).

Send feedback

Tim's JeOS Demo

Disk Image

Based on: openSUSE 11.3
Platform: 32-bit

Used space: **390 MB**
Download size: **140 MB**

0 patterns selected
29 packages selected
151 total packages

Software changes

Added mysql-community-server Undo

Added 4 package, totaling 31.6 MB
View details...

Take notes

Disk and memory

OVF, VMware, and Xen

Memory: 512 MB

EC2, OVF, VMware, and Xen

Disk size: 4 GB

Note: The EC2 disk size is automatically capped at 10GB for it to work with Amazon's uploading tool.

Disk image

Note: When first launched, a disk image will expand its filesystem to fill available space.

Swap partition: 512 MB

All formats

☐ Enable extended memory (PAE), to access more than 4GB

Logical Volume Manager

Note: Logical Volume Manager (LVM) applies to the *disk image* and *VMWare* formats only.

☐ Configure LVM

Send feedback

Tim's JeOS Demo

Disk Image

Based on: openSUSE 11.3
Platform: 32-bit

Used space: **390 MB**
Download size: **140 MB**

0 patterns selected
29 packages selected
151 total packages

Take notes

Version 0.0.2

Default format: USB stick / hard disk image

Build

Additional formats:
- ☐ Live CD/DVD (.iso)
- ☐ VMware / VirtualBox / KVM (.vmdk)
- ☐ Amazon EC2 image
- ☐ OVF virtual machine (.ovf)
- ☐ Xen guest
- ☐ Preload ISO (.iso)

Read more about formats...

Configuration...

Version 0.0.1

Disk Image — Creating boot image — 1:04

Configuration... Clone

Builds older than seven days may be deleted to free up space on our servers. But don't worry, you can rebuild them at any time.

View MD5 checksums, for verification that your appliance's download was successful.

Export your appliance's Kiwi configuration, for building your appliance locally. (For advanced users only)

Information shown on the testdrive console and keystrokes sent to testdrive are not encrypted. For secure access to your testdrive, we suggest using SSH.

Ctrl-Alt-F1
Ctrl-Alt-F2
Ctrl-Alt-F3
Ctrl-Alt-F7

Alt-F1
Alt-F2

Ctrl-Alt-Del
Ctrl-Alt-Back

Keyboard layout:
English (US)

SUSEStudio.com

```
|                 |
+-----------------+
Starting SSH daemon                                                  done
Initializing random number generator                                 done
Starting rpcbind                                                     done
Setting up (remotefs) network interfaces:
Setting up service (remotefs) network  .  .  .  .  .  .  .  .  .    done
Starting service MySQL                                               done
Starting mail service (Postfix)                                      done
Starting CRON daemon                                                 done
Master Resource Control: runlevel 3 has been                         reached

Welcome to openSUSE 11.3 "Teal" - Kernel 2.6.34.7-0.7-default (tty1).


linux-3rgb login: root
Password:
Have a lot of fun...
-bash: warning: setlocale: LC_MESSAGES: cannot change locale (en_US.UTF-8): No such file or dire
ctory
-bash: warning: setlocale: LC_CTYPE: cannot change locale (en_US.UTF-8): No such file or directo
ry
-bash: warning: setlocale: LC_COLLATE: cannot change locale (en_US.UTF-8): No such file or direc
tory
-bash: warning: setlocale: LC_TIME: cannot change locale (en_US.UTF-8): No such file or director
y
-bash: warning: setlocale: LC_NUMERIC: cannot change locale (en_US.UTF-8): No such file or direc
tory
-bash: warning: setlocale: LC_CTYPE: cannot change locale (en_US.UTF-8)
linux-3rgb:~ # echo "Welcome to Tim's openSUSE 11.3 JeOS Demo" > /etc/motd
linux-3rgb:~ # less /etc/motd
-bash: less: command not found
linux-3rgb:~ # _
```

You

Play with our open technologies
Join a team, work, create : get involved

Meet us on mailing list, forums, IRC, conference, ...

Become your own star!

Become your own geeko star!

The mic is up to you!

Questions and Answers

opensuse.org

planet.opensuse.org

opensuse.org/Portal:How_to_participate

opensuse.org/Junior_jobs

features.opensuse.org

build.opensuse.org

susestudio.com

#opensuse-project

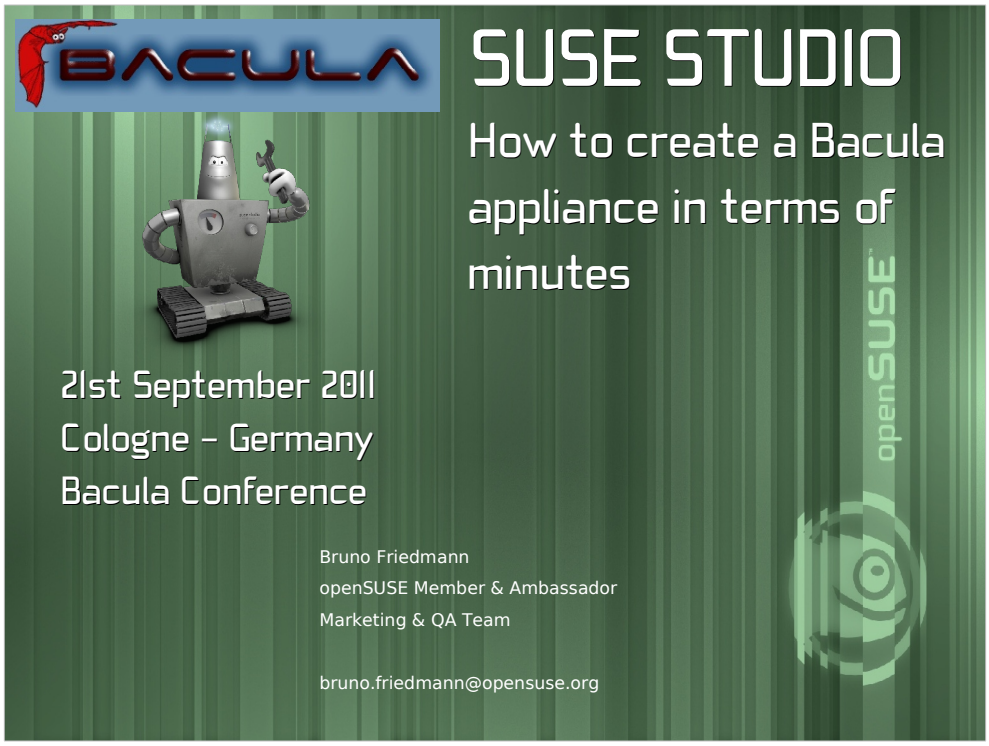
Thanks / Credits

Amazing openSUSE community!
fantastic Bacula community!
dassit organization

Photos : Koustas Koudaras,
sleepy kitty from http://www.flickr.com/photos/pasotraspaso/

Proudly presented on openSUSE Factory 12.1

Your project!



A small and quick presentation about SUSE Studio and Bacula

Bruno Friedmann (irc:tigerfoot)

openSUSE member & Ambassador, Marketing & QA group

I'm a long term supporter of FOSS & openSUSE. Starting using the SuSE distribution in 2001. Since 2004, my company Ioda-Net Sàrl has been using openSUSE for servers and desktops.

In my system administrator / IT consultant day live, I mainly installs & maintains IT server's infrastructure in enterprises around. From firewalls, files & printers sharing, to more specialized servers (backups with Bacula, virtual machines, geo-mapping portals etc)

My distribution is openSUSE, my desktop is KDE, and I use Bacula for my backups etc.

AFUL's member (french association promoting Free Software),

AFUP (French PhP user's association)

FSFE fellowship,

For a long time my contributions have been mainly bugs reporting about used products (openSUSE, Bacula, KDE), until 2009, when boards members ask me to become an official openSUSE member. I applied and was accepted :-)

I do my best to be present at main event, spreading the openSUSE word like in recent frOSCamp in Zürich (2010), FOSDEM in Brussels, or SCALE in Los-Angeles (2011), openSUSE conference(Nüremberg, Bacula Konferenz (Köln) I was also co-author of the first virtual party on SecondLife for the 11.4 release

You can find me in different channels on irc, and mailing-list

For the lazy among us:
how to click together a completely customized Linux distribution with Bacula in 5 minutes!

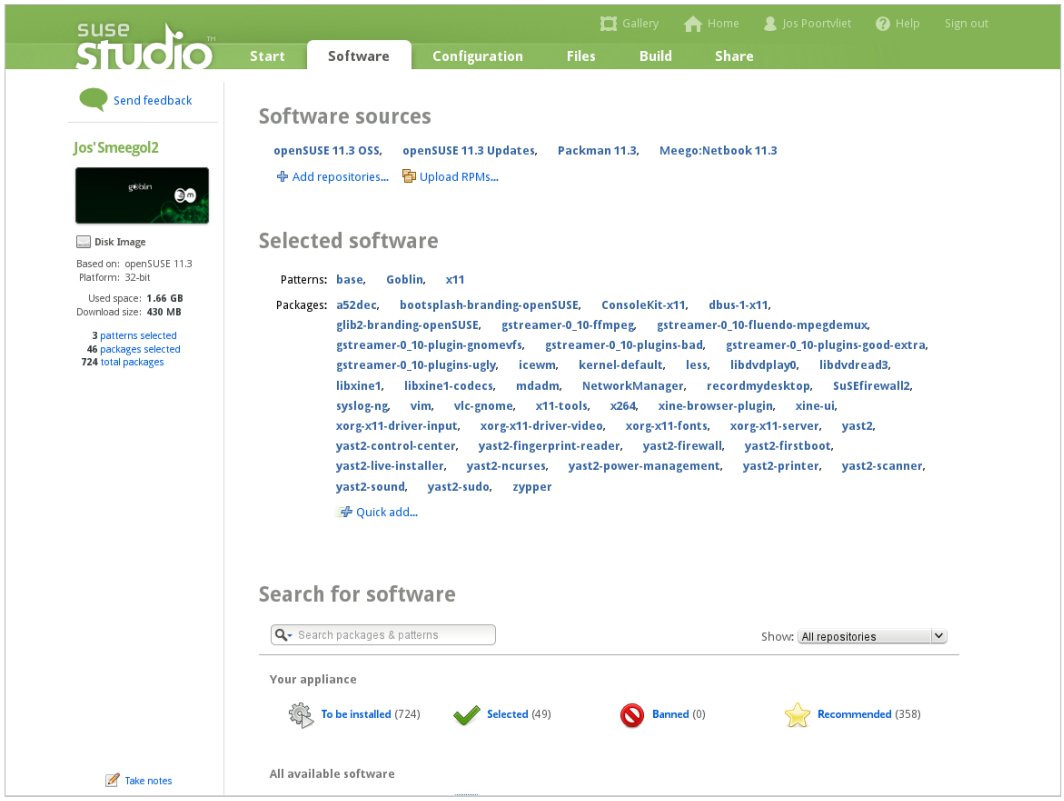
The tool: SUSE Studio.
Free to use on SUSEStudio.com!

Go there, log in via openID, Google or create an account.

It works simple:
you choose to create a new appliance and give it a name.

Why not open : permit partners to publish non-free appliances. Check susegallery.com for example

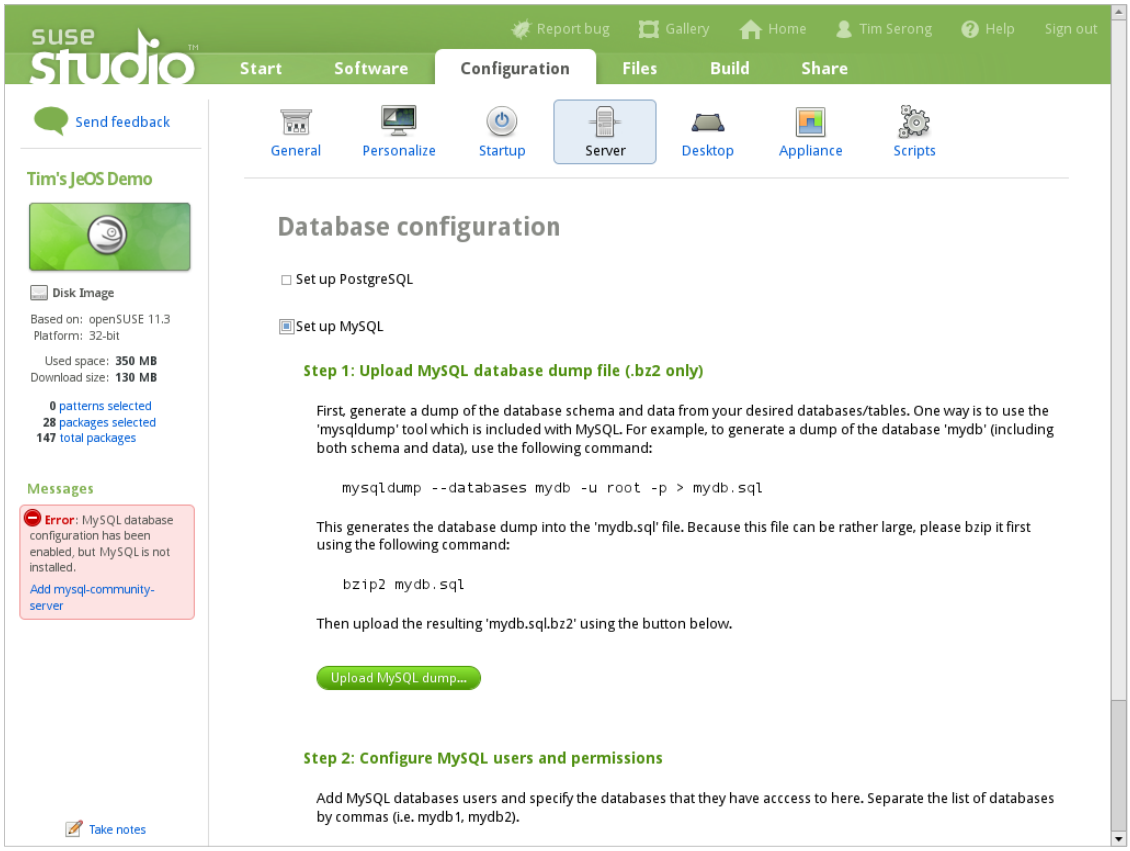
Private instances can use non openSUSE/SUSE OS



Choose your OS (SLES or openSUSE based) and architecture x86/x64

pick a base template : just enough OS(jeOS), only X, minimal GNOME, full KDE, File/Print server etc.

Choose your own custom package selection from the 30.000 repositories on build.opensuse.org (or upload your own packages)

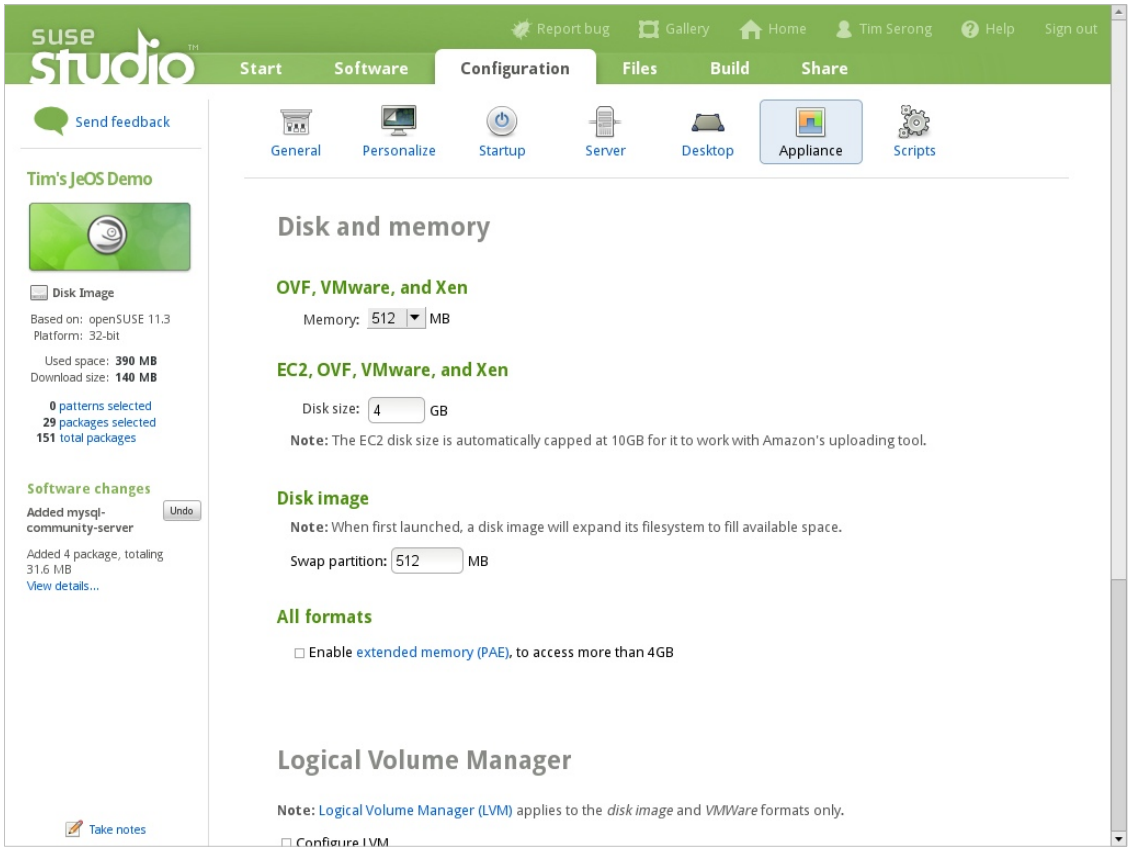


Choose your own custom artwork, configuration, scripts or upload overlay files.

Anything can be changed!

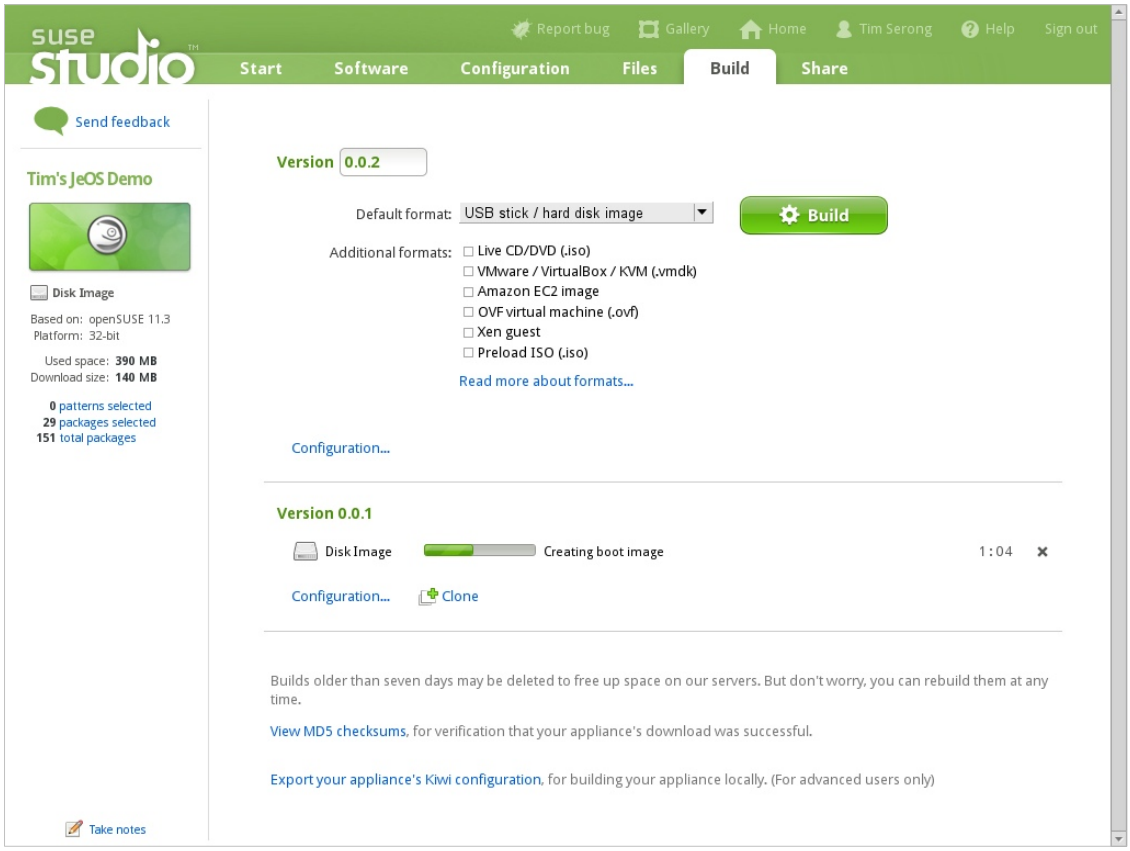
Studio takes care of almost everything: if you configure MySQL but forget to add it, it will warn and help you.

Adding a package, it resolve automatically all dependencies. And warn you in case of conflict.



Configure your VM, hard drive, USB or CD/DVD output. You can also upload your newly build operating system directly to the Amazon EC2 Cloud!

You can include WebYast to control your new appliance remotely from the browser!

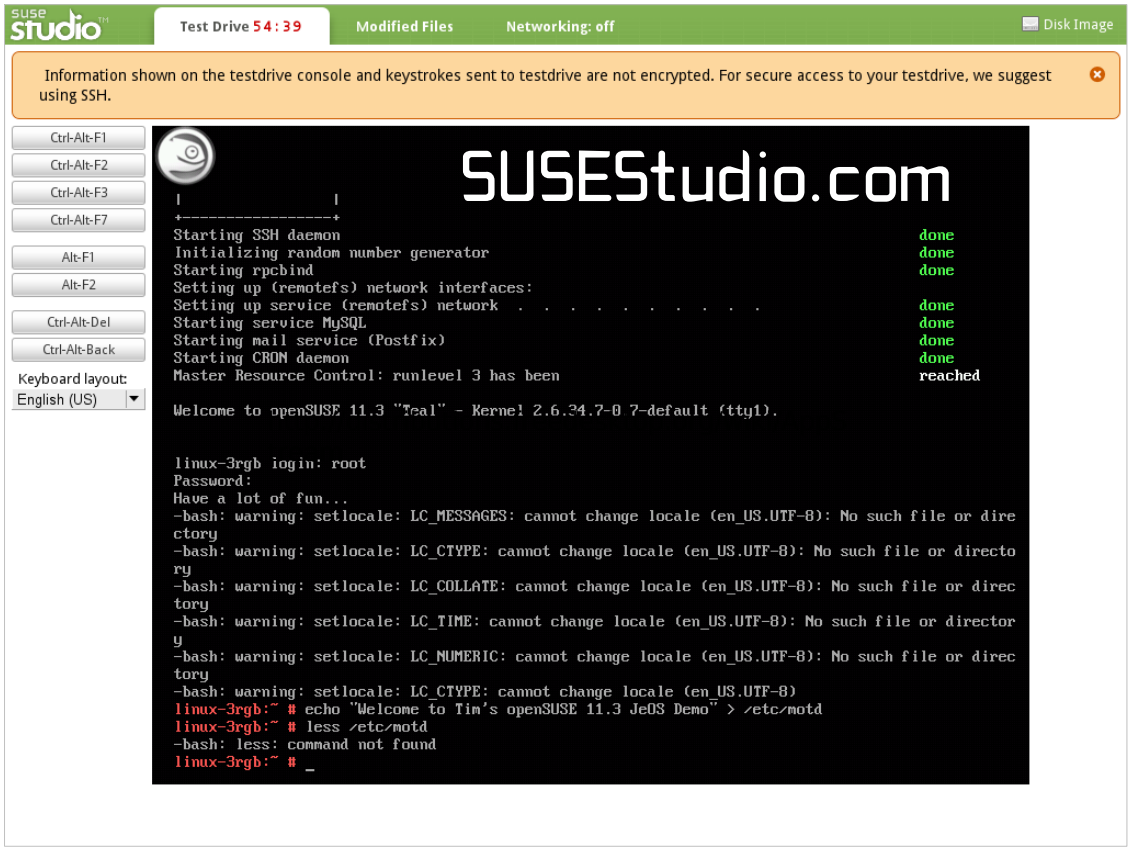


Studio builds your OS like you want it.

BTW you can export and import KIWI configuration scripts. KIWI is the underlying tech of Studio, it is FOSS and developed in openSUSE.
Gives even more control!

You can also upload full files folders layout with a tar archive.

Add or modify script for each run or first boot.



Once you are done you can test drive your appliance for 45 minutes through a flash plugin or via remote SSH. Any changes you make are saved in the appliance!

That's it, go and try it on susestudio.com!

You

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opensuse.org
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#opensuse-project
openSUSE

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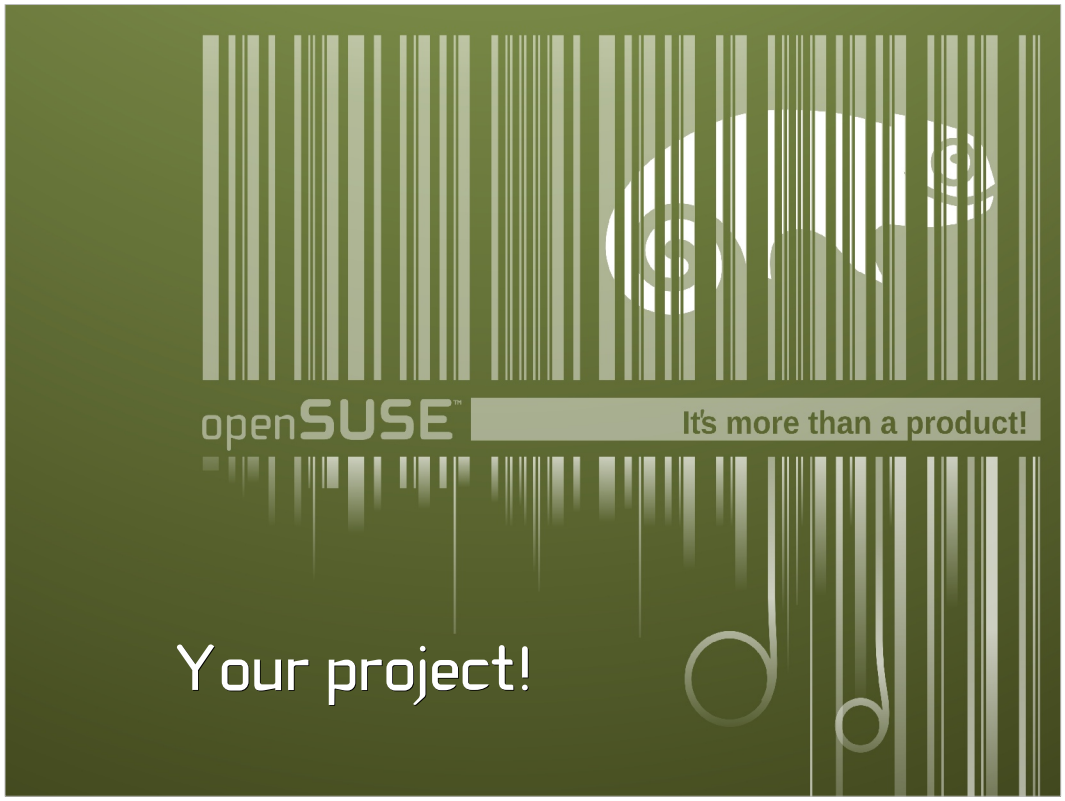
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It's more than a product!
Your project!