



Server Installation

Describes the RAID configuration and operating system installation on standard SuperMicro Server with 4x2TB drives and 1xSSD drives (128 or 256 GB)

Written By: Zdenek Horak

```
I MegaRAID SAS-MFI BIOS
rsion 3.30.02.2 (Build June 17, 2014)
pyright(c) 2014 LSI Corporation
-0 (Bus 2 Dev 0) LSI 2108 MegaRAID
package: 12.15.0-0239
```

```
attery Status: Not present
I Slot Number: 5
```

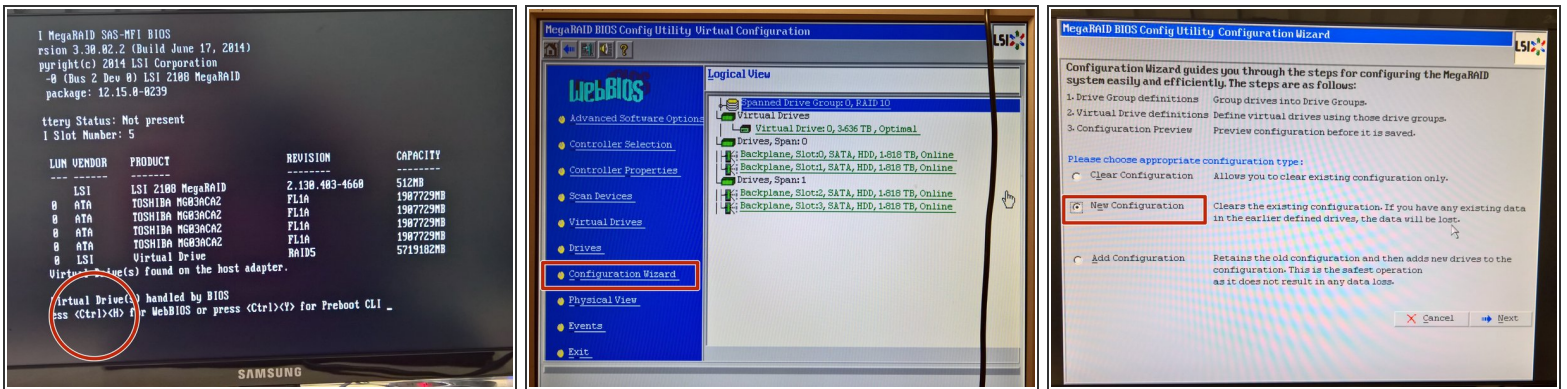
LUN	VENDOR	PRODUCT	REVISION	CAPACITY
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	LSI	LSI 2108 MegaRAID	2.130.403-4660	512MB
0	ATA	TOSHIBA MG03ACA2	FL1A	1907729MB
0	ATA	TOSHIBA MG03ACA2	FL1A	1907729MB
0	ATA	TOSHIBA MG03ACA2	FL1A	1907729MB
0	ATA	TOSHIBA MG03ACA2	FL1A	1907729MB
0	LSI	Virtual Drive	RAID5	5719182MB

Virtual Drive(s) found on the host adapter.

Virtual Drive(s) handled by BIOS
Press <Ctrl><H> for WebBIOS or press <Ctrl><Y> for Preboot CLI _

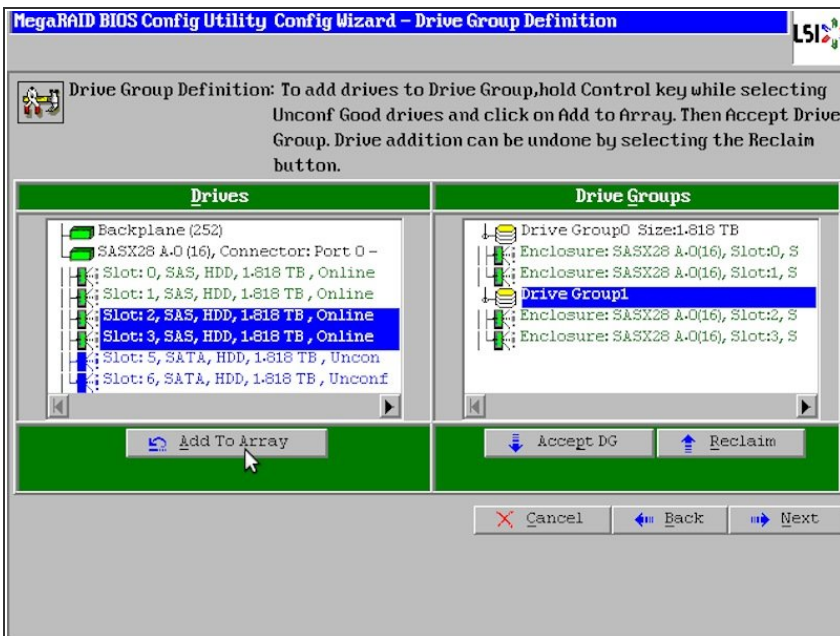
SAMSUNG

Step 1 — Start RAID Configuration



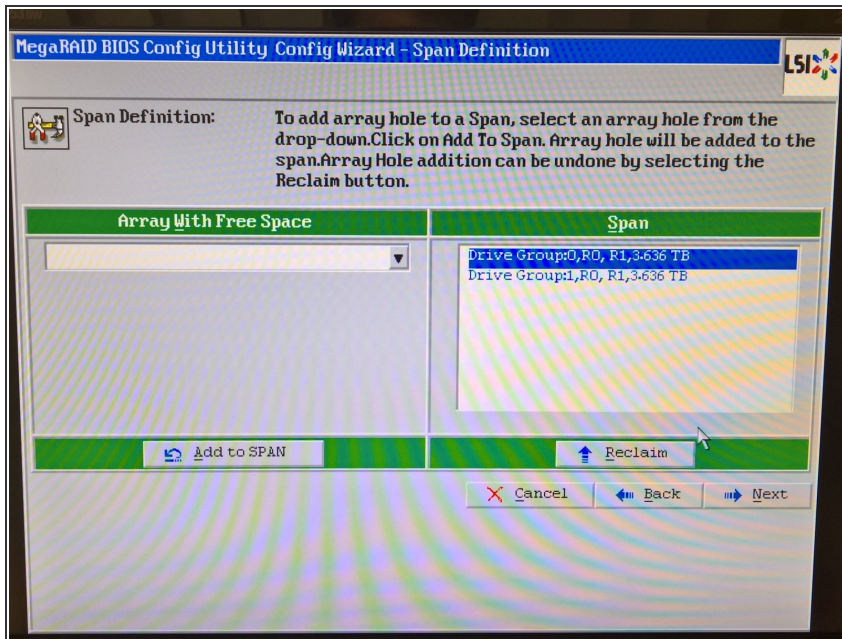
- Start RAID configuration by pressing **Ctrl + H** during start up.
- Run **Configuration Wizard** from the left menu
- Pick **New Configuration** and press the **Next** button

Step 2 — Create RAID DriveGroups



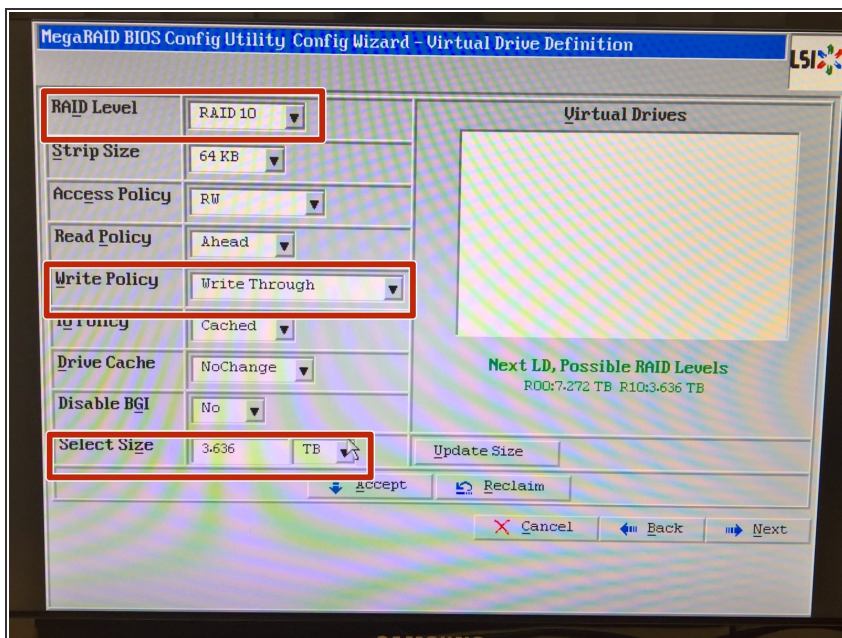
- Create two drivegroups, each with two discs
- Insert disks from slot 0 and 1 into first drivegroup
- Create second drivegroup by pressing the **Accept DG** button
- Insert disks from slots 2 and 3 into the second drivegroup
- Confirm the second drivegroup by pressing the **Accept DG** button again.

Step 3 — Create RAID Span



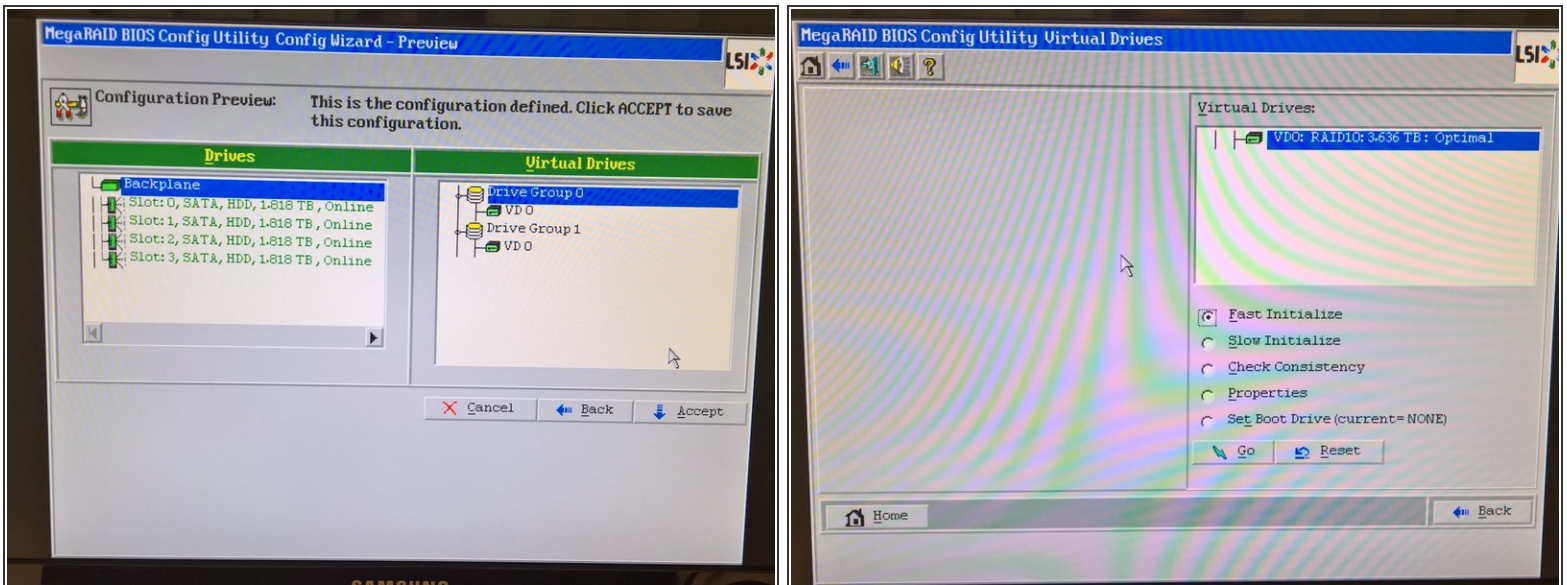
- Create a span with both drivegroups that you have created in the previous step.

Step 4 — Configure Virtual Drive



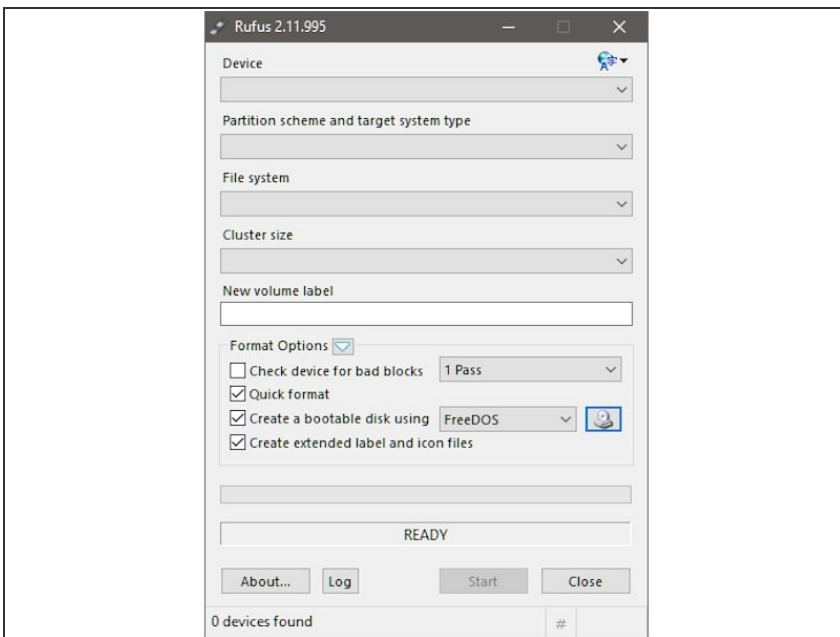
- Pick RAID 10
- Set Write Policy to Write Through
- Set size to 3.636 TB

Step 5 — Confirm configuration&initialization



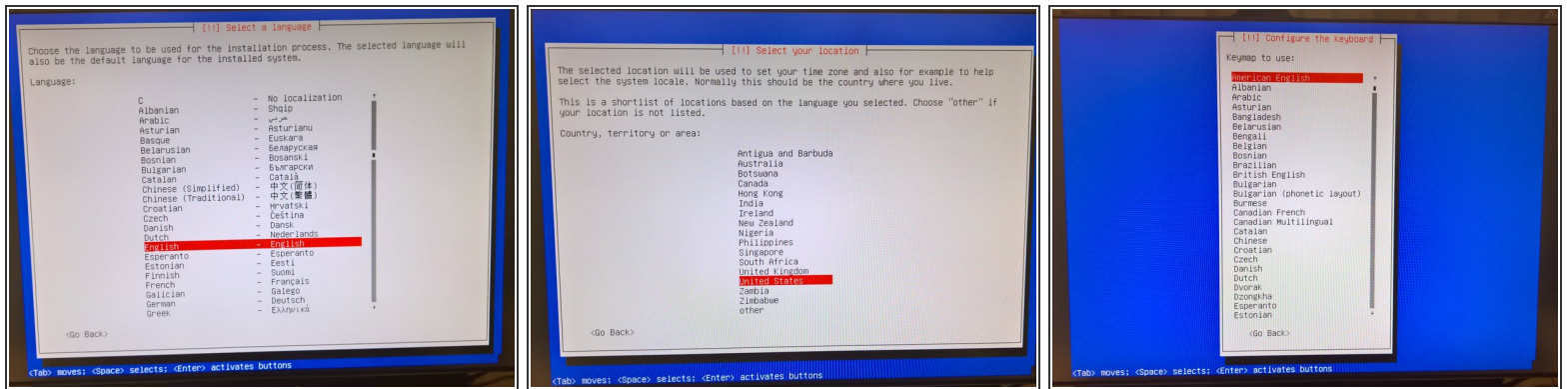
- Confirm the configuration

Step 6 — Create Debian Installer bootable USB drive



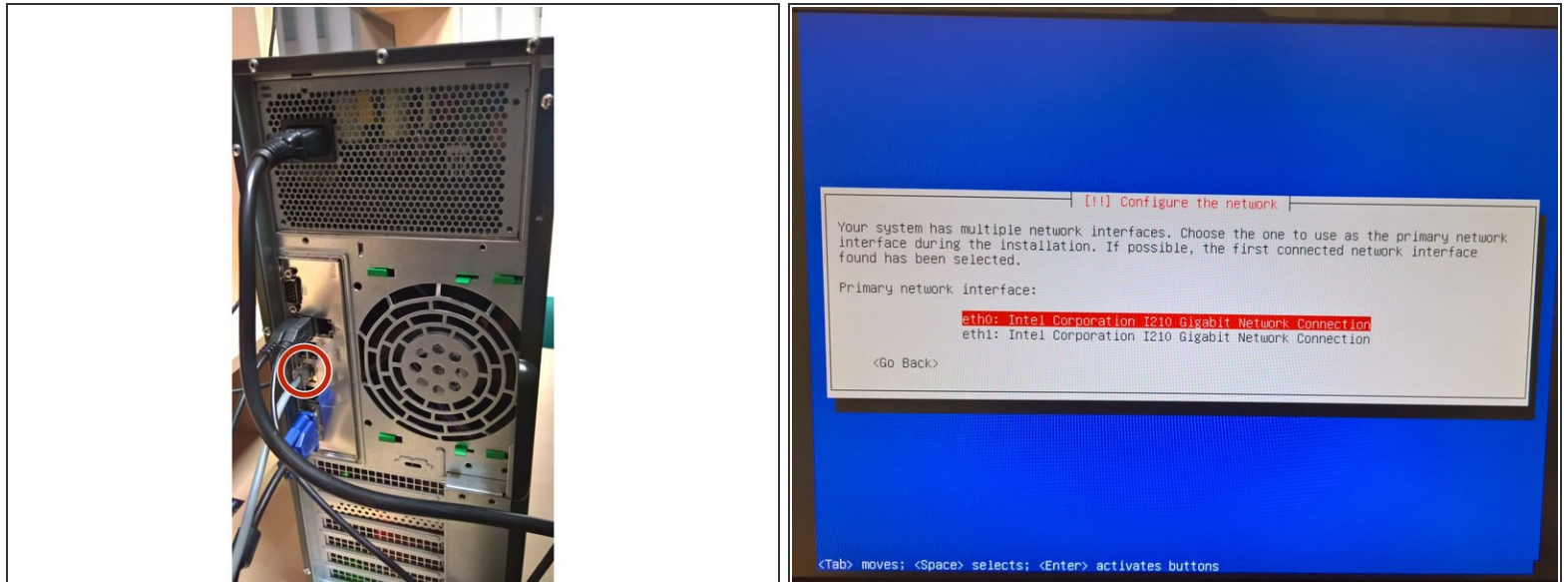
- You may skip this step if you already have a bootable installer media.
- Download Debian Jessie (stable) netinst ISO for AMD64 architecture ([download](#))
- If you are running Windows, use Rufus ([download](#)) to create a bootable USB drive with downloaded ISO file

Step 7 — Start Debian Installation



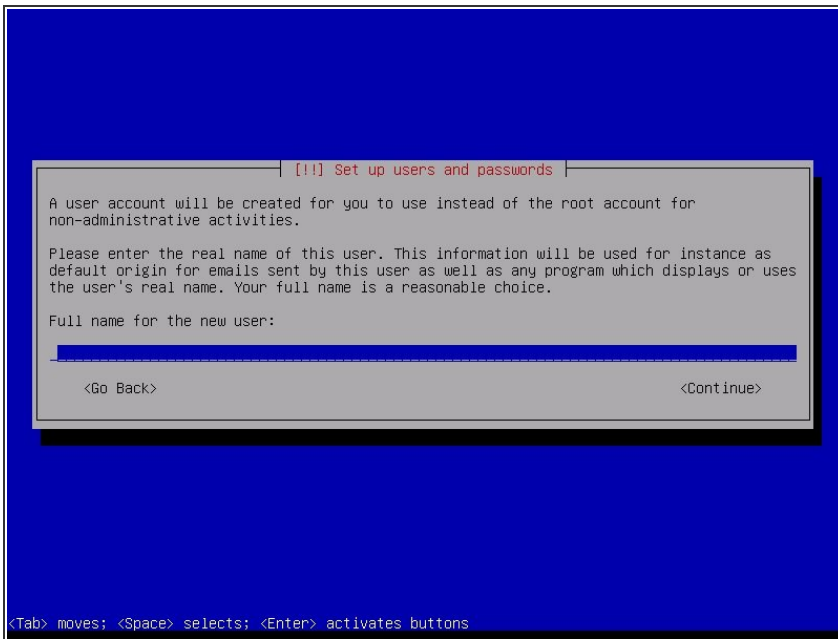
- Boot from a USB drive (or different installer media) created in the previous step
 - Boot menu can be shown using the F11 key during startup
- Pick the default Install option (textual, no graphics)
- Pick the English language and english locale
- Select the expected destination country (eg. Germany for Buchshause, etc.). This info is needed for setting the correct time zone.
- Pick the American English keymap

Step 8 — Configure Network Installation



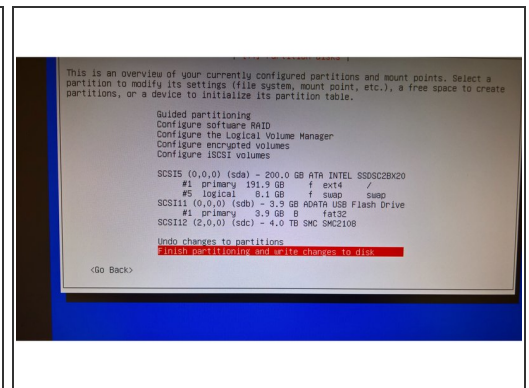
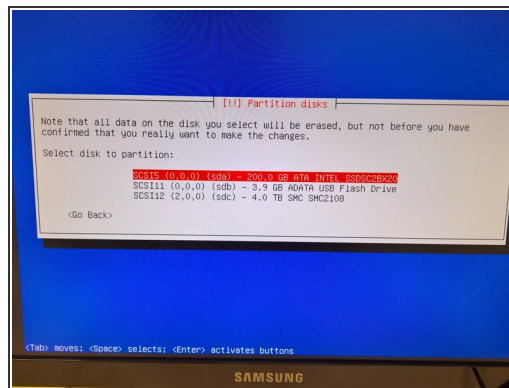
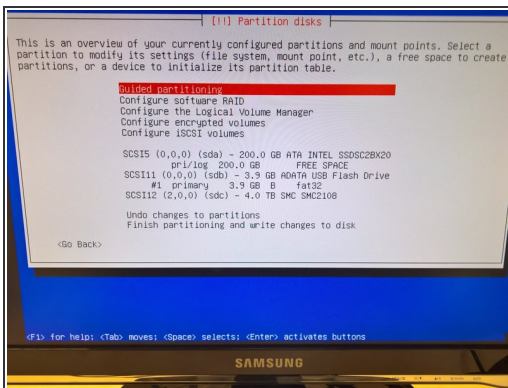
- Plug the ethernet cable into one ethernet socket (eg. the **middle** one - eth0)
- Pick corresponding ethernet interface for installation (eg. **eth0**)
- Enter correct server name (eg. C014H010)
- Enter domain - just to suit your needs, will be changed later on-site to suit customer network policies (eg. Inflex.local)

Step 9 — User Accounts Configuration



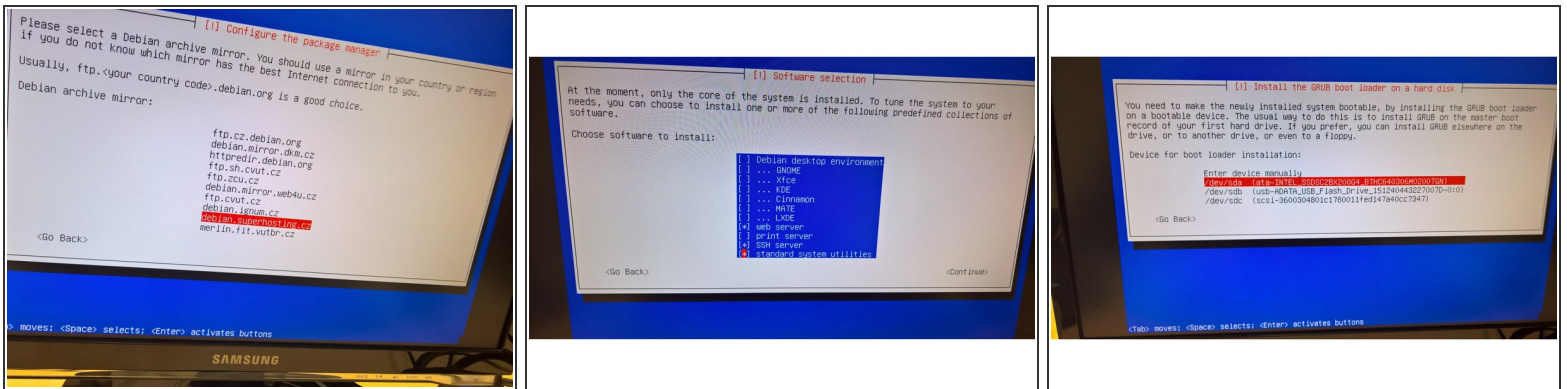
- Create root account with default password
- Create txpom account with default password

Step 10 — Configure Drives&Partitioning



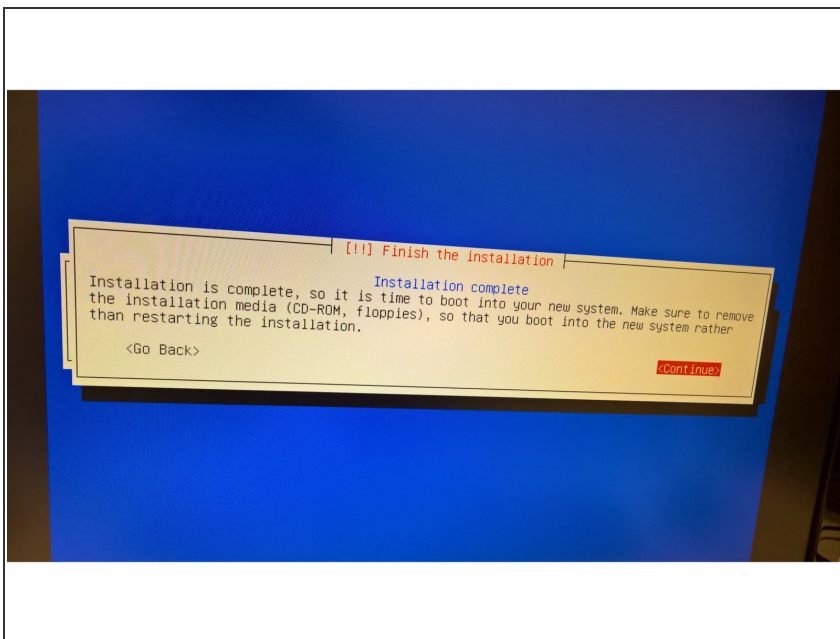
- Pick guided partitioning, confirm removal of existing partitions (if-any)
- Confirm the usage of entire disk - Guided - Use entire disk
- Pick the correct drive for operating system installation - SSD drive
- Finish partitioning and write changes

Step 11 — Finish Debian Installation



- Pick download mirror (eg. ignum.cz)
- Use no proxy
- Do not participate in package survey
- Pick **web server, SSH server and Standard System Utilities**
- Install GRUB loader to the root of the SSD drive

Step 12 — Reboot



- Remove the installer media, reboot the server and let the new operating system to start up.
- Complete the [OS First Start Configuration](#)

