



RadHat Enterprise Linux 7.1 OS Installation

Customer: Grant Investrade Ltd

Document History:

Document Title:	SOP for Grant Investrade Ltd
Process Name:	RadHat Enterprise Linux 7.1 OS Installation
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Date	20 th June 2016

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1. Introduction

Insight Business Machines Pvt. Ltd. has been in the field of Computing Technology since 1992. What Insight envisages: The right mix of Products, services, People, infrastructure, Resources and Technical expertise. The prime push for INSIGHT has been towards diversifying itself into many arenas of Digital Information Technology. Today customers are turning to INSIGHT for flexible and operable solutions. Be it Systems Integration, Infrastructure Consolidation, Networking or Application Development we providing efficient, cost effective & cutting-edge technology has been the driving initiative at INSIGHT since last more the one decade. Our expertise in the Information Technology and the industry domain has been acknowledged by the business community at large. A testimony of this is our distinguished client portfolios that are leaders in their vertical and an achievement that Insight is proud of. Our vision is Instigate Values by Service Integration and Solutions.

Solutions we provide: Compliance, Convergence, and Manageability & Lifecycle Management.

2. Introduction for SOP

A Standard Operating Procedure (SOP) is a set of written instructions that document a routine or repetitive activity followed by an organization / team. The development and use of SOPs are an integral part of a successful quality system as it provides individuals with the information to perform a required job properly, and facilitates consistency in the quality and integrity of an end-result.

The use of Standard Operating Procedures by teams will provide several Benefits. First, the intent will be communicated to all individuals in the team. Second, SOPs provide subordinate employees with the desired end state and allow them to use their discretion if decisions need to be made. SOPs provide leaders the framework to conduct business safely by allowing them to focus on critical decisions instead of routine ones thus enhancing their decision making ability in stressful situations. Finally, SOPs provide a mechanism to identify needed changes, implement appropriate policy, enhance training, describe desired performance, and evaluate operational performance. The result is improved operational efficiency, greater accountability, and customer (user) satisfaction.

3. Objective

The primary objective of this document is to serve as a set of written instructions for remotely managing the infrastructure of Grant Investrade Ltd, it provides the standard Process Framework and detailed procedures in carrying out the services effectively and efficiently.

4. Scope

The scope of this document is to follow the step by step process for the VMware deployment at Grant Investrade Ltd. On daily basis it will help the support team for managing the infrastructure, and analyse any possible security threat or anomalies that can be fatal for business.

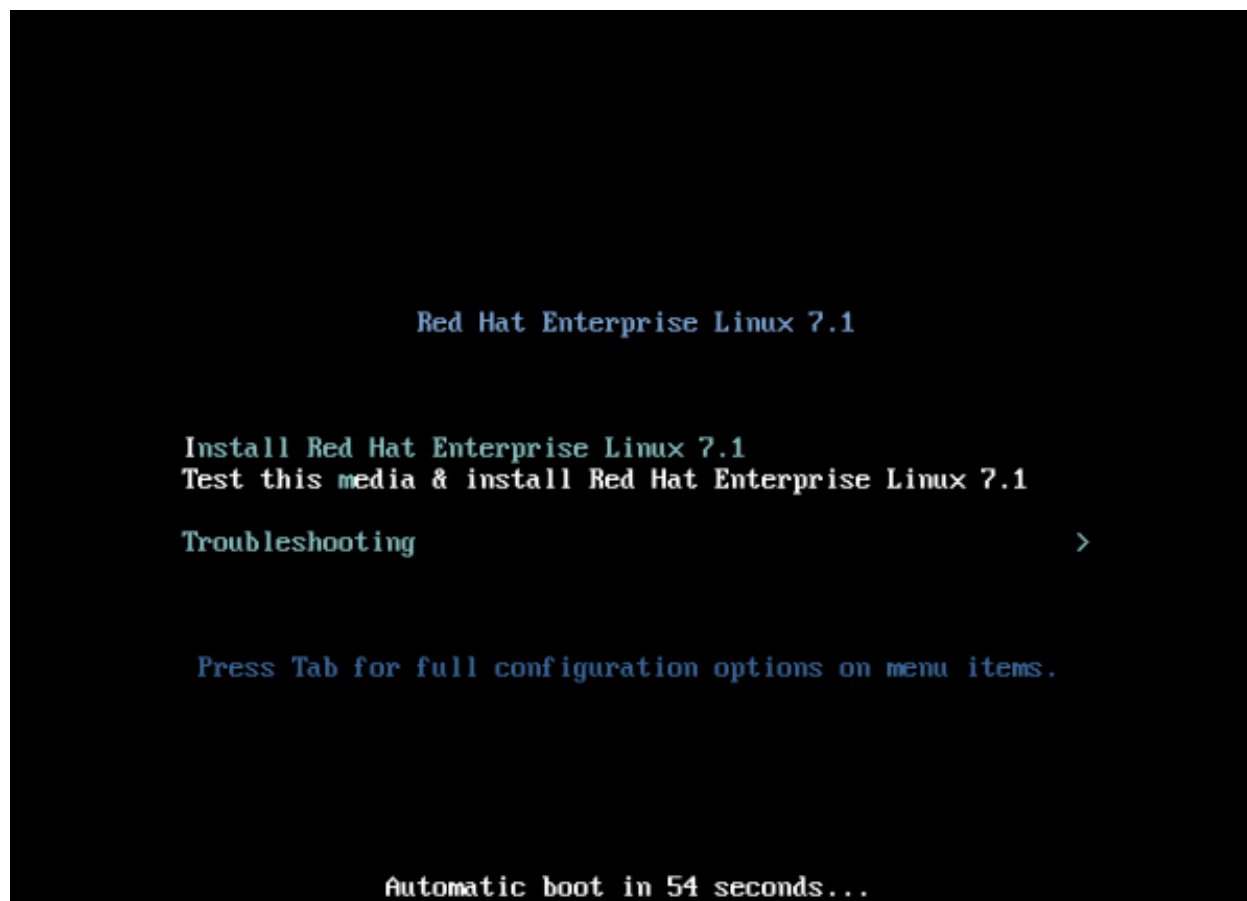
5. Audience

The intended audience for this document is Help Desk, System Engineer / System Administrator, Team Leader and IT End Users at Grant Investrade Ltd (Mumbai)

6. Installation of RedHat Enterprise Linux 7.1 OS

Step-1:- After downloading RHEL 7.1 DVD Binary ISO image, then burn it to a CD/DVD media or create a bootable USB media using Unetbootin LiveUSB Creator.

Step-2:- Insert the Red Hat Enterprise Linux 7.1 boot-able DVD or USB to your system and choose to boot from DVD or USB from BIOS. You will be greeted with welcome screen.



Step-3:- Checking the installation media by default. You may cancel this by pressing 'ESC' key.

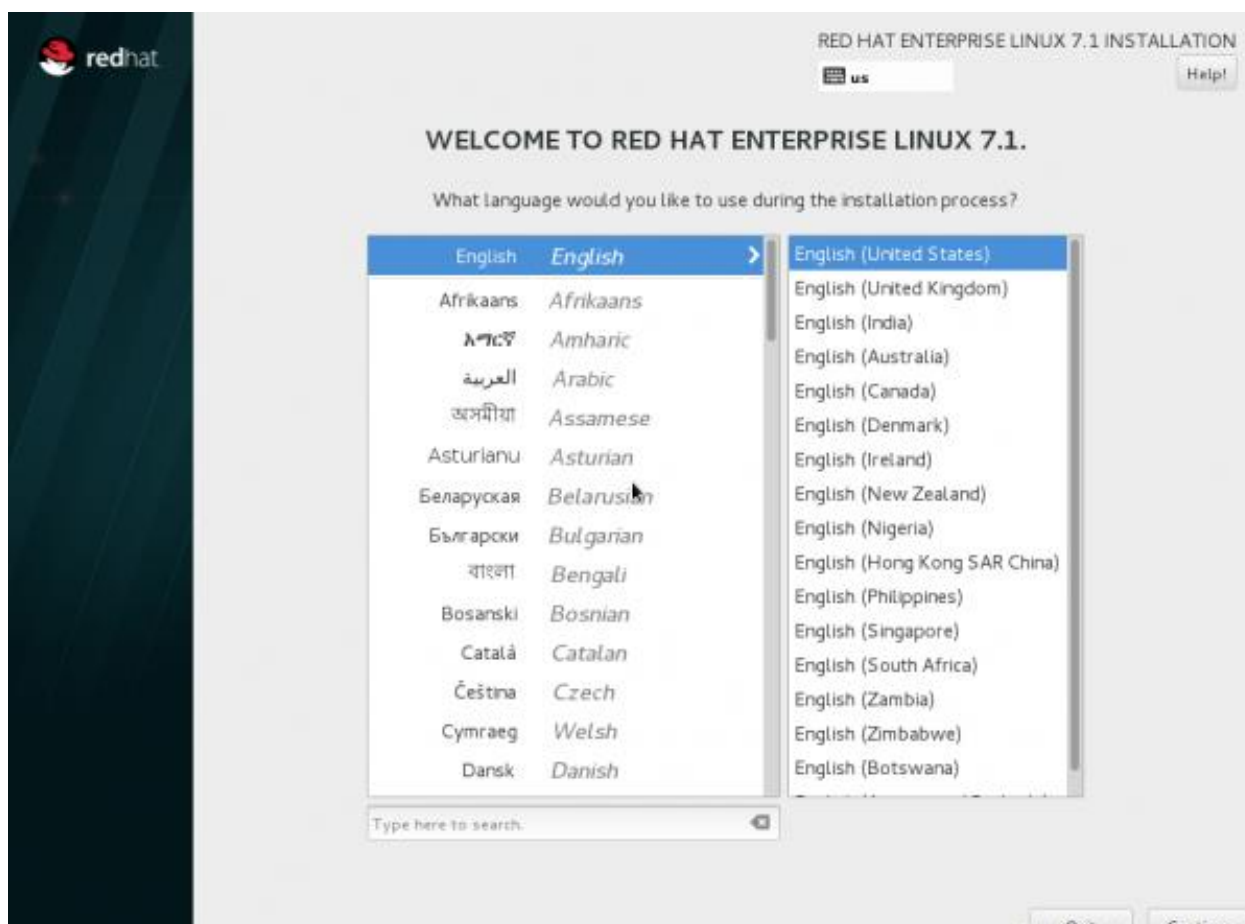
```
[ 0.000000] tsc: Fast TSC calibration failed
[ OK ] Started Show Plymouth Boot Screen.
[ OK ] Reached target Paths.
[ OK ] Reached target Basic System.
dracut-initqueue[555]: mount: /dev/sr0 is write-protected, mounting read-only
[ OK ] Started Show Plymouth Boot Screen.
[ OK ] Reached target Paths.
[ OK ] Reached target Basic System.
dracut-initqueue[555]: mount: /dev/sr0 is write-protected, mounting read-only
Starting Media check on /dev/sr0...
/dev/sr0: 518df1f55cc57045adfea7170050a2fe
Fragment sums: 5fb5cd5d7ebfbc1754a39609a73921d07d4ba3122387cb993d025bb5d593
Fragment count: 20
Press [Esc] to abort check.
Checking: 029.1%
```

Step-4:- After Interrupted/Successful installation media checking, Installer will be started.

```
Starting installer, one moment...
```

```
[anaconda] 1:main* 2:shell 3:log 4:storage-log
```

Step-5:- Time to choose language of Installation. Choose any language you are comfortable with. Though it is always a good idea to stick to English. Click Continue...



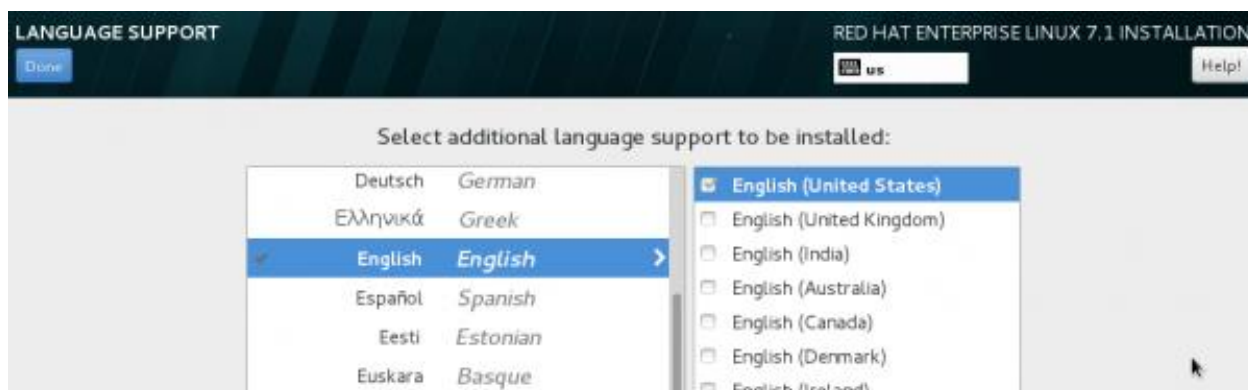
Step-6:- Installation Summary Interface. Here you can modify Date and Time, Keyboard, Language Support, Installation Support, Software Selection, Installation Destination, Kdump, Network and Hostname.



Step-7:- Set Date and Time, as per you Geographical Location and click Done.



Step-8:- Select Additional language to be installed and click Done.



Step-9:- Time to modify (not necessary) installation source. Add additional repositories here, and other repositories over http. If you are not sure about these better stick to 'Auto-detected installation Media and Click done.

INSTALLATION SOURCE

Done

RED HAT ENTERPRISE LINUX 7.1 INSTALLATION

us

Help

Which installation source would you like to use?

☒ Auto-detected installation media:

Device: sr0
Label: RHEL-7.1_Server.x86_64

Verify

☐ ISO file:

Device: ATA VBOX HARDISK /dev/sda1 (476 MB MB) ext4-1105151f-8258-444d-963a-0003ec411c17

Choose an ISO

Verify

☐ On the network:

http://

Proxy setup...

☐ This URL refers to a mirror list.

Additional repositories:

Enabled	Name
<input checked="" type="checkbox"/>	Server-HighAvailability
<input type="checkbox"/>	Server-ResilientStorage

+

-

⌂

Name: Server-HighAvailability

file:// /run/install/repo/addons/HighAvailability

☐ This URL refers to a mirror list.

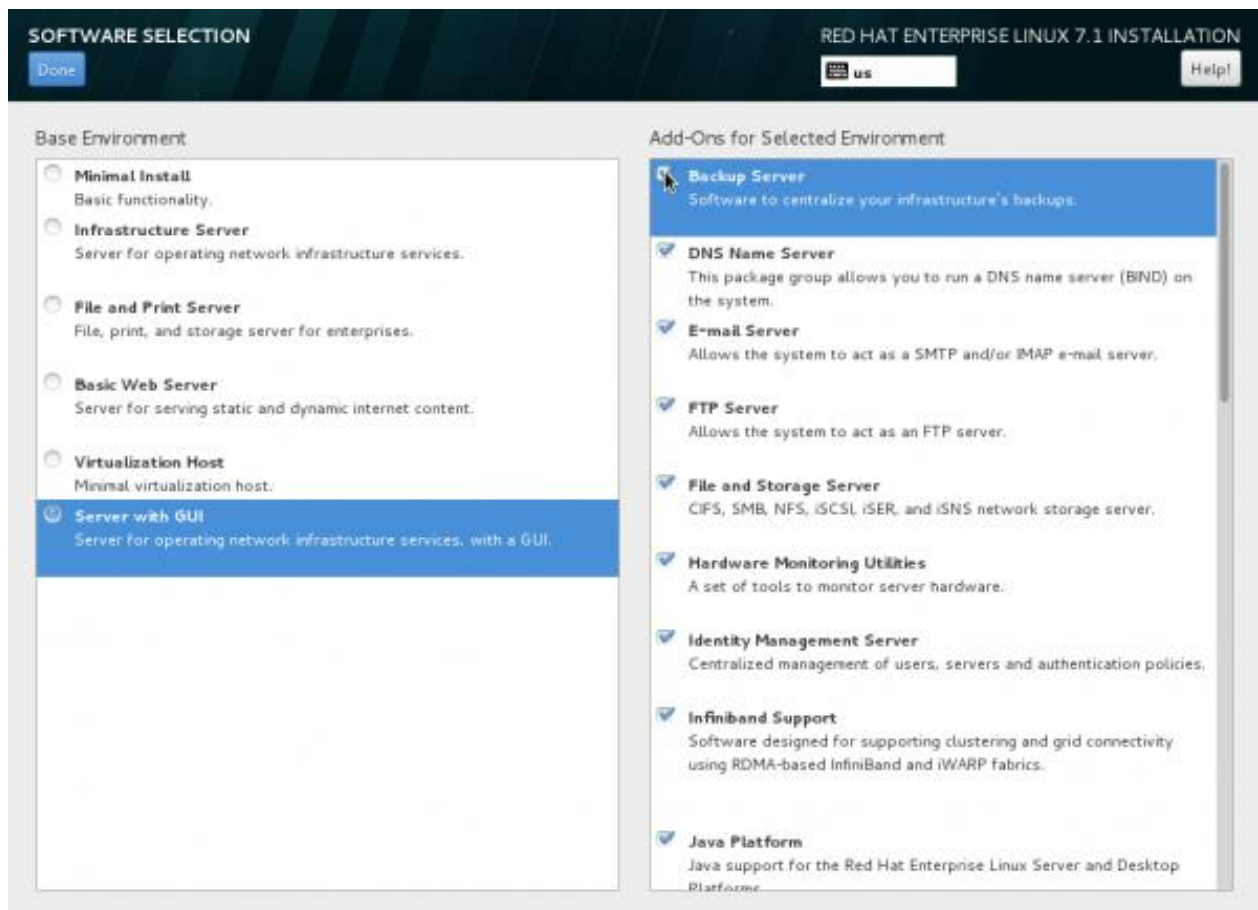
Proxy URL:

User Name:

Password:

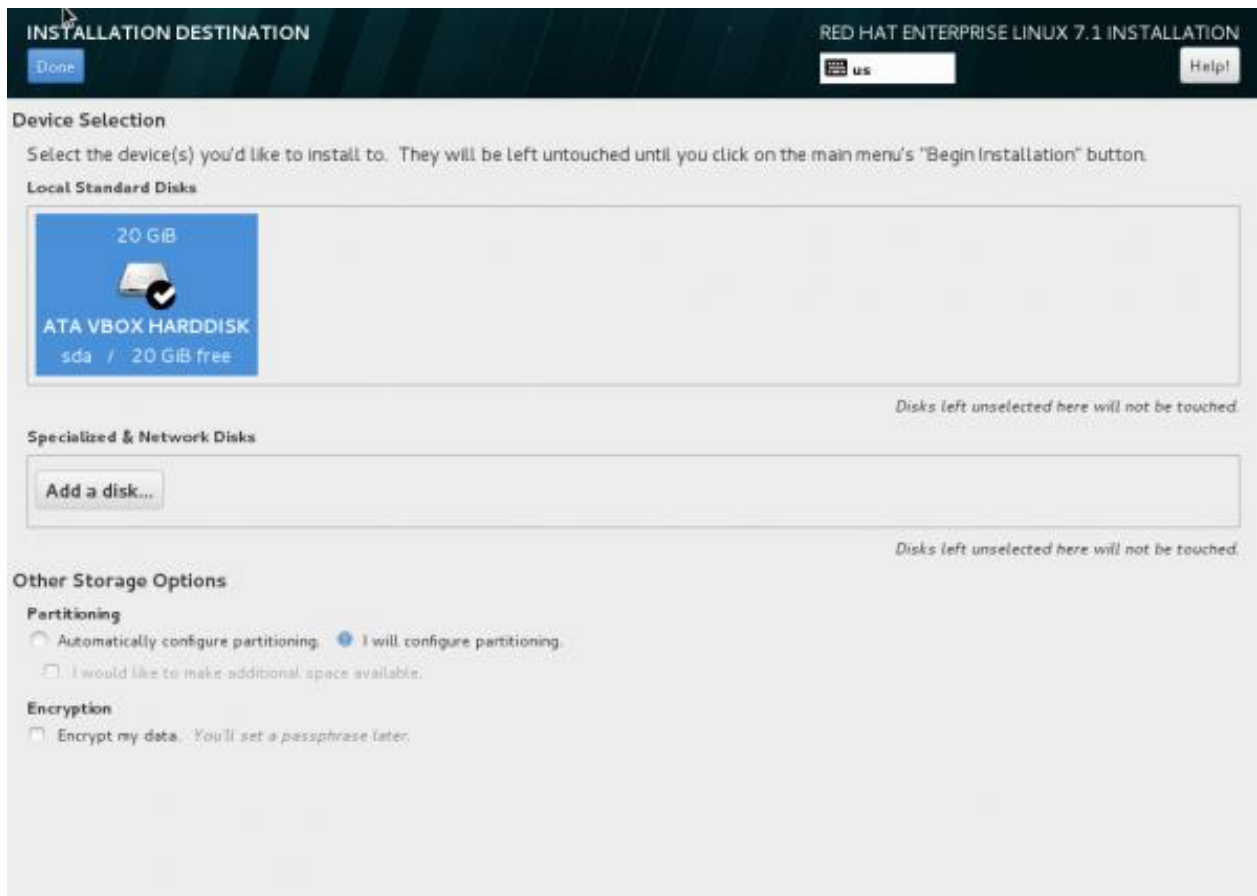
Step-10:- Software Selection Interface. In production you should always select 'Minimal Install' which installs your system with basic installation. This way you may choose which software to install and nothing extra thus higher level of customization.

Here in the example, I choose to install with GUI because I don't wanted to give my time on GUI installation later moreover I am not going to use this installation in production. It is just a test drive. To proceed Click Done.



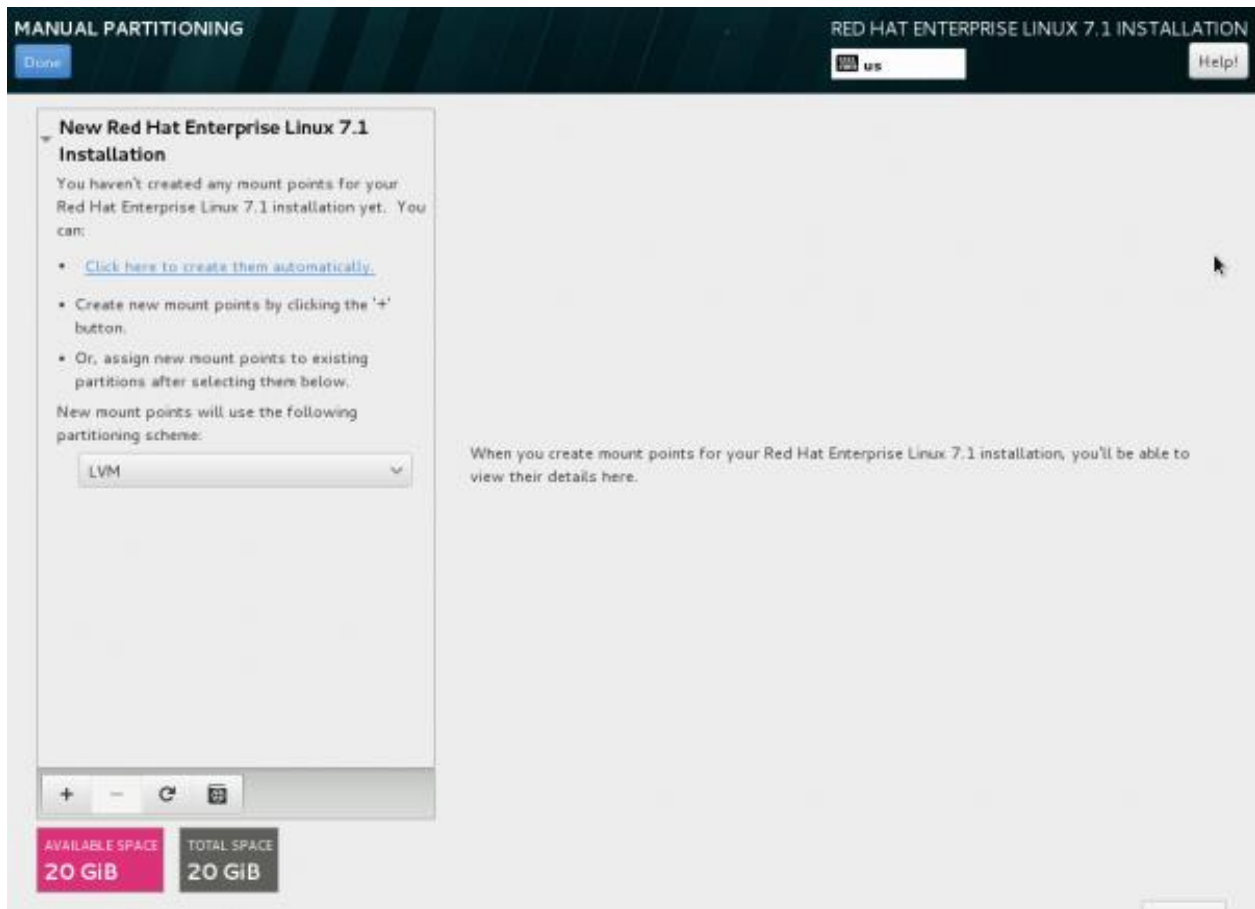
Step-11:- Choose the device to install the OS. You have the option to encrypt your data from this interface. Also option to automatic configure partitioning as well as manual partitioning.

Automatic partitioning will do everything for you, but it won't give you that level of customization as manual partitioning would. I chose "I will Configure Partitioning" aka Manual Partitioning. Select device and click done.

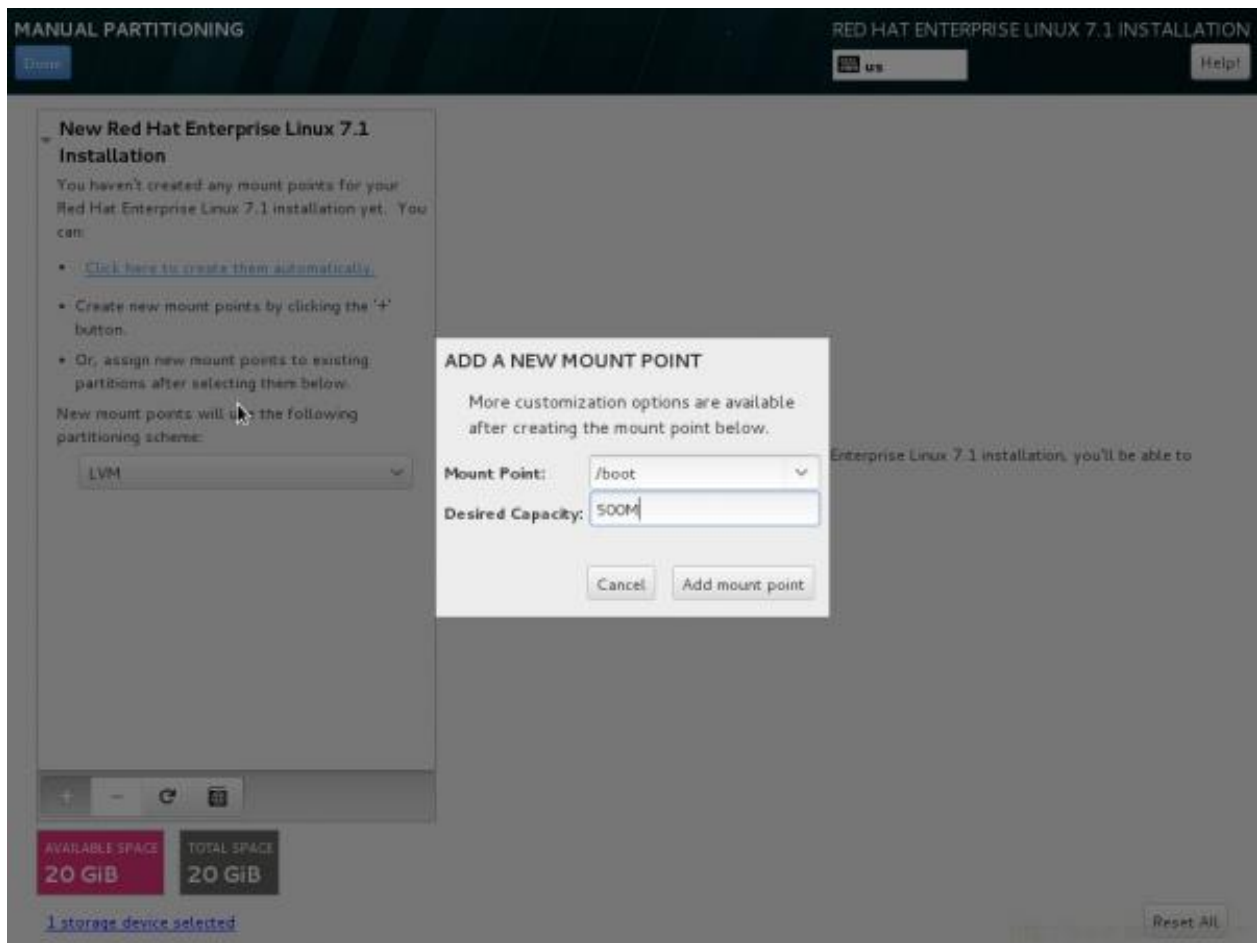


The screenshot shows the "INSTALLATION DESTINATION" window for Red Hat Enterprise Linux 7.1. The window has a dark header with the title "INSTALLATION DESTINATION" on the left, "RED HAT ENTERPRISE LINUX 7.1 INSTALLATION" on the right, and a "Done" button on the far left. Below the header, there's a "Device Selection" section with a sub-header "Local Standard Disks". A single disk is listed: "ATA VBOX HARDISK" with a size of "20 GiB" and "sda / 20 GiB free". A checkmark icon is next to the disk name. Below this, there's a section for "Specialized & Network Disks" with an "Add a disk..." button. At the bottom, there's a section for "Other Storage Options" which includes "Partitioning" (with radio buttons for "Automatically configure partitioning" and "I will configure partitioning", where the latter is selected) and "Encryption" (with a checkbox for "Encrypt my data").

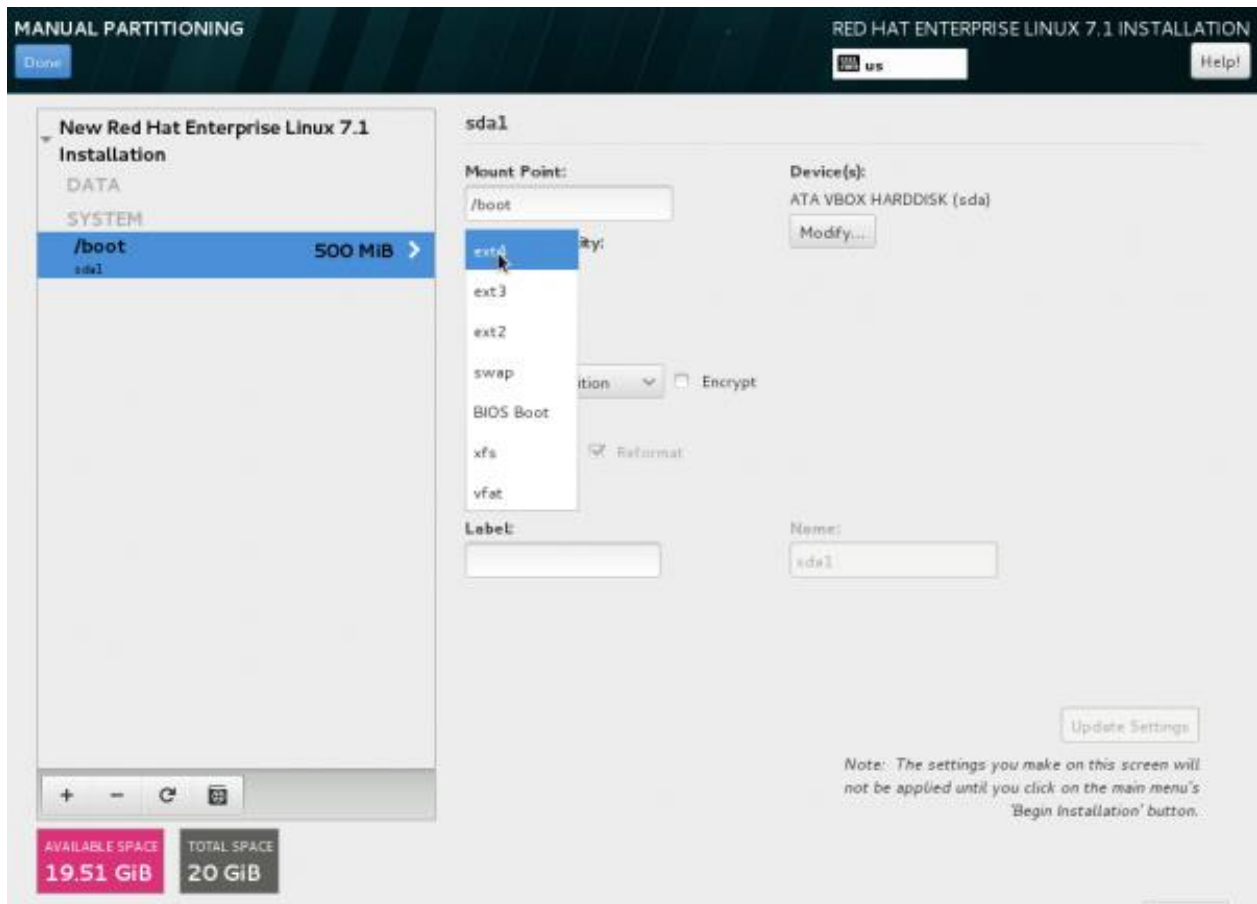
Step-13:- Time to partition disk manually.



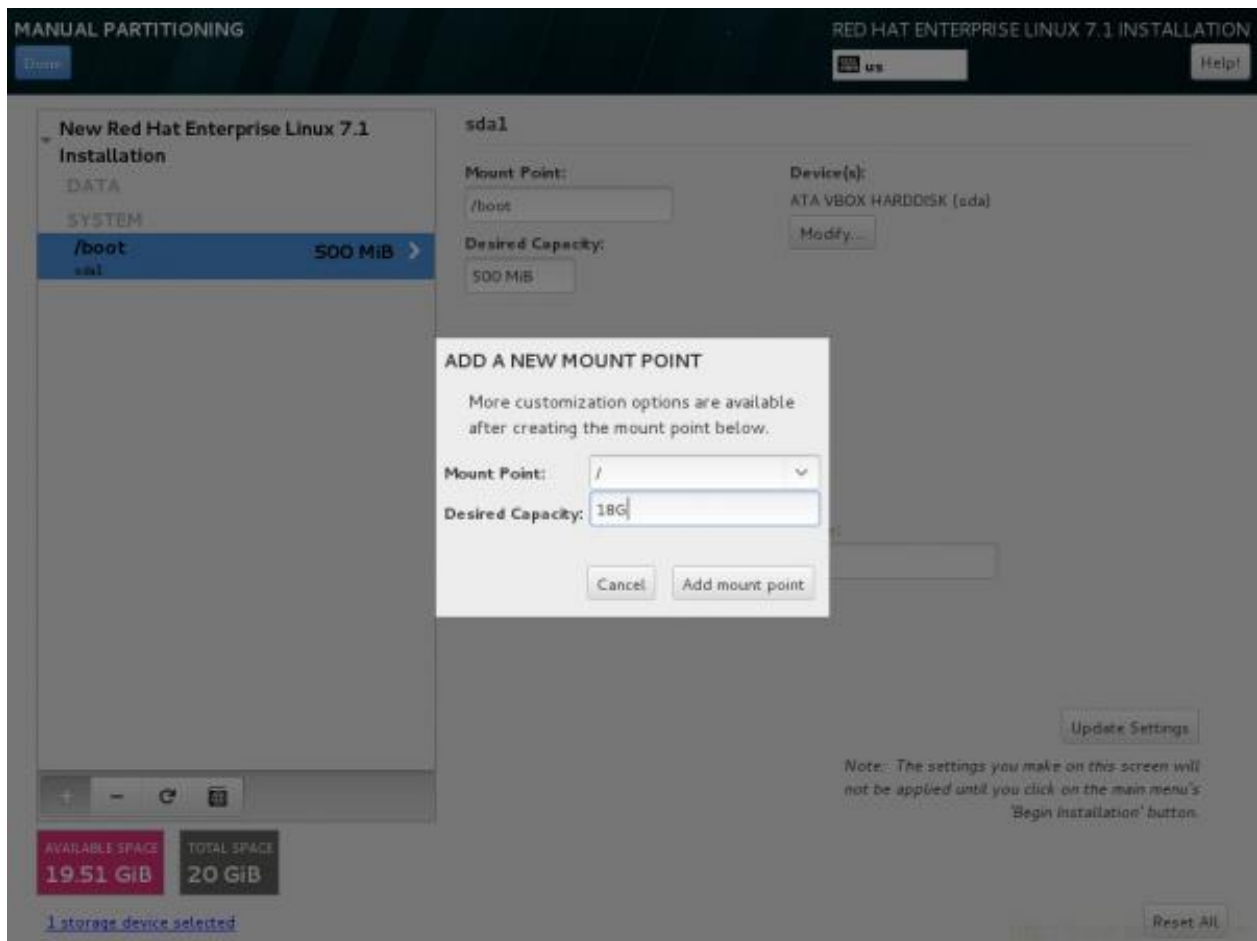
Step-14:- Add a new mount point (/boot) by clicking on + symbol. Input desired capacity and click to Add mount point.



Step-15:- Next is the /boot partition settings window. Change file system from xfs to ext4.



Step-16:- Add another mount point (/) by clicking + symbol and add Desired Capacity to it. Finally Click Add mount Point.



Step-17:- Change file system to ext4 again and update settings.

MANUAL PARTITIONING RED HAT ENTERPRISE LINUX 7.1 INSTALLATION

Done Help!

New Red Hat Enterprise Linux 7.1 Installation

DATA

SYSTEM

/boot 500 MiB

sda1

/ 18 GiB

rhel-root

rhel-root

Mount Point: /

Desired Capacity: 18 GiB

Device(s): ATA VBOX HARDISK (sda)

Device Type: LVM ☐ Encrypt

File System: ext4 ☒ Reformat

Volume Group: rhel [0 B free]

Label:

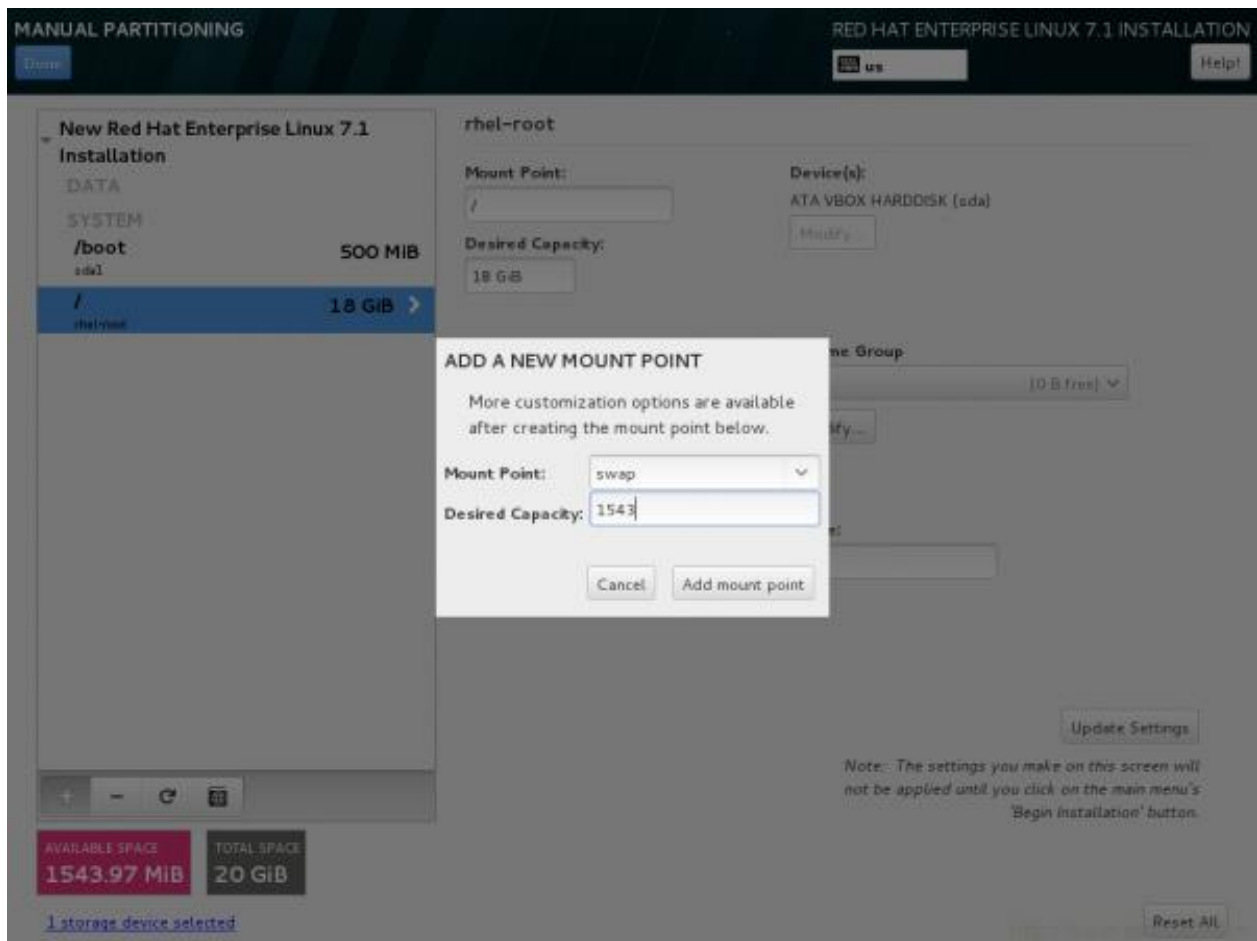
Name: root

Update Settings

Note: The settings you make on this screen will not be applied until you click on the main menu's 'Begin Installation' button.

AVAILABLE SPACE: 1543.97 MiB TOTAL SPACE: 20 GiB

Step-18:- Time to create Swap mount point. Click on + icon to add swap as mount point and input desired Capacity. Finally click Desired Capacity.



Step-19:- Update swap partition settings, if required from this window.

MANUAL PARTITIONING RED HAT ENTERPRISE LINUX 7.1 INSTALLATION

Done us Help!

New Red Hat Enterprise Linux 7.1 Installation

DATA

SYSTEM

/boot 500 MiB

sda1

/ 18 GiB

rhel-root

swap 1543 MiB >

rhel-swap

rhel-swap

Mount Point:

Desired Capacity:

1543 MiB

Device Type:

LVM ☐ Encrypt

File System:

swap ☒ Reformat

Label:

Device(s):

ATA VBOX HARDISK (sda)

Volume Group:

rhel (0 B free)

Name:

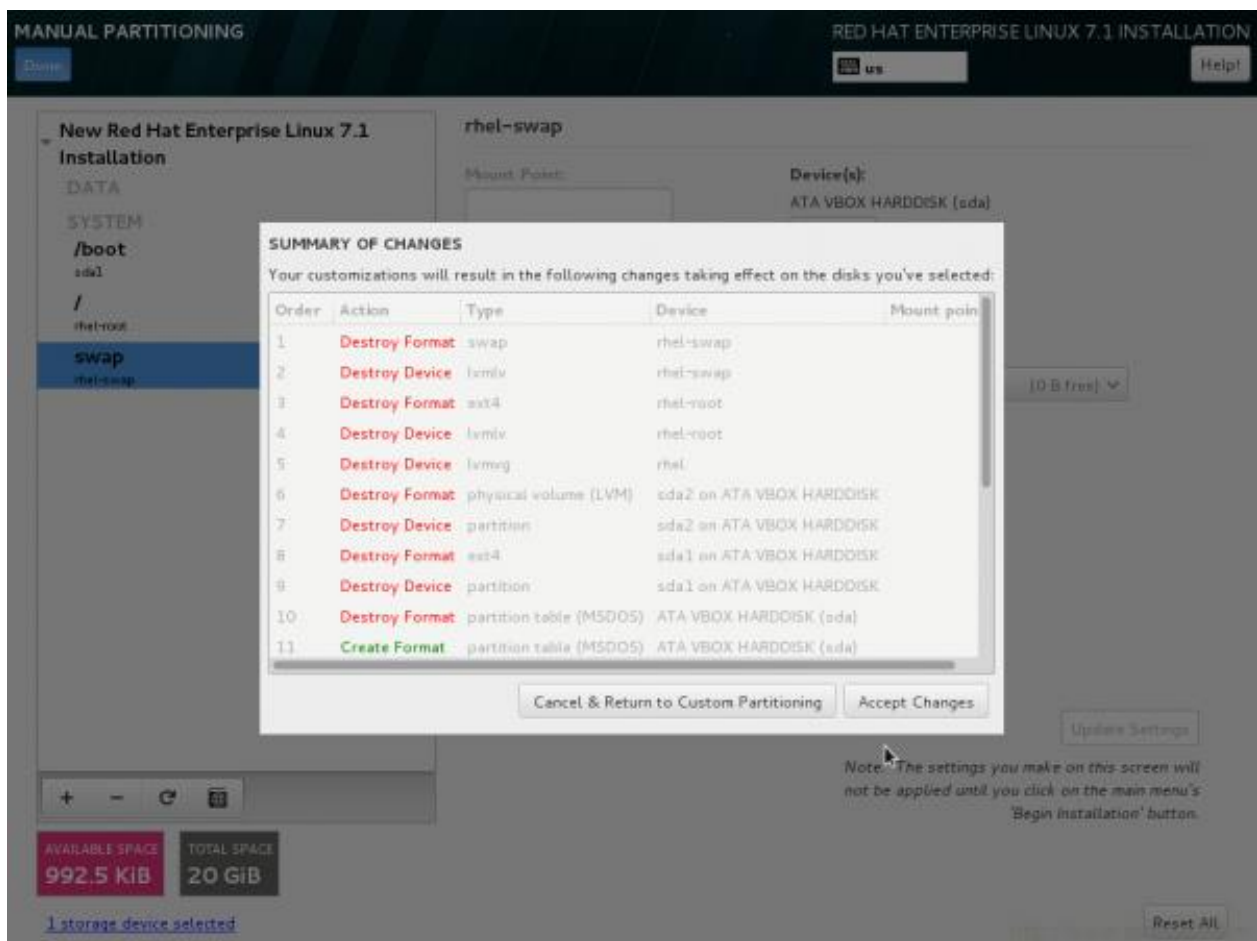
swap

Update Settings

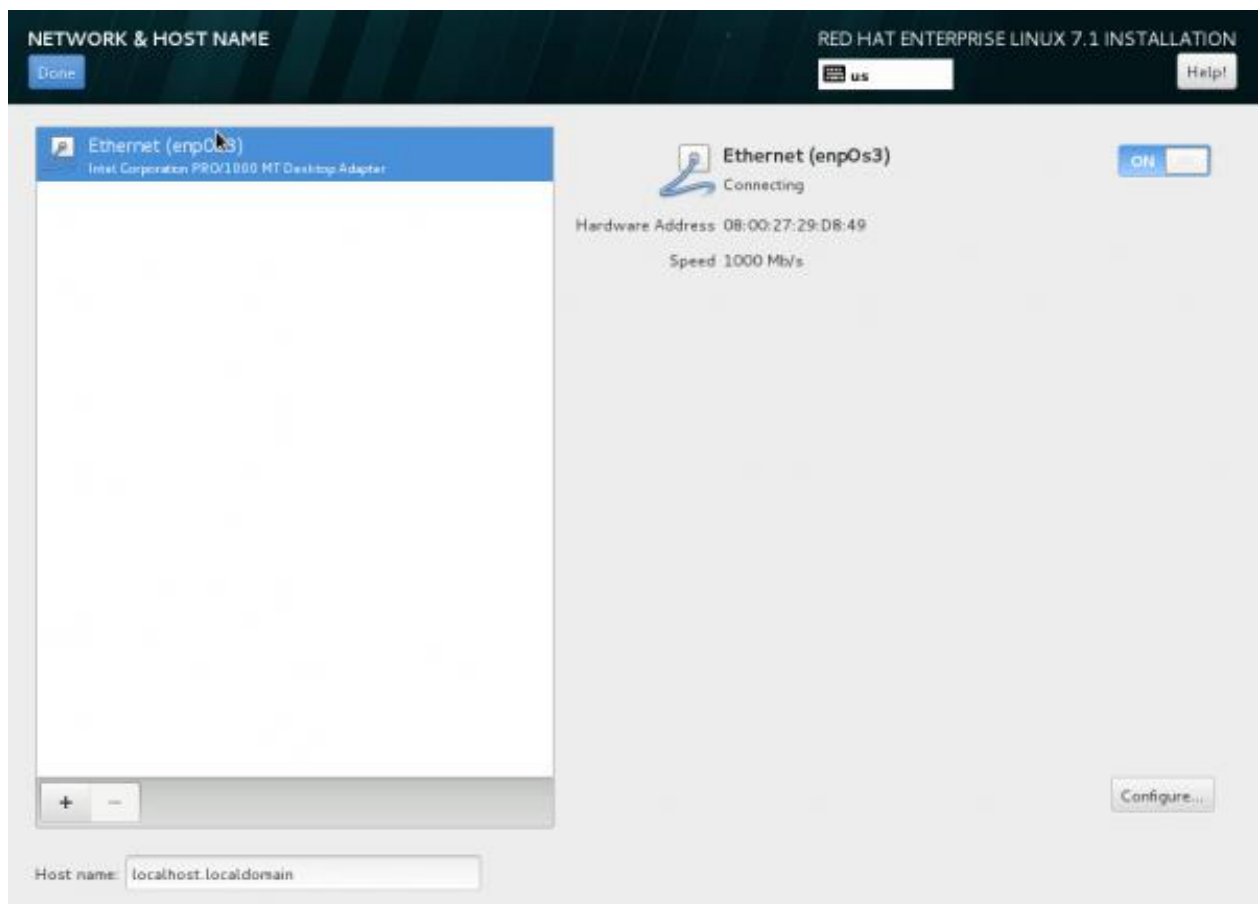
Note: The settings you make on this screen will not be applied until you click on the main menu's 'Begin Installation' button.

AVAILABLE SPACE: 992.5 KiB TOTAL SPACE: 20 GiB

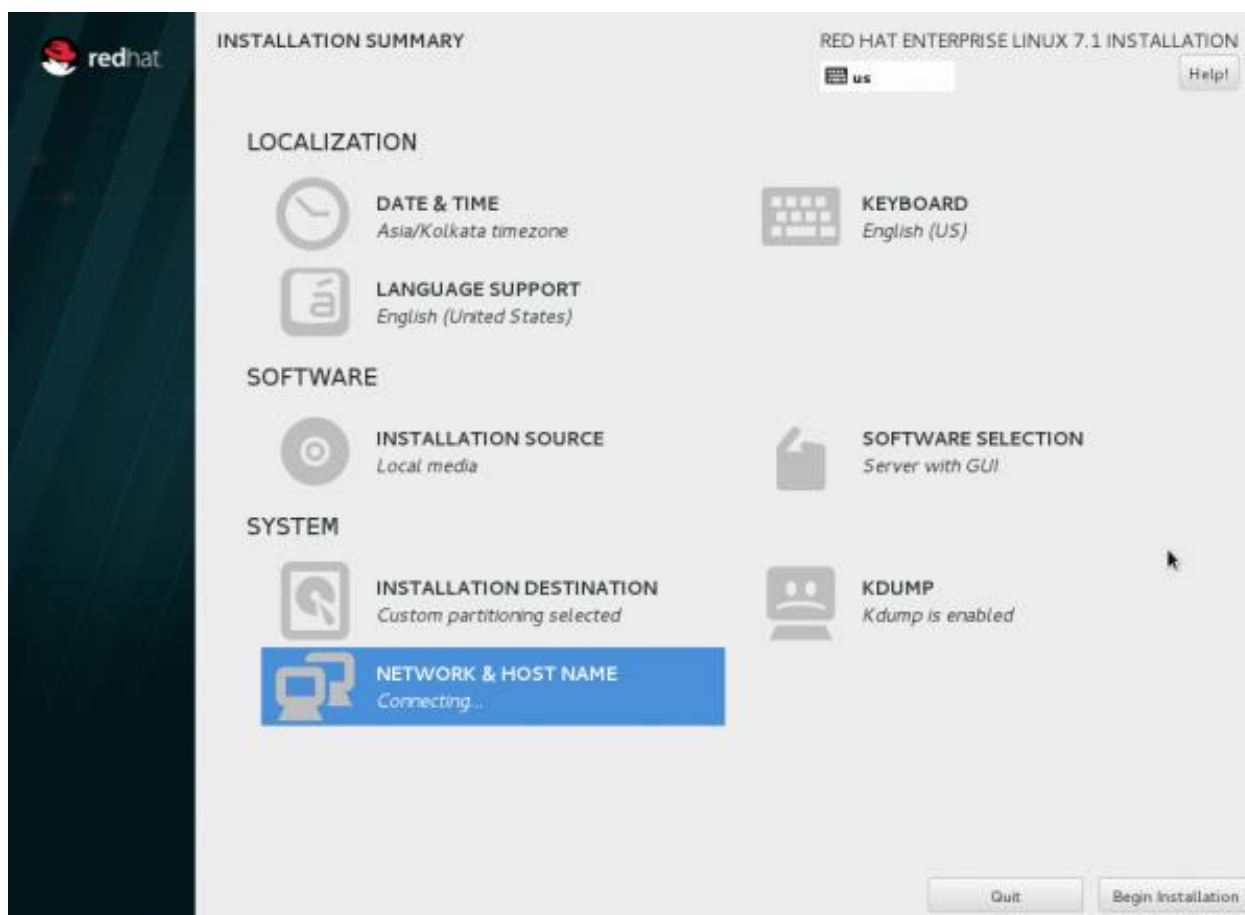
Step-20:- Time to accept changes you have made to the disk.



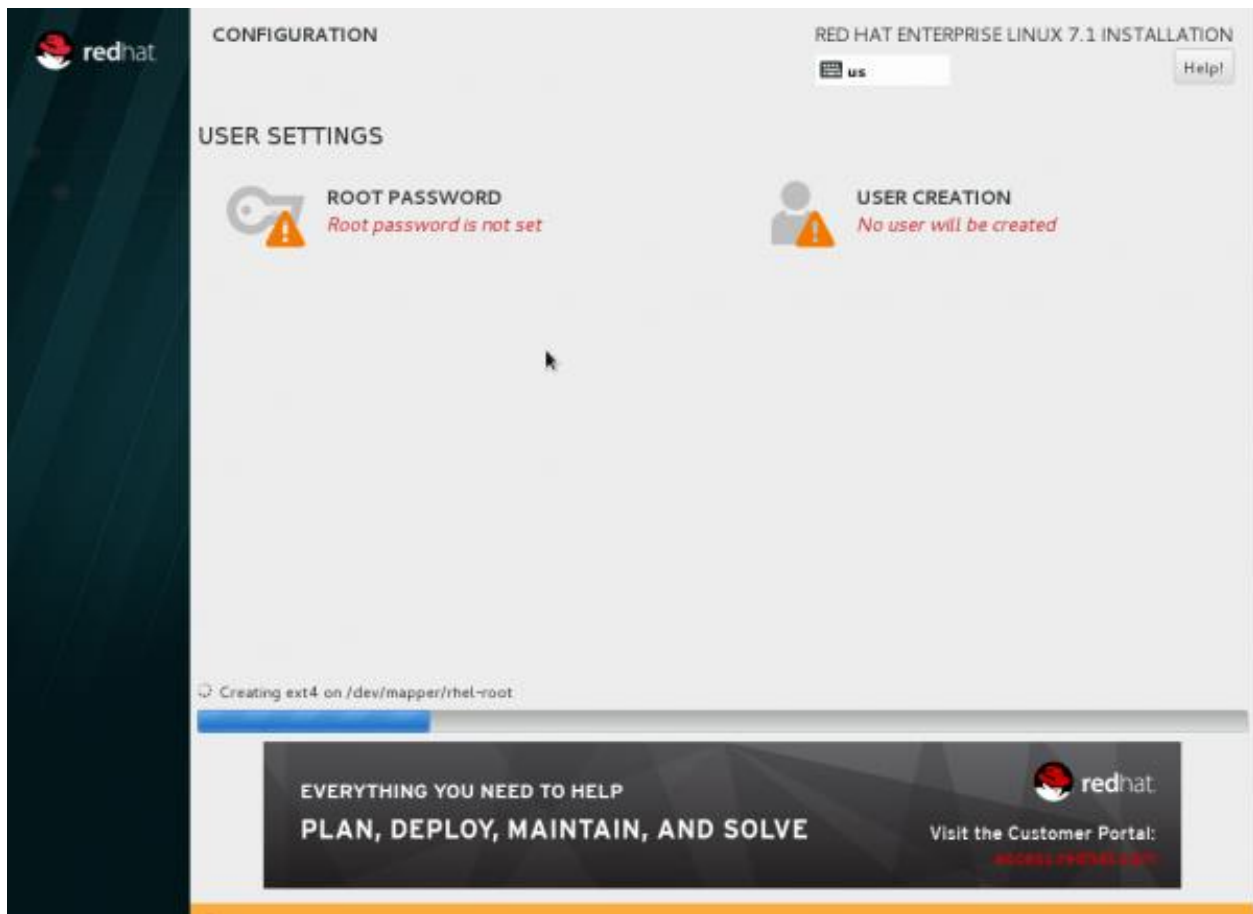
Step-21:- Enable Network and Host name from this window. You may configure the connection if required.



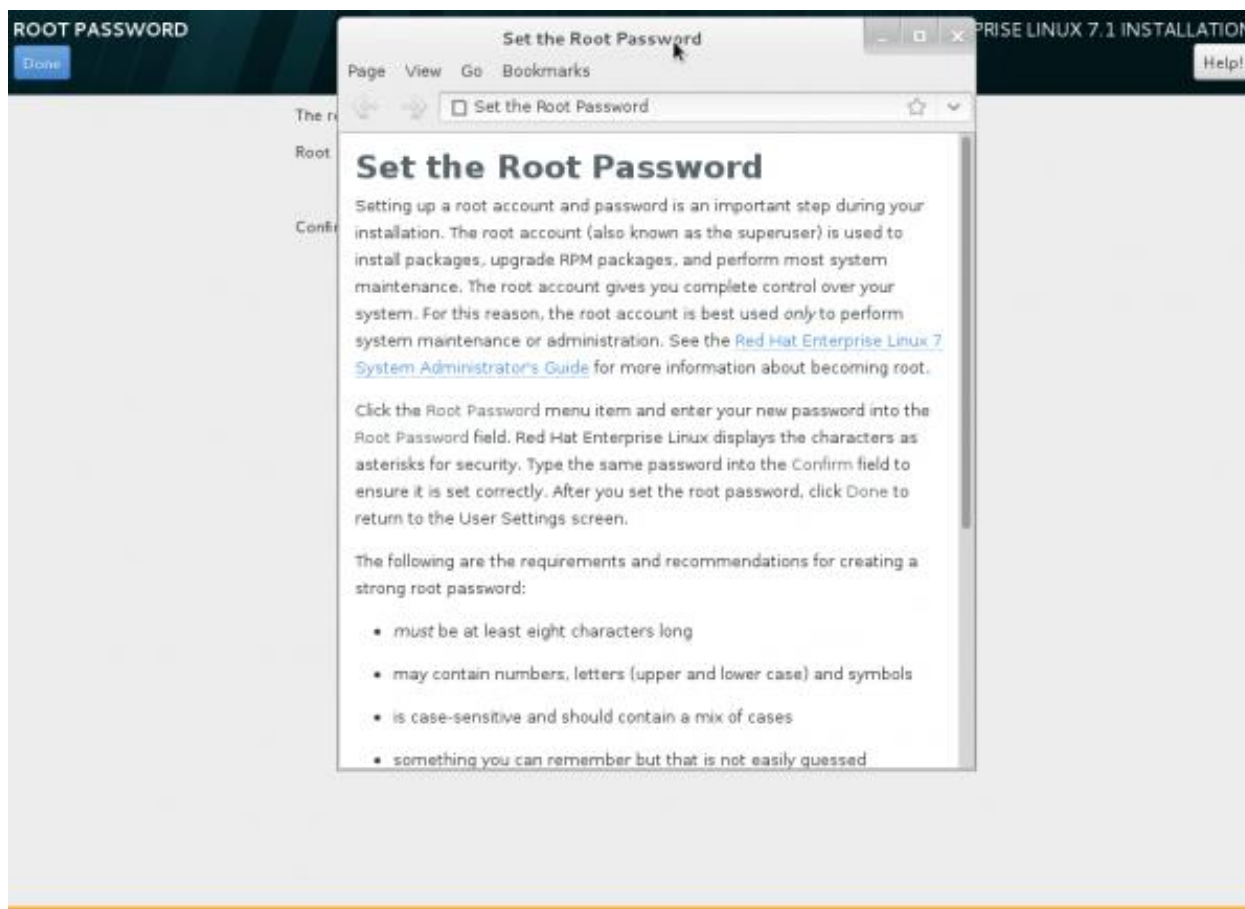
Step-22:- Back to Installation Summary windows. Everything looks Okay. Time to begin installation.



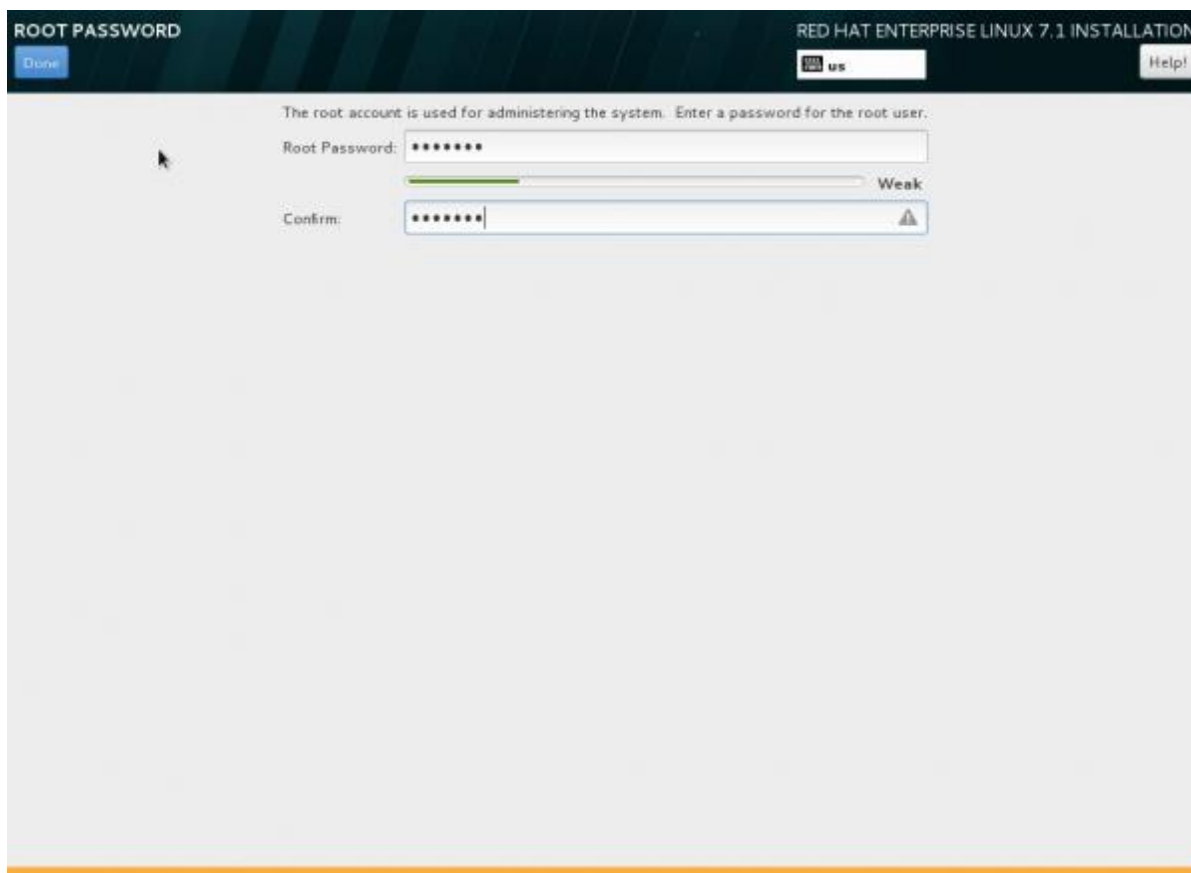
Step-23:- Packages are being installed. The windows points at ROOT PASSWORD is not set and no user is created as of now.



Step-24:- You may always get help (yelp browser) at any point of installation which is very well documented.



Step-25:- Create Root Password.



ROOT PASSWORD RED HAT ENTERPRISE LINUX 7.1 INSTALLATION

[Done](#) US [Help!](#)

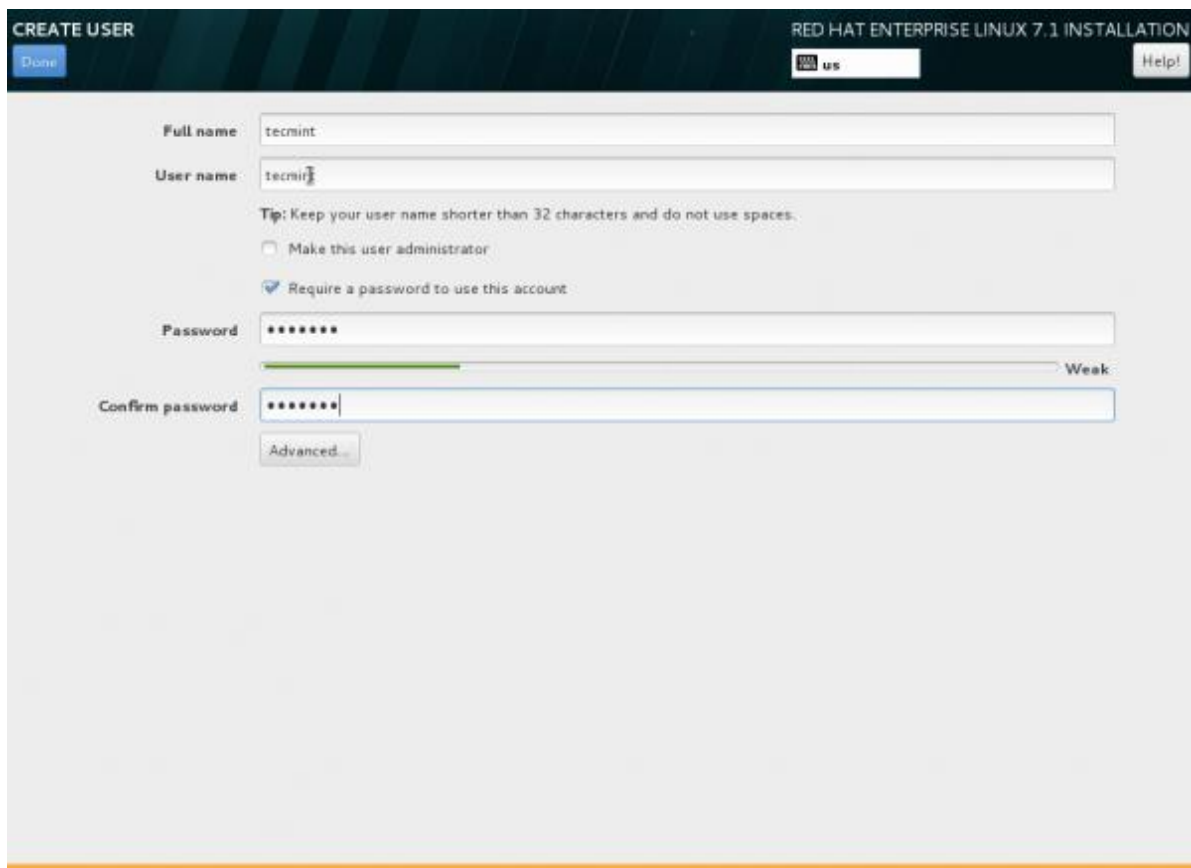
The root account is used for administering the system. Enter a password for the root user.

Root Password:

Confirm:

Weak

Step-26:- Create User account and password.



CREATE USER RED HAT ENTERPRISE LINUX 7.1 INSTALLATION

[Done](#) US [Help!](#)

Full name:

User name:

Tip: Keep your user name shorter than 32 characters and do not use spaces.

☐ Make this user administrator

☒ Require a password to use this account

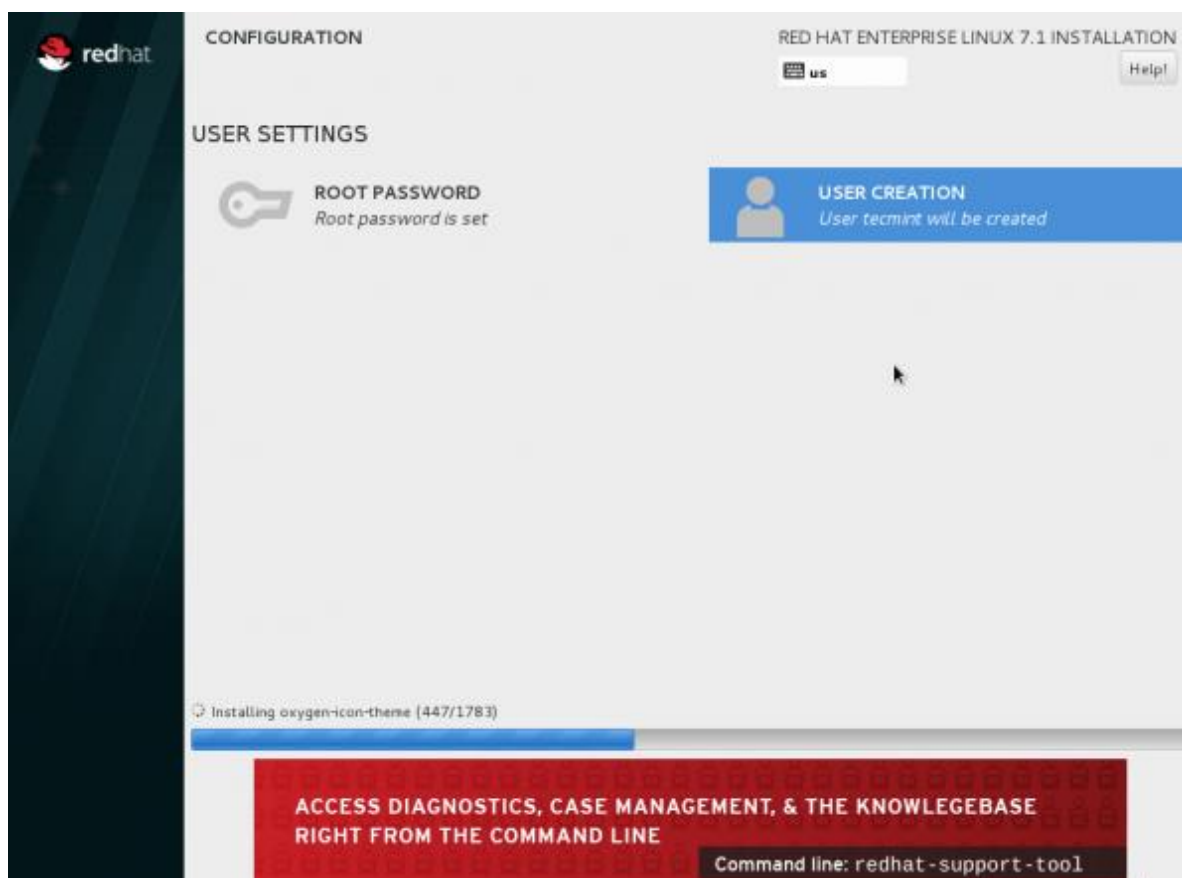
Password:

Confirm password:

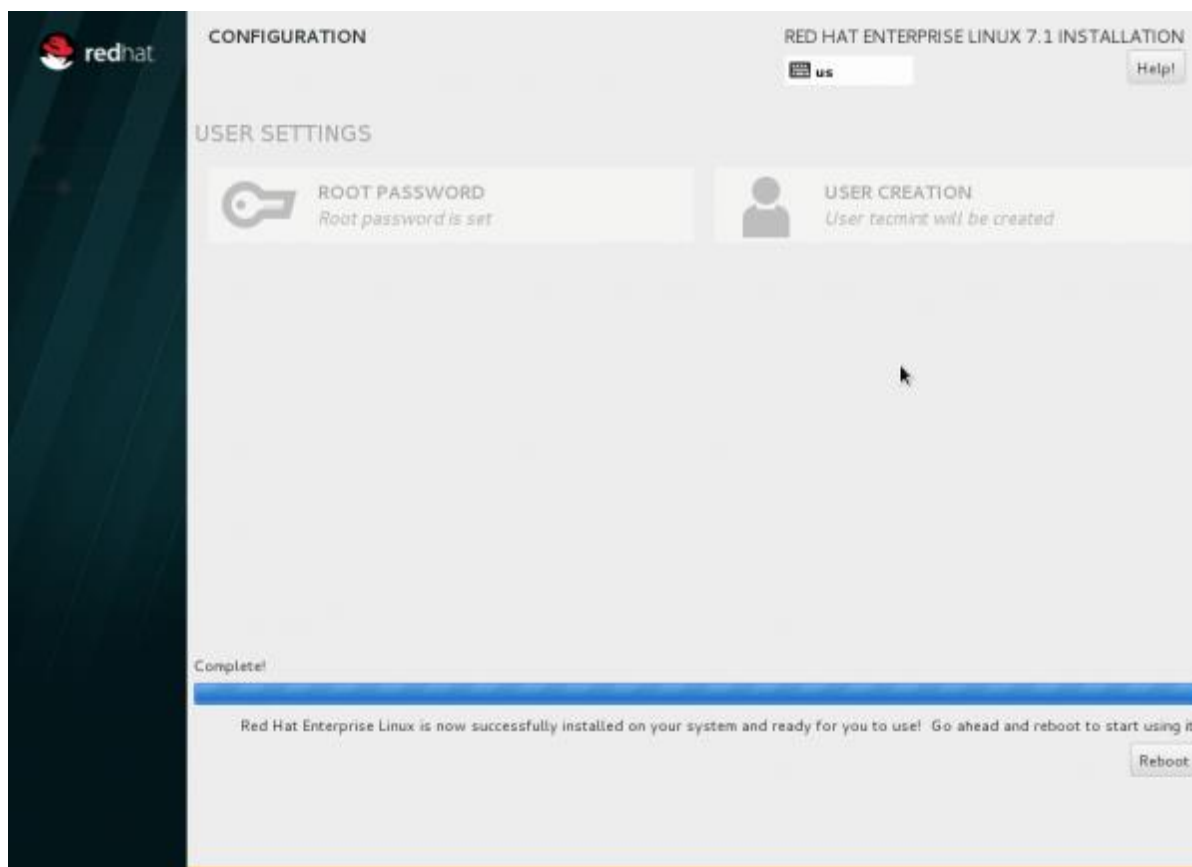
Weak

[Advanced...](#)

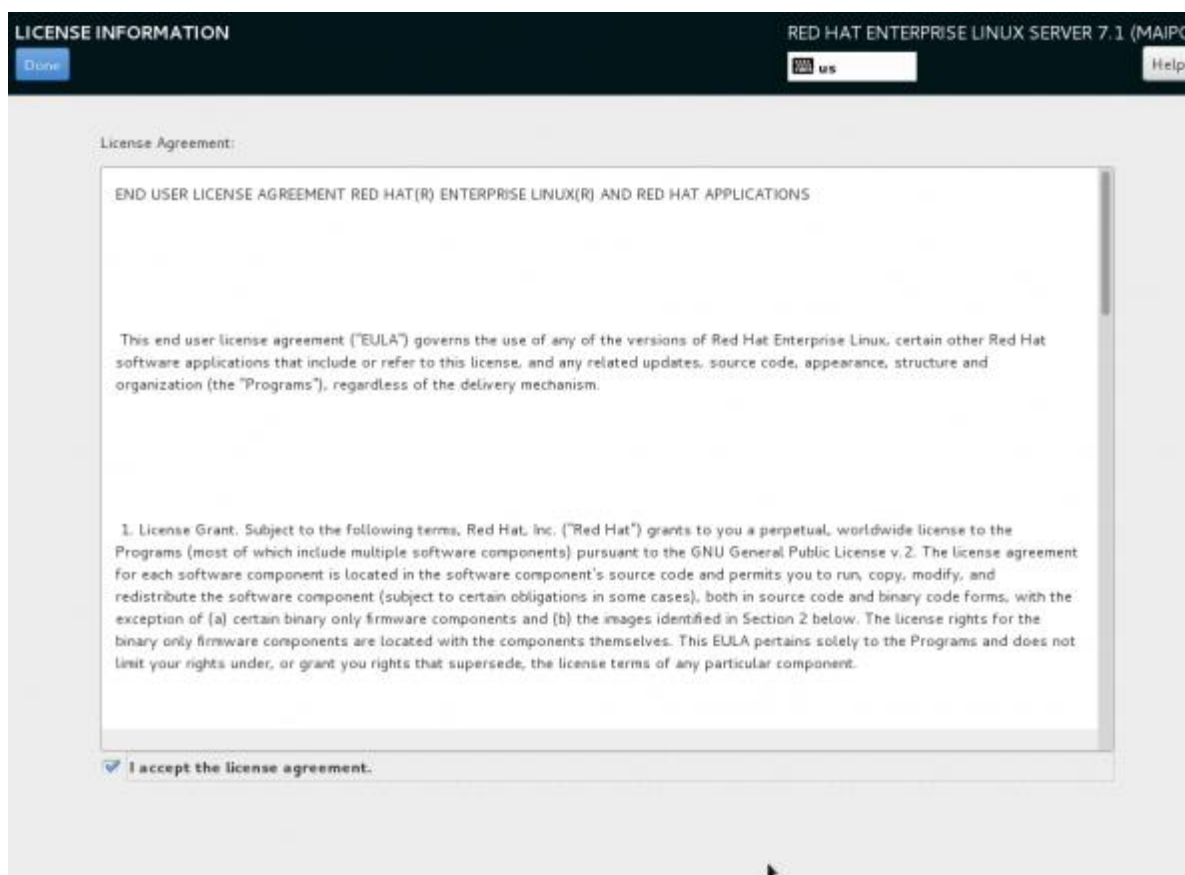
Step-27:- Back to configuration window. Now no issue is visible.



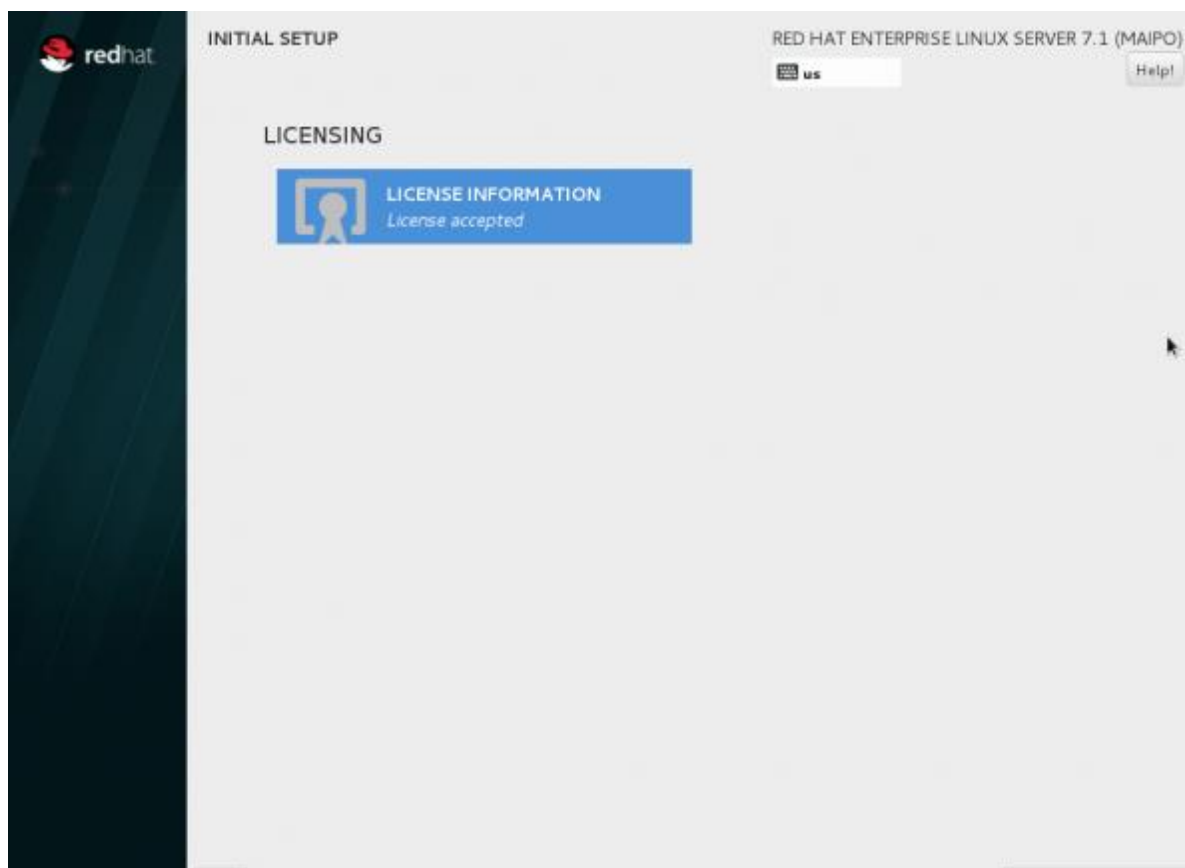
Step-28:- Installation successfully completed! Reboot.



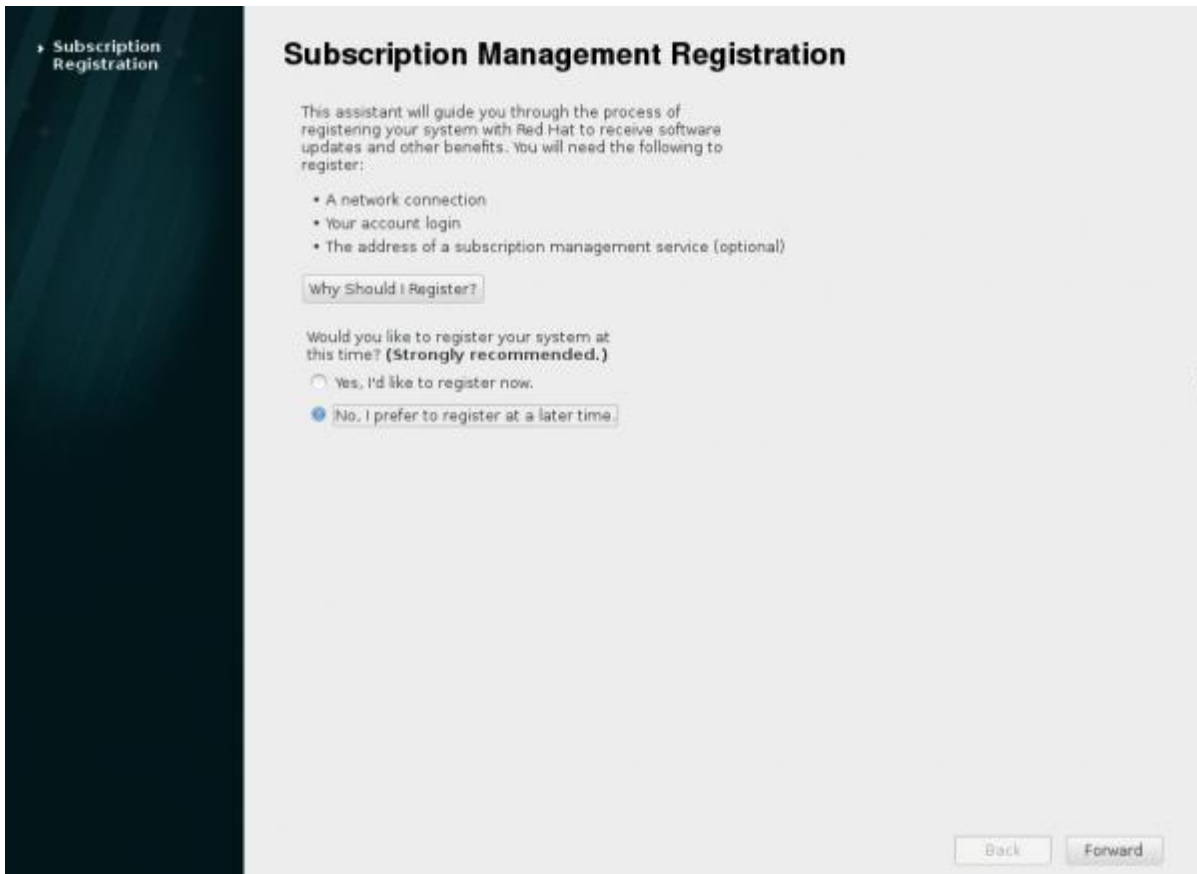
Step-31:- Click “I Accept the License Agreement” and then done.



Step-32:- Back to License Information window and now it says License accepted. We can move forward from here.



Step-33:- If you have subscription, you can register here or click no, I prefer to register at a later time.



Subscription Management Registration

This assistant will guide you through the process of registering your system with Red Hat to receive software updates and other benefits. You will need the following to register:

- A network connection
- Your account login
- The address of a subscription management service (optional)

Why Should I Register?

Would you like to register your system at this time? **(Strongly recommended.)**

☐ Yes, I'd like to register now.

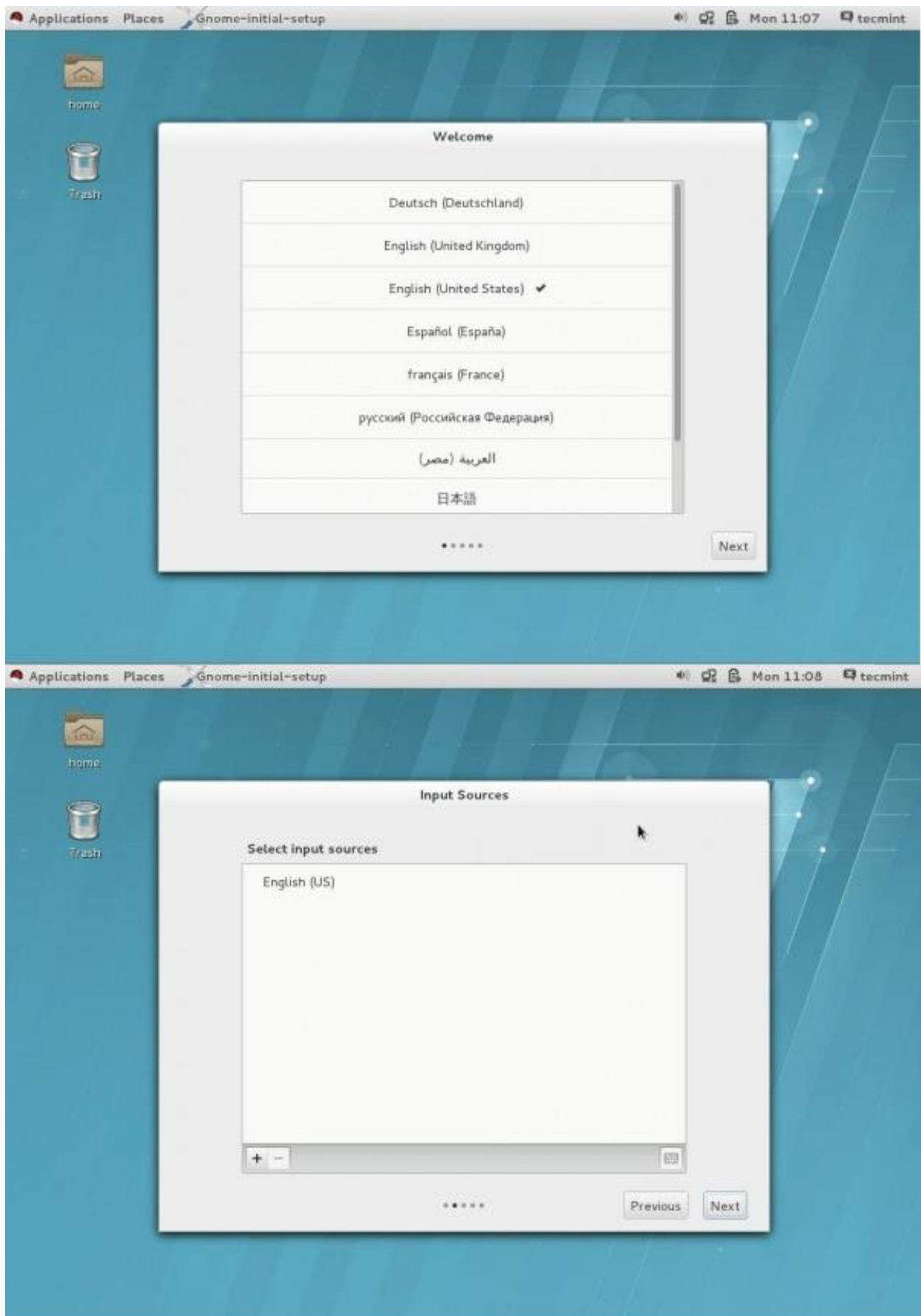
☒ No, I prefer to register at a later time.

Back Forward

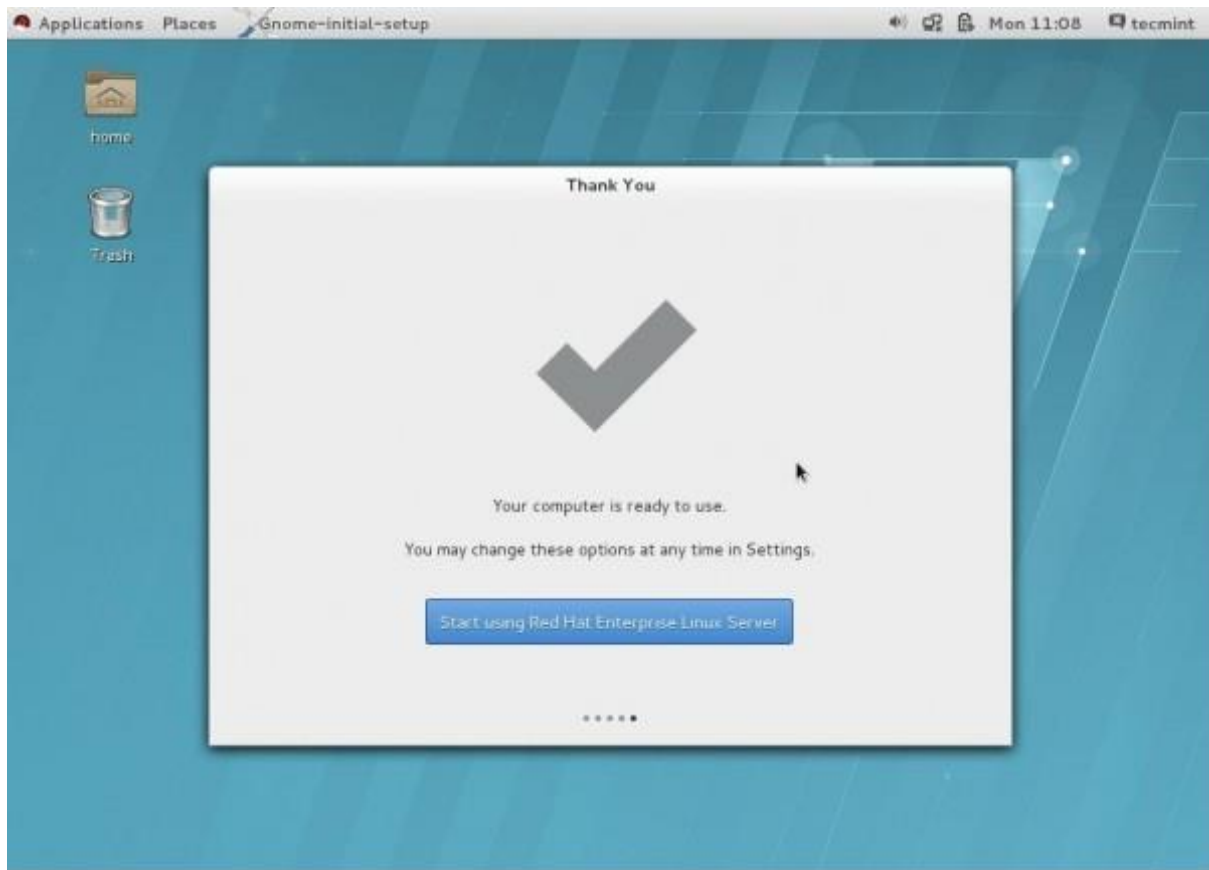
Step-34:- The login window of Red Hat Enterprise Linux 7.1.



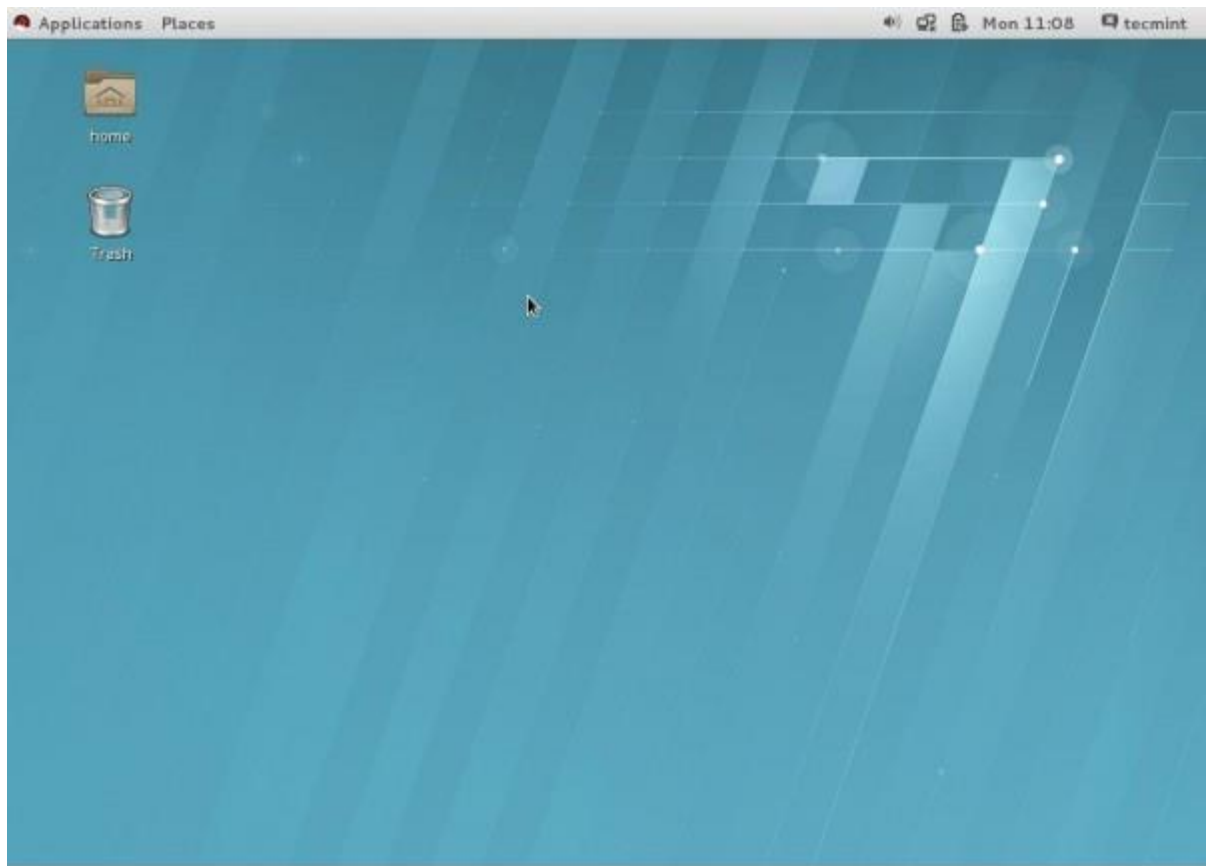
Step-35:- After successful log-in, you are greeted by a very small setup screen to set up language of your choice.



And finally “Thank You” Message. Click - Start using Red Hat Enterprise Linux Server.



Step-36:- The Desktop - Clean and Effective. Check Red Hat Release and OS release.



7. Document Acceptance;

The parties, in signing this acceptance, have agreed the above mentioned deliverables & scope of work. This signoff is required prior to any Services being carried out onsite.

Insight and Customer have caused this SOW to be signed and delivered by their duly authorized representatives.

Grant Investrade Ltd.		Insight Business Machines Pvt Ltd	
Name	Seal & Signature	Name	Seal & Signature
Vinyak S		Darshan C	
Vijay K		Kamlesh S	

8. Annexure;

NA