

SUSE OpenStack Cloud 4 Admin Appliance Walk Through

Prerequisites

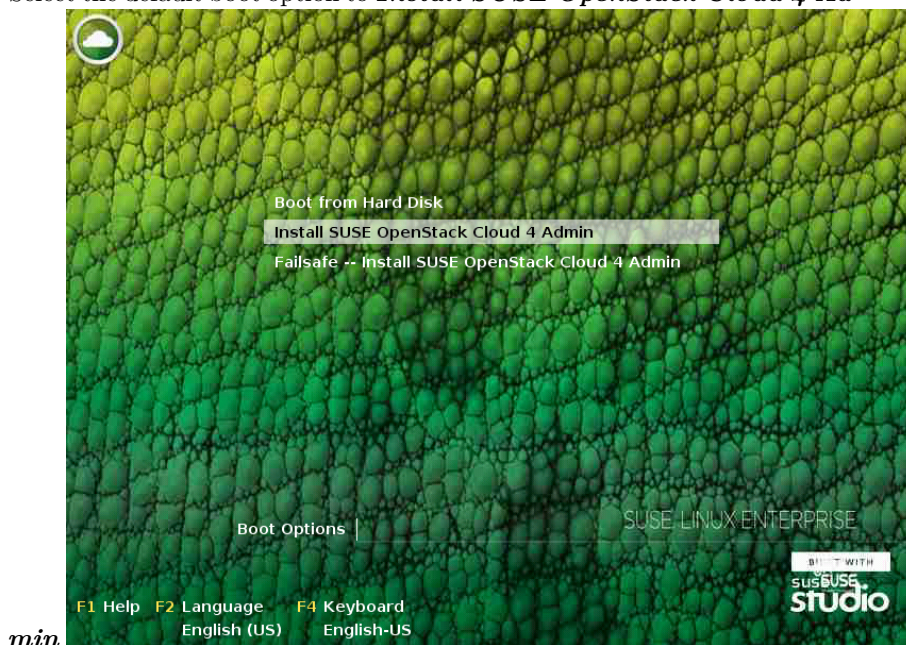
Before you proceed with deploying the SUSE OpenStack Cloud Admin appliance you should:

- Review the following documentation:
- [SUSE Cloud](#) : This product documentation explains the overall highlights and contains links to technical information, other reference material and evaluation downloads.
- [SUSE Cloud 4 Deployment Guide](#) : As this is the basis behind the SUSE OpenStack Cloud 4 Admin appliance, it provides a great reference to the tasks being performed for you, plus those that will be required once the appliance is setup. It also contains further instructions on how to proceed on setting up your private cloud and operating it, along with [SUSE Cloud 4 Admin User Guide](#) and [SUSE Cloud 4 End User Guide](#) documents. Here you will also find the [Release Notes](#) which details changes from previous releases and any known issues.
 - *NOTE : This software appliance implements the SUSE Cloud 4 Deployment Guide, specifically the “Installing and Configuring the Administration Server” section, through the “Basic Network Configuration” step near the end.*
- Download the [SUSE OpenStack Cloud 4 Admin](#) appliance. It is pre-populated with all the right media, packages and software to speed up deployment, and is available in one of the following formats:
- as virtual machine images compatible with either KVM, VMware, or other hypervisors
- as preload ISO and USB images that are ideal for doing installations on physical machines
- Ensure you have sufficient system and network resources to deploy and use a private cloud instance. While the SUSE OpenStack Cloud 4 Admin appliance is deployed on a single system, or even virtual machine for evaluations purposes, at least two more systems, or virtual machines, are typically needed for the smallest, functional instance of a private cloud. Please refer to the above SUSE Cloud Deployment Guide for details on the resources needed for each of these systems. Also noted in the deployment guide are the specific details around the various network ranges, services and boundary conditions needed for a functional instance.

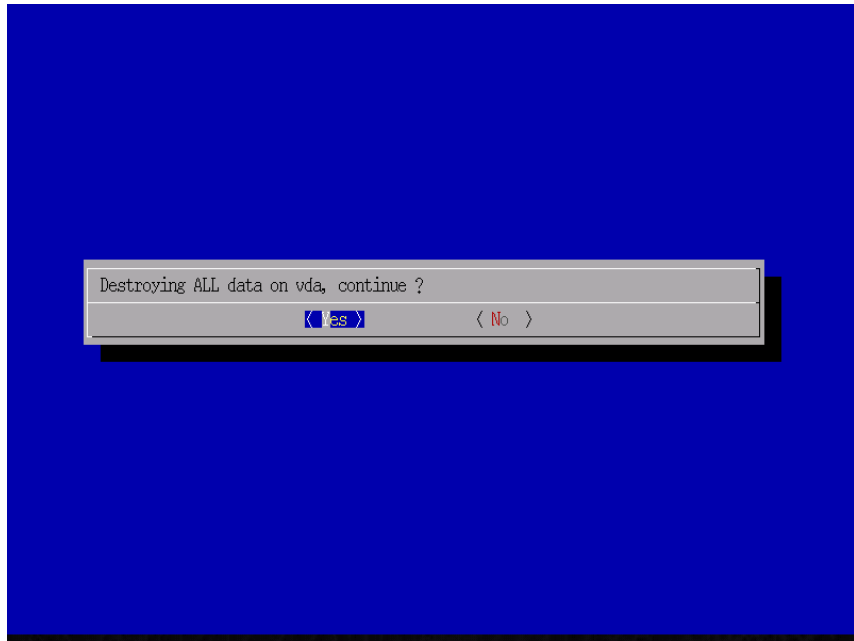
Phase 1 - Prepare Initial Installation

With the prerequisites in hand, you can follow the steps below as you go through the installation of the SUSE OpenStack Cloud 4 Admin appliance. For the target SUSE Cloud Administration Server system, present the desired flavor of the appliance as a boot image, then:

- Select the default boot option to *Install SUSE OpenStack Cloud 4 Ad-*

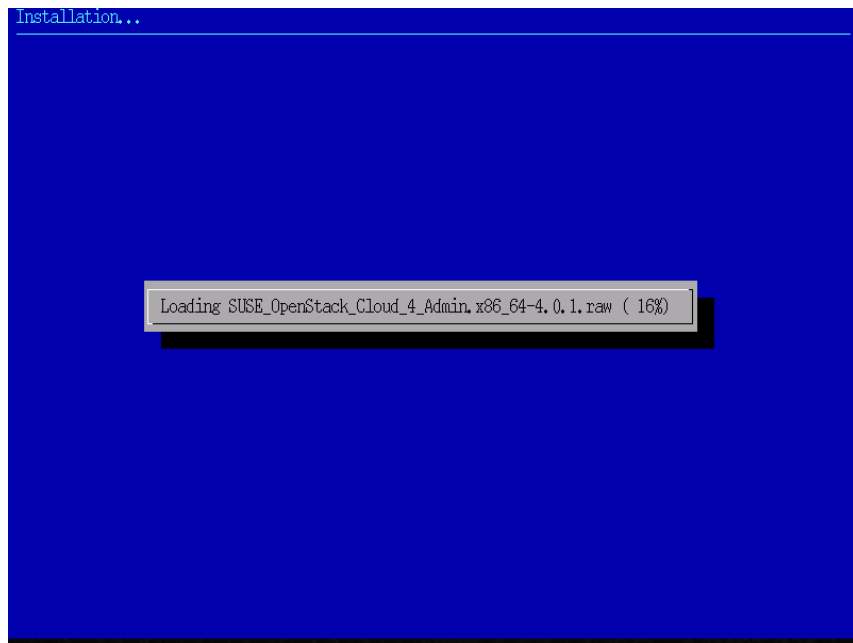


- *CAUTION : Proceeding beyond this point will destroy **ALL** data on the primary, selected disk for the target system. In some cases you might have more than one disk listed. Be sure to select your desired root disk and select **Yes***

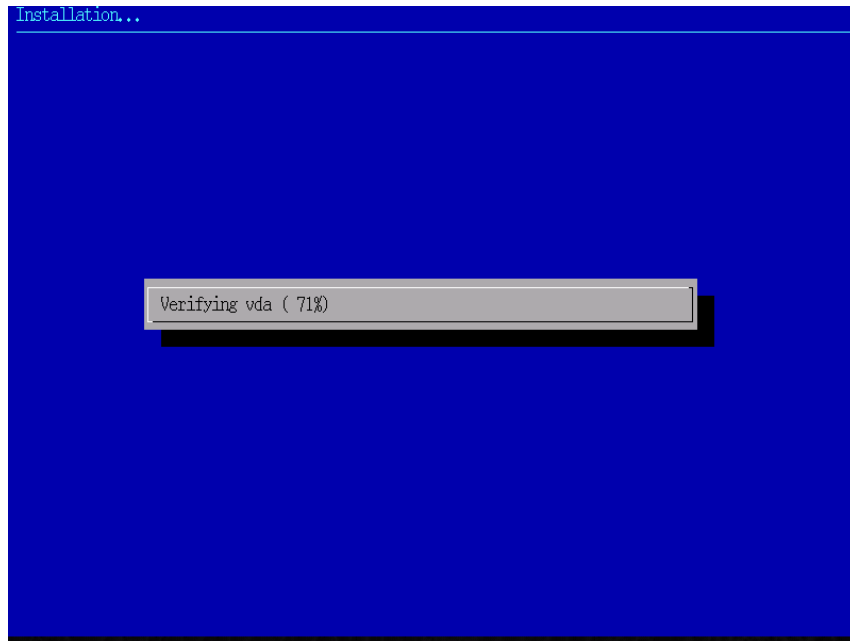


to continue.

- Then wait as the raw image is



- loaded to the disk you selected,



- verified,
- then expanded to fill the disk, and rebooted from the installed image

```

[ 316.407429] System installation has finished
[ 318.713037] Repartition the disk according to real geometry [ parted ]
[ 318.839472] Repartition the disk according to real geometry [ parted ]
[ 319.985974] Activating swap space on /dev/uda2
[ 319.994785] Filesystem of OEM system is: ext3 -> /dev/uda1
[ 320.002268] Resize EXT3 filesystem to full partition space...
/dev/uda1: clean, 41852/837184 files, 2464310/3344896 blocks
Resizing the filesystem on /dev/uda1 to 6160671 (4k) blocks.
Begin pass 1 (max = 85)
Extending the inode table XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
The filesystem on /dev/uda1 is now 6160384 blocks long.

/dev/uda1: UUID="ae332ec9-96cf-4e45-bc12-ec77b12630bd" SEC_TYPE="ext2" TYPE="ext3"
[ 322.486210] Creating boot loader configuration
[ 322.623048] Activating Image: /squashed/SUSE_OpenStack_Cloud_4_Admin.x86_64-4.0.1.raw
[ 322.627577] Preparing preinit phase...

[ 322.632793] Booting System:
[ 0.009649] Calling pre-init stage in system image
udevd[2170]: specified group 'tape' unknown


[ 0.039755] Creating mkinitrd based initrd

Kernel image: /boot/vmlinuz-3.0.101-0.35-default
Initrd image: /boot/initrd-3.0.101-0.35-default
RMS drivers: intel-agg cirrus
Kernel Modules: hmon thermal_sys thermal processor fan scsi_mod scsi_dh scsi_dh_rdac scsi_dh_em
c scsi_dh_hp_sw scsi_dh_alua mbcache jbd ext3 intel-gtt intel-agg syscopyarea sysfillrect sysimg
blt i2c-core drm drm_kms_helper ttm cirrus virtio_ring virtio virtio_blk usb-common usbcore ohci
-hcd uhci-hcd ehci-hcd xhci-hcd hid usbhid crc-t10dif sd_mod virtio_pci
Features: acpi kms block usb
Bootplash: studio (800x600)

```

– NOTE: This process may take a few minutes, as noted on the screen text, since the process executes some first boot steps for the required configuration of the SUSE Cloud Administration server.

```


fsck from util-linux 2.19.1
Mounting local file systems...
nothing was mounted
Check if the profiles matches the system
Creating /var/log/boot.msg
Enabling monitoring on LVM volume groups...
No volume groups found

Activating remaining swap-devices in /etc/fstab...
Setting current systemctl status from /etc/sysctl.conf
Enabling syn flood protection
Disabling IP forwarding

Setting up hostname 'admin'
Setting up loopback interface lo
lo IP address: 127.0.0.1/8
lo IP address: 127.0.0.2/8

System Boot Control: The system has been
Failed features:
Skipped features:
System Boot Control: Running /etc/init.d/boot.local

=====
/0 --"-
v / --"- | SUSE OpenStack Cloud 4 Admin
// // 0

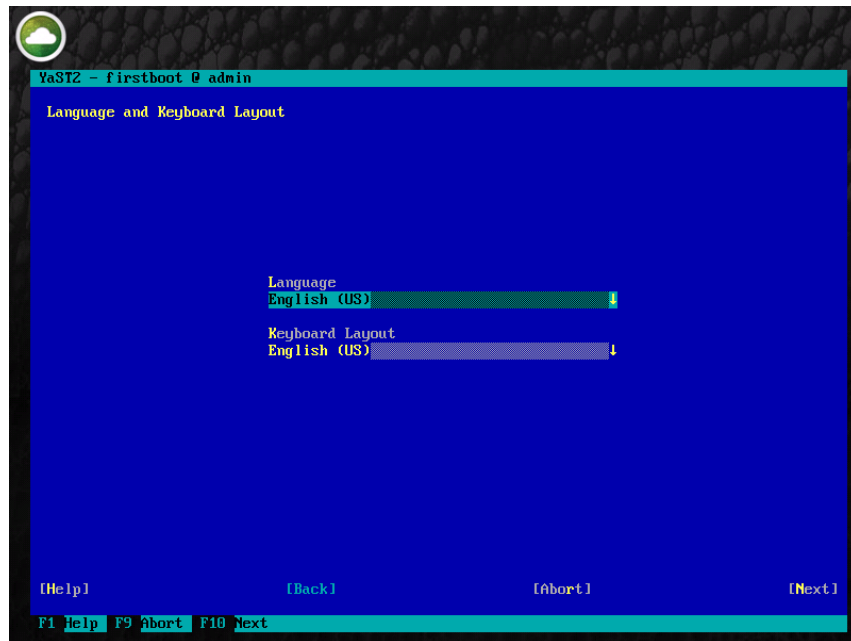
Running prepare step
This will take a few minutes...
=====
SUSE LINUX ENTERPRISE
SUSE with
SUSE
studio

```

Phase 2 - Installation Localization and Configuration

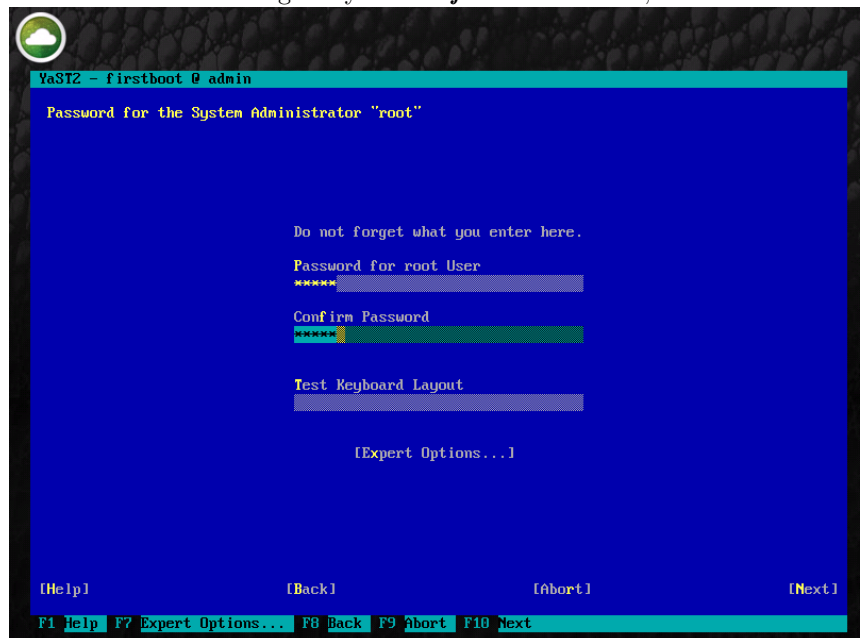
Driven by a simplified series of YaST (Yet another Setup Tool) first boot dialogs, you will be prompted to interactively localize your installation and perform preliminary configurations steps. Many of these tasks are similar to a SUSE Linux Enterprise Server installation, so refer to the [SUSE Linux Enterprise Server Quick Start Guide](#) for more details.

- *NOTE : During the remainder of this document, you may interact with the following screens and menus using the **Alt** key and the highlighted character to perform that action, or simply use the **Tab** to navigate to the various fields.*
- **Language and Keyboard Layout** - Select the desired values to be used during the remainder of the installation and for the installed system, then se-



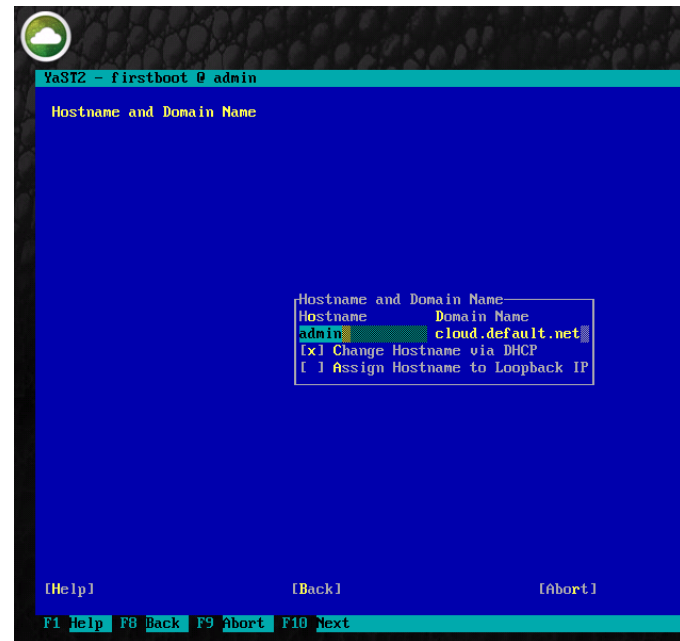
lect *Next*.

- **Password for the System Administrator** - Enter the desired values for *Password for root User* and a matching entry in *Confirm Password*,



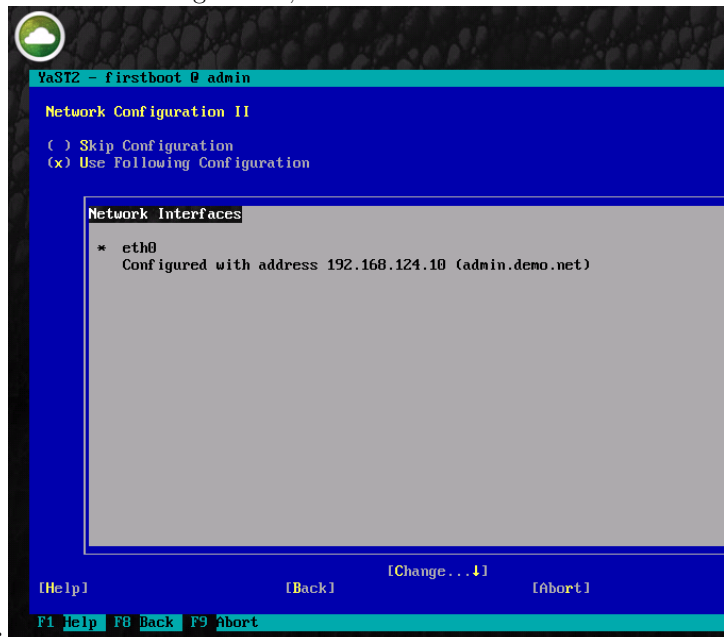
followed by *Next*.

- **Hostname and Domain Name** - Enter the desired values for *Host-*



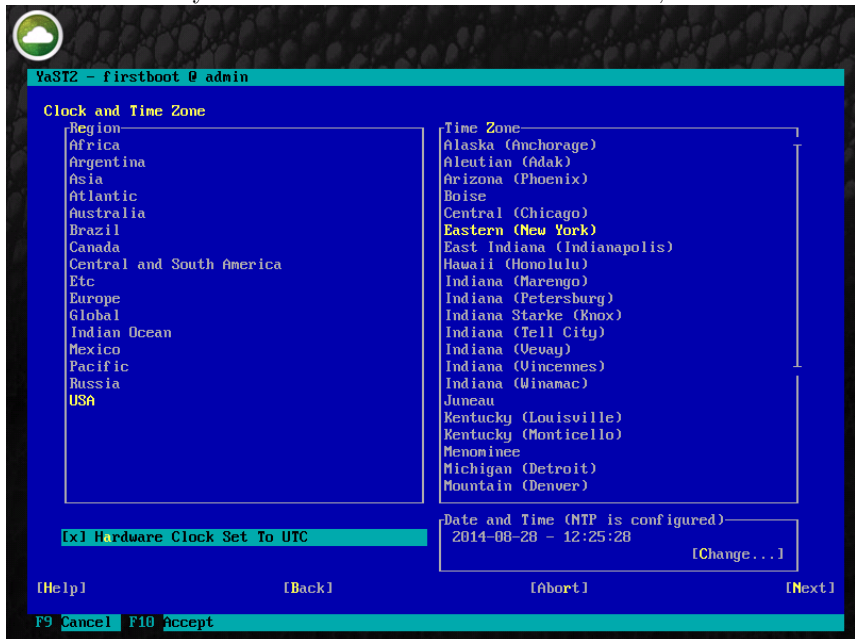
name and *Domain Name*, followed by *Next*.

- *NOTE: The SUSE Cloud Administration server is required to have a fully qualified hostname plus domain name, so ensure both values are correctly entered.*
- **Network Configuration II** - To modify the network configuration, select



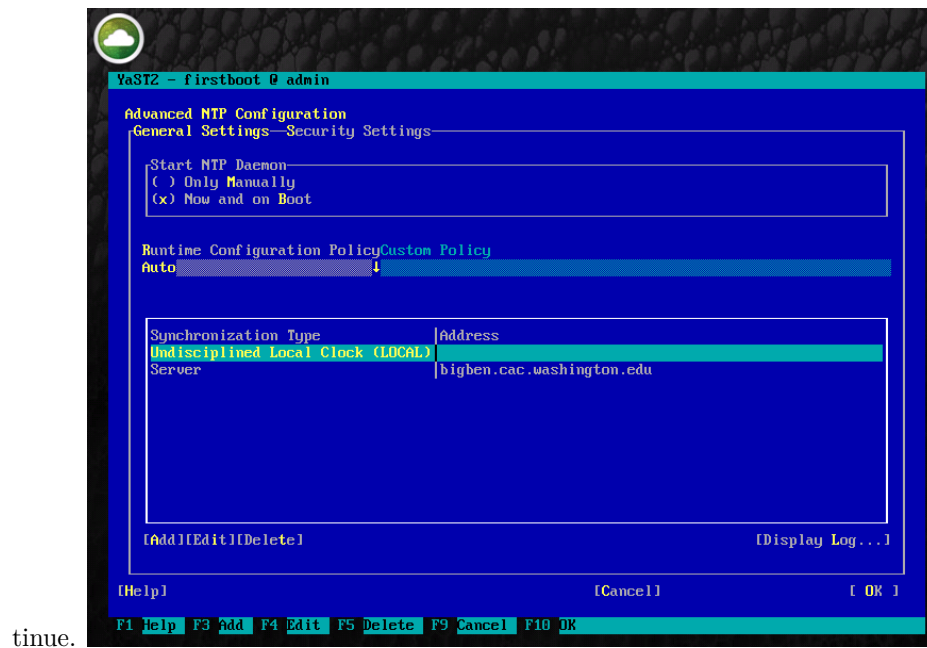
Change followed by *Network Interfaces*

- Then select **Edit** to modify your network settings for the primary network interface (e.g. eth0). You might have more than one network interface for your configuration, but it's only necessary to configure the primary one at this time.
- Choose either **Dynamic Address** or **Statically assigned IP Address** (recommended) along with entering the respective **IP Address**, **Subnet Mask** and **Hostname**, then select **Next**.
- **NOTE** : The SUSE OpenStack Cloud 4 Admin appliance defaults to using a hostname of `admin.cloud.default.net` and static IP address of `192.168.124.10` (as shown), where the IP address corresponds to the default SUSE Cloud networking configuration from the deployment guide.
- **Clock and Time Zone** - For these settings, select the proper **Region** and **Time Zone**, plus select whether your **Hardware Clock is set to UTC**,



then select **Next**

- **Advance NTP Configuration** - Verify the various settings, changing as necessary to match your local environment preferences and **OK** to con-



tinue.

Ready to Use

At this point, the SUSE OpenStack Cloud 4 Admin appliance has been prepared according to the relevant sections of the SUSE Cloud Deployment Guide, so select

- *NOTE : This might be a good time to do a snapshot if you are running this in a virtualized environment. In this way, you have a point in time to restart with a mostly configured SUSE OpenStack Cloud 4 Admin appliance, before you further define the private cloud networks and finish the deployment.*

Then complete the final operations to make your SUSE Cloud Administration server ready to use, basically:

- `yast2 crowbar`
- `screen install-suse-cloud`

After these two steps have been successfully completed, the SUSE Cloud Administration Server should be fully functional. More details may be found in the SUSE Cloud deployment guide to help guide you through these steps. After that you will be ready to deploy the various OpenStack services and resource nodes using the administrative web interface.

Congratulations and have fun!