



Stacki Tutorial #8: Install

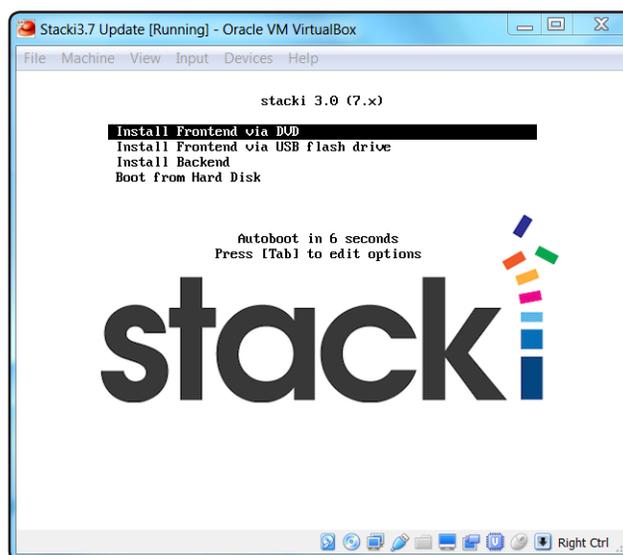
Introduction

We've had some feedback on our tutorials that members of the Stacki community would appreciate some more basic tutorials. To meet this desire, we are launching a series of entry-level tutorials that will showcase basic functionality from installation to fully functional system. This tutorial is the first in that series.

Initial Boot-up.

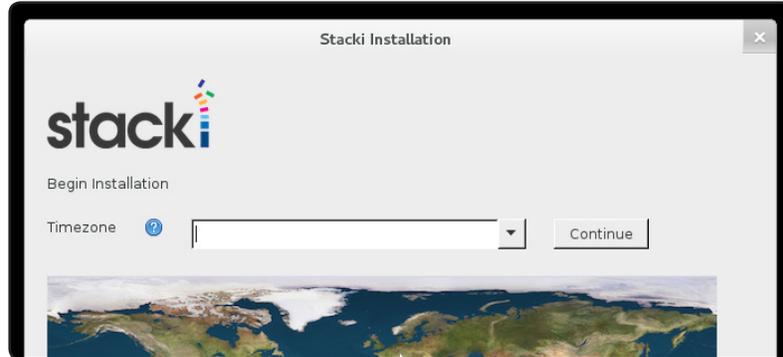
First, place the DVD or USB into the boot drive of a physical server, or give a VM access to the ISO or DVD. Make certain BIOS is set to boot from whatever location you have chosen, and boot the machine. Our examples here are rather obviously a VirtualBox VM, but the steps are exactly the same in VMWare or on physical hardware – only whether/where you put the ISO/DVD being different.

You will be presented with a screen that looks like this (it might say "stacki 3.0 (6.x)" at the top if you are using Stacki for CentOS/RHEL 6). Select your install method – via DVD or via USB – and hit enter. Or let the timer run down, and it will boot into the selected item.



Set the Time Zone

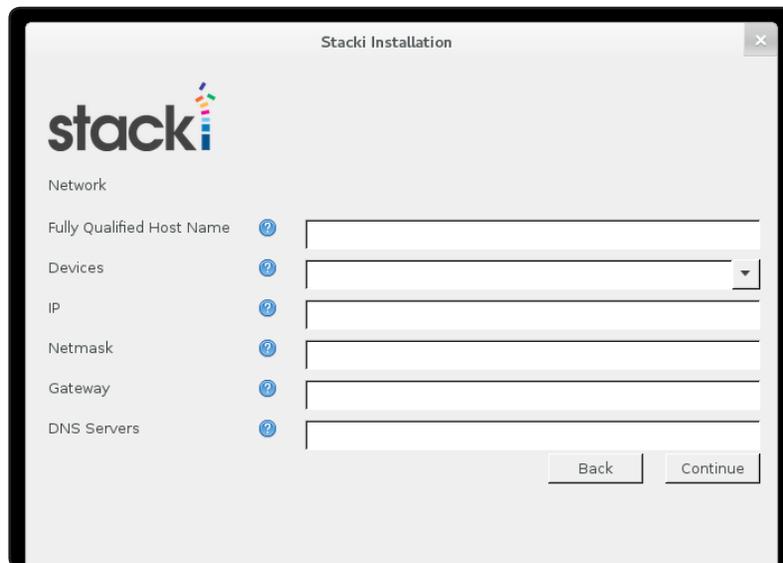
By default, Stacki uses NTP to keep the time on the Stacki Server and installation targets (front-end and back-end respectively) in-sync. To correctly set the time, we need the timezone this stacki server is installed in. Select the relevant timezone and a red location set of lines will be drawn, intersecting at the location chosen. Then click "Continue".



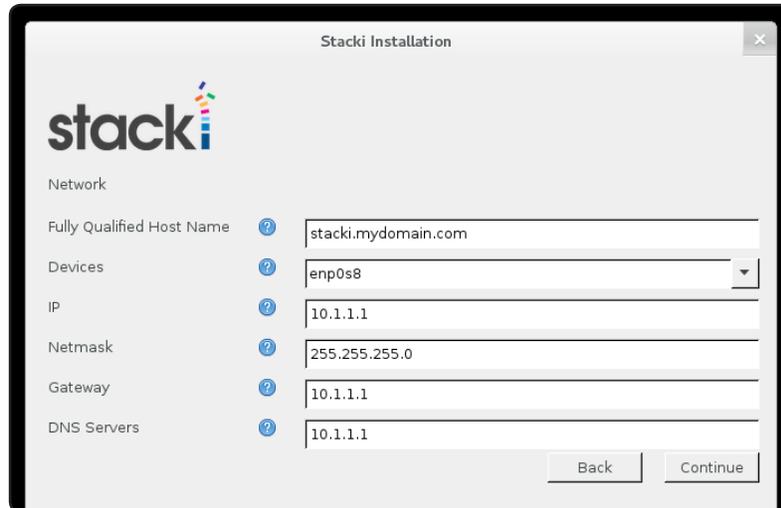
Fill in the detailed information about the server and the network

Stacki uses the network defined here to communicate with the servers it manages. Generally speaking, users will want more than one network defined, but for installation purposes, only the network that installations are to occur over needs to be defined. Additional networks can be added after installation completes, and information about doing so can be found in our Basics of Networking tutorial. In common stacki parlance, that is called the "private" network.

Since the Stacki server is the center of the installation network, unless you are an advanced user we recommend using the address entered under IP for both the gateway and DNS values. That will ensure that your servers and the Stacki server can communicate after installation.



And here we have the same dialog, completely filled in. Note that we used the same IP for IP, Gateway, and DNS – just as we recommended above. If you are brand new to Stacki and working in a sandbox, the values below will provide a working installation, with the only item that needs to be checked for your local configuration being the Device. Make sure you select the device that is on the same network as all of your servers that Stacki will manage.



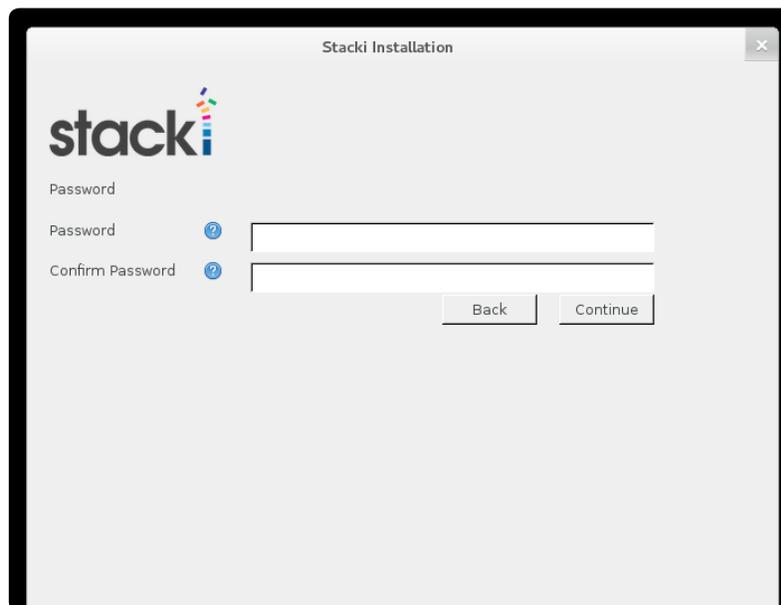
The screenshot shows the 'Stacki Installation' dialog box with the 'Network' section. The 'stacki' logo is at the top left. Below it, the 'Network' section contains several fields, each with a help icon (a question mark in a circle) to its left:

- Fully Qualified Host Name: stacki.mydomain.com
- Devices: enp0s8 (selected from a dropdown menu)
- IP: 10.1.1.1
- Netmask: 255.255.255.0
- Gateway: 10.1.1.1
- DNS Servers: 10.1.1.1

At the bottom right of the dialog, there are two buttons: 'Back' and 'Continue'.

Provide a password for Root.

The password entered here will be used for the root account on the Stacki server, and by default will be the root password on every server that Stacki installs. After installation you can change it with the `stack set password` command.



The screenshot shows the 'Stacki Installation' dialog box with the 'Password' section. The 'stacki' logo is at the top left. Below it, the 'Password' section contains two fields, each with a help icon (a question mark in a circle) to its left:

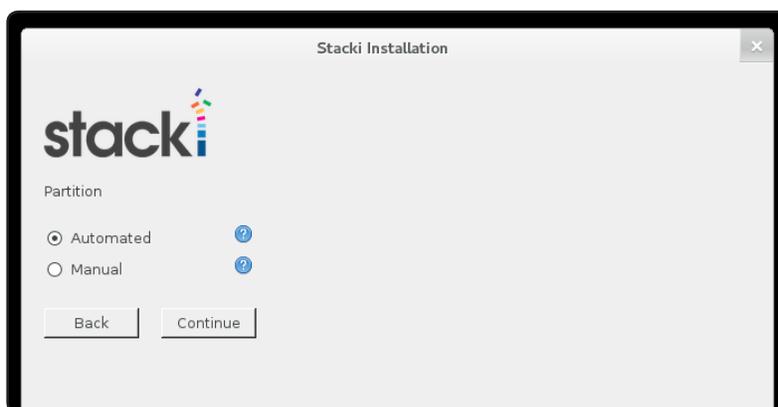
- Password: [Empty text box]
- Confirm Password: [Empty text box]

At the bottom right of the dialog, there are two buttons: 'Back' and 'Continue'.

Choose partitioning option

If you are familiar with linux partitioning practices and want to set up your own partitions, choose “manual” (though read the rest of this section first). Then during installation, you will be asked to define all of the partition information for the server.

If you just want a working Stacki server, select automated, and Stacki will set up a pretty standard partition scheme with the exception that as much space as possible will be placed into a partition accessed through /export. This large space is where Stacki will marshal files for installations, hence the reason it is given as much disk as is available. A 40 Gig drive can run a good Stacki installation with automated partitioning, but if you build a lot of carts and boxes, over time you may run out if you don't offer it more.

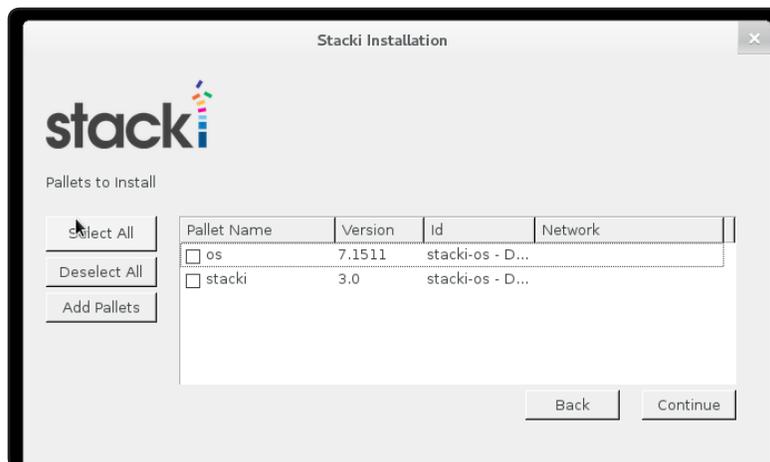


Install the Pallets

Stacki uses Pallets to provide base installation data that Boxes (and by extension Carts) then can use. Think of a pallet as the raw material a Box uses to define machines. Not a perfect comparison, but it works out pretty well.

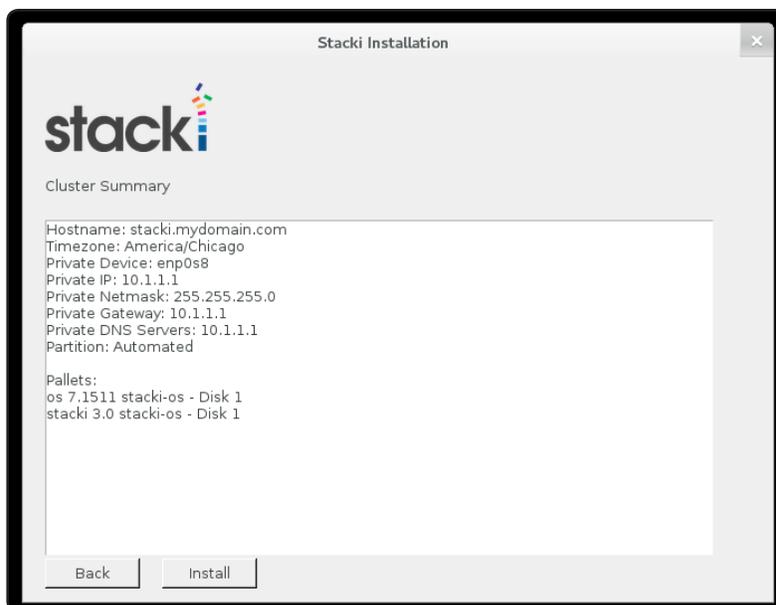
When installing, choose both OS and Stacki. OS provides the core CentOS image that stacki is installed on, and stacki provides the server software. Just clicking “select all” will take care of the selection for you.

If you have pre-built pallets, you can select “add pallets” to get them into the system so they are included in the box build done when Stacki is installed. If you get some Pallets at some point in the future, you can also add them via the command line on an installed system.



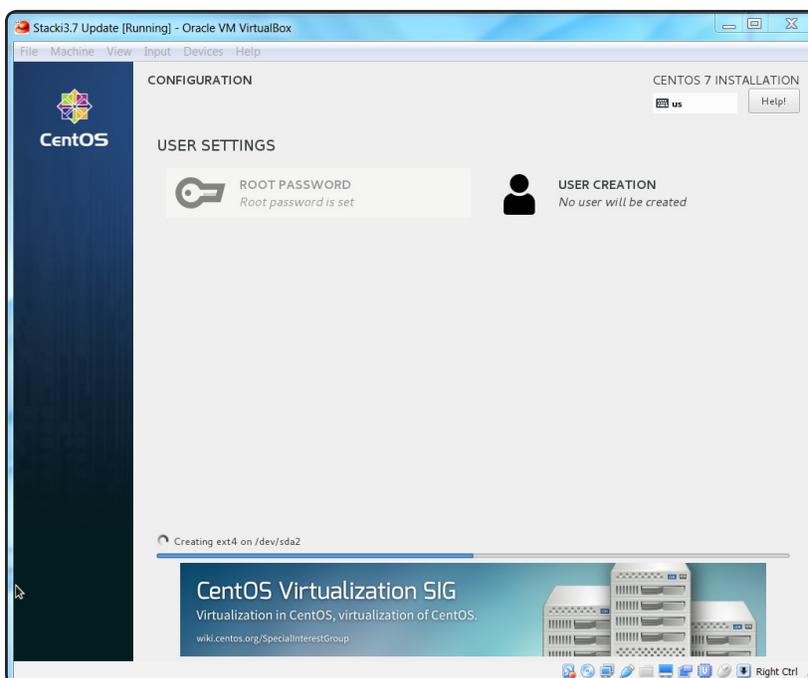
Finish up!

That's it, you have given Stacki all the information that it needs to perform the installation. Review the information in the "Cluster Summary", and make certain there were no typos or other errors, and click install.



Watch it install

Clicking install launches the standard CentOS installation with your customizations already applied. It also installs Stacki while it's at it, and leaves you with a functional Stacki Server ready to install machines on the target network.



Check the Install

While anything that goes wrong during installation should give you a pretty clear indication of what happened, it's always best to check that things actually worked after a fresh install. So log in to your new Stacki server, and type the following commands:

stack list host

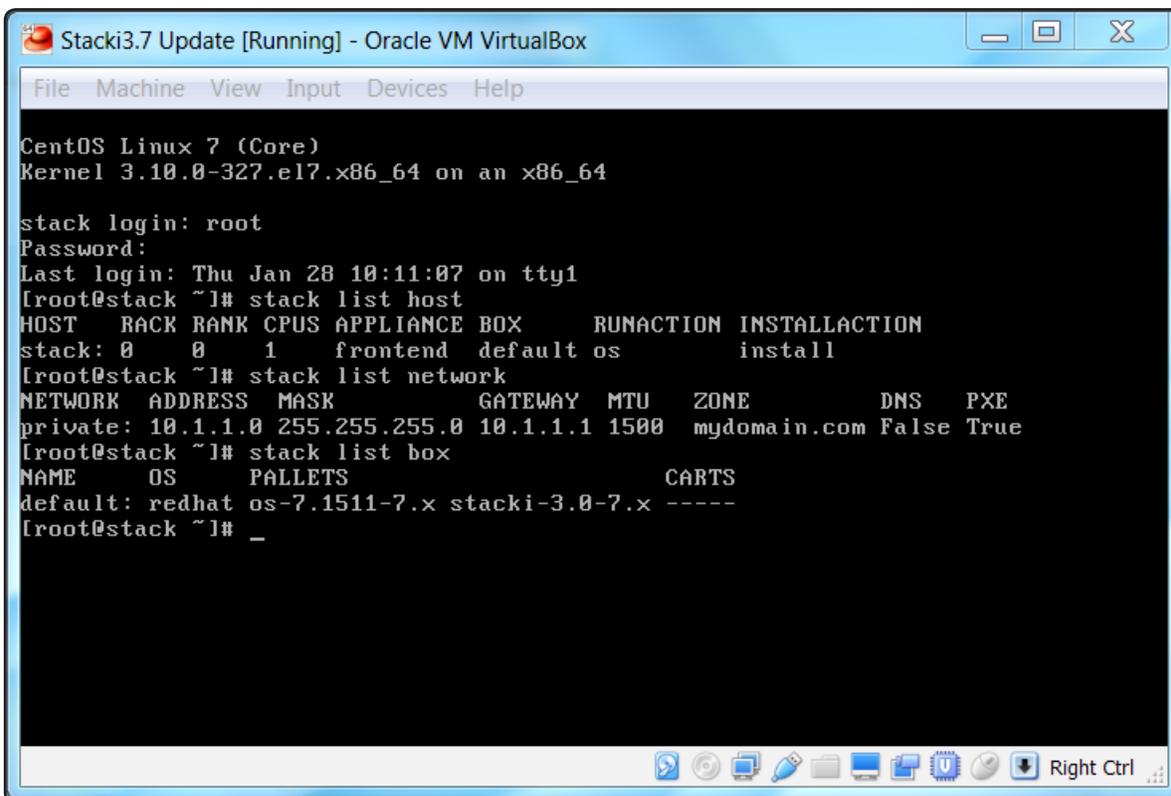
- This should show you information about the Stacki host. Since it is the only machine in the database, it's the one you get. Check the information and see that it is correct.

stack list network

- This should show you information about the network that you entered during installation.

stack list box

- This should show you information about your installation platform. In our case we have redhat (CentOS) 7 with stacki 3 for the pallets (the ones selected during install) and no carts yet defined in the default box



```
Stacki3.7 Update [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

CentOS Linux 7 (Core)
Kernel 3.10.0-327.el7.x86_64 on an x86_64

stack login: root
Password:
Last login: Thu Jan 28 10:11:07 on tty1
[root@stack ~]# stack list host
HOST    RACK  RANK  CPUS  APPLIANCE  BOX      RUNACTION  INSTALLACTION
stack:  0    0    1    frontend  default    os         install
[root@stack ~]# stack list network
NETWORK  ADDRESS  MASK      GATEWAY  MTU    ZONE      DNS    PXE
private: 10.1.1.0 255.255.255.0 10.1.1.1 1500  mydomain.com False True
[root@stack ~]# stack list box
NAME    OS      PALLETS          CARTS
default: redhat os-7.1511-7.x stacki-3.0-7.x -----
[root@stack ~]# _
```