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LANforge Operating System Installation Guide for Fedora 14

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The procedure described here is guide for the installation of the Fedora operating system to create a LANforge system.

Before beginning this procedure, verify that the Keyboard-Video-Mouse (KVM) are all connected and the appliance's management port is connected to your network. If you are using a KVM switch, ensure it is set to display LANforge once it is powered up. LANforge is very flexible, so if you have hardware constraints that do not appear to be supported by LANforge, please contact support@candelatech.com. It is likely we have a solution!

2. System Requirements

The Candela Technologies CT962 is a mid-range 1U rackmount appliance with the typical following hardware specifications:

- 2.8Ghz Pentium-4 processor
- 40GB Hard Drive
- 1GB RAM
- Slim CDROM drive
- Two ethernet ports
- Additional 10/100/1000 ethernet interface for management

If you choose to load LANforge software on your own appliance, system performance will vary depending on your system's specifications. Candela Technologies does not guarantee performance on your own system. We recommend you compare the system specifications of our pre-configured LANforge Systems.

3. Download Fedora

The latest Fedora operating system can be downloaded from http://www.fedoraproject.org/. Both 32-bit and 64-bit operating systems are available. If your system has more than 4GB of RAM, you may want to install the 64-bit operating system. You will need to download all Fedora install CDs or DVD media. If you wish to perform a network install you will have to create a boot CD.

4. Boot System from Fedora CD or DVD

Boot system from media to commence installation.
- Apply power to your LANforge appliance
- Open the CDROM or DVDROM drive and insert the Fedora boot CD or DVD
- Reboot

When rebooted, your system should detect the bootable Fedora CD or DVD and boot from the disc. If your system does not boot from the CD, you may need to modify the BIOS to boot from the CDROM drive. When the boot sequence is complete, the Fedora welcome screen will be displayed on the monitor. Be sure to select the [Local CD/DVD] installation method on the Fedora installer program.

5. Install Fedora Operating System

From the Fedora welcome screen, the button for 'Install or upgrade an existing system' should be selected.

The system will boot again from the boot media and start the Fedora installer program. After a few minutes a Fedora logo screen will be displayed on the monitor. To continue, Click [Next]

The following choices are for a typical LANforge installation:
- "What type of devices will your installation involve?"
  - Choose: Basic Storage Device
  - Click [Next]

- A brand new storage drive may generate a "Warning", "Error processing drive:".
  - If the device is the correct installation device and the only device in the system then: Click [Re-Initialize all]
  - Otherwise: Click [Re-Initialize]
- If an existing installation is detected then:
  - Choose: Fresh Installation

- Click [Next]

  - "Please name this computer"
    - Click [Next] or...
    - Enter a hostname and click [Next]

  - Select the timezone for the system (red X on map), and click [Next]
  - "Enter a password for the root user."
    - Enter "lanforge" as the standard default password for lanforge system
    - Click [Next]
    - For "Weak Password" pop up: Click [Use Anyway]

  - "Which type of installation would you like?"
    - Replace Existing Linux System(s)
    - Click [Next]

  - The installer may detect more than one potential installation target.
    - Be sure to select the correct "Install Target Devices" from the "Data Storage Devices" list.
    - Ensure that "Boot Loader" button is checked for the install target device.
    - Click [Next]

  - For the "Confirm" warning "...reformatted partitions will be lost": Click [Write Changes to Disk]
  - "The default installation of Fedora..." screen will appear
    - Check the "Customize now" button
    - Click [Next]

  - Select 'Applications' from the list on the left:
    - Select the 'Engineering and Scientific' checkbox
    - Deselect the 'Games and Entertainment' checkbox
  - Select 'Development' from the list on the left:
    - Select the 'Development Tools' checkbox
  - Select 'Servers' from the list on the left:
    - Select each checkbox, i.e. all servers
  - Select 'Base System' from the list on the left:
    - Select 'Base' then [Optional packages]. Select the 'bridge-utils' and click [Close]
    - Select the 'System Tools' checkbox then [Optional packages]. Check the 'wireshark-gnome' checkbox and click [Close]
    - Click [Next]

The system will now check dependencies in packages selected for installation and proceed to install which will take several minutes. When complete, the following message will be displayed on the monitor: **'Congratulations, your Fedora installation is complete. Please reboot to use the installed system...'**

NOTE: Before rebooting, remove Fedora boot media from the optical drive. If the boot media remains in the drive, the system will not boot from the hard drive.
  - Click [Reboot]

The system will now reboot automatically from the LANforge hard drive. When the boot sequence is complete, the Fedora welcome screen will be displayed on the monitor.

6. # Configure Computer Settings and Create User Login

This procedure configures the computer settings to operate LANforge and creates the lanforge user login and password.
  - Click [Forward]
  - License Information: Click [Forward]
  - Create User:
    - Enter Username, Full Name, Password, Confirm Password: lanforge
    - Click [Forward]
    - Warning (Password is weak... Do you want to use it anyway?): Click [Yes]

  - Date and Time:
    - Select the 'Synchronize data and time over network' checkbox.
    - Click [Forward]

  - Hardware Profile
    - Click [Forward]
    - Question: Are you sure...? Click [No, do not send.]

When the boot sequence is complete, login from the Fedora welcome screen:
  - Username and Password: lanforge

The Fedora default Desktop now be displayed.

7. # Update Fedora OS (if internet is accessible)

Update the Fedora OS with the yum command via a terminal.

- Open terminal program from Desktop: Applications->System Tools->Terminal
- Log in as super user and start OS update with yum:

```
$ su -
# yum -y update
```

Yum from the teminal may complain that another process is running. This other process is running on the Desktop. Yum in the terminal will eventually run. Once yum has completed reboot the system

- Reboot system:

```
$ su -
# reboot
```

When the system returns to operation it should be running the latest Fedora kernel with the latest updates.