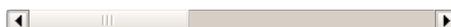fedora™ DOCUMENTATION

Fedora 19

Installation Quick Start Guide

Downloading and installing Fedora 19 on most desktop and laptop computers

fedora™

Fedora Documentation Project

Legal Notice

Abstract

This document shows you how to download and install Fedora. It does not cover every possible scenario, but describes steps that will work in most situations on most common hardware.

1. Introduction

This guide shows you how to download a Fedora 19 live CD image, burn this image to a disc, and use this disc to install Fedora 19 on a typical desktop or notebook computer. This guide is not a complete description of the installation process and all its options — for greater detail, refer to the *Fedora 19 Installation Guide*, available from http://docs.fedoraproject.org/.

2. Requirements

To create a Fedora live CD, you need:

- a broadband connection to the Internet.
- a computer with a CD or DVD burner.
- software that allows you to create a CD from an image file.
- a blank, writeable CD.

If you do not have a fast Internet connection, or if you have a problem creating boot media, downloading may not be an option. Fedora DVD and CD distribution media is available from a number of online sources around the world at a minimal cost. Use your favorite Web search engine to locate a vendor, or refer to http://fedoraproject.org/wiki/Distribution.

The computer on which you intend to install Fedora 19 from the live CD should have:

- a CD or DVD drive, and the capability to boot from this drive.
- a 1 GHz processor or faster
- at least 1 GB of memory (RAM)
- at least 10 GB of permanent storage (hard drive) space.

These specifications represent a bare minumum to use Fedora in graphical mode. Almost any laptop or desktop computer manufactured in recent years will meet these requirements. For more details of the hardware requirements for Fedora 19, refer to the *Fedora 19 Release Notes*, available from http://docs.fedoraproject.org/.

If your computer does not have a CD or DVD drive, or is not capable of booting from this drive, then you might be able to install Fedora from a USB storage device such as a USB flash drive. Refer to the *liveusb-creator* page at https://fedorahosted.org/liveusb-creator/ for instructions.

Do you already have Fedora 19 on CD, DVD, or live USB media?

If you already have Fedora 19 on CD, DVD, or live USB media, you can still use this guide, because many steps will be similar. Skip ahead to Section 5, "Boot your computer from the CD", then

- continue through the instructions in order if you have a Fedora 19 live CD or live USB device.
- skip ahead to Section 9, "Keyboard Configuration" if you have a Fedora 19 DVD.

3. Download the Fedora live CD image file

The image file for the Fedora 19 live CD is available from https://fedoraproject.org/en/get-fedora-options. You can choose any of the available desktops. Since all of them are live CDs, you can use this opportunity to try out different desktops without installing them. Download and save the version you chose to your computer.

4. Burn the image file to CD

The exact series of steps that produces a CD from an image file varies greatly from computer to computer, depending on the operating system and disc burning software installed. Use this procedure as a general guide. You might be able to omit certain steps on your computer, or might have to perform some of the steps in a different order from the order described here.

Make sure that your disc burning software is capable of burning discs from image files. Although this is true of most disc burning software, exceptions exist.

In particular, note that the CD burning feature built into Windows XP and Windows Vista cannot burn CDs from images and that earlier Windows operating systems did not have any CD burning capability installed by default. Therefore, if your computer has a Windows operating system prior to Windows 7 installed on it, you need a separate piece of software for this task. Examples of popular CD burning software for Windows that you might already have on your computer include **Nero Burning ROM** and **Roxio Creator**. If you use a Windows operating system on your computer and do not have disc burning software installed (or you are not sure that the software can burn discs from image files) **InfraRecorder** is a suitable alternative available from http://www.infrarecorder.org/, and is free and open-source.

The **Disk Utility** software installed by default with Mac OS X on Apple computers has the capability to burn CDs from images built into it already. Most widely-used CD burning software for Linux, such as **Brasero** and **K3b**, also includes this capability.

1. Insert a blank, writeable CD into your computer's CD or DVD burner. On some computers, a window opens and displays various options when you insert the disc. If you see a window like this, look for an option to launch your chosen disc burning program. If you do not see an option like this, close the window and launch the program manually.

2. Launch your disc burning program. On some computers, you can do this by right-clicking (or control-clicking) on the image file and selecting a menu option with a label like `Copy image to CD`, or `Copy CD or DVD image`. Other computers might provide you with a menu option to launch your chosen disc burning program, either directly or with an option like **Open With**. If none of these options are available on your computer, launch the program from an icon on your desktop, in a menu of applications such as the **Start** menu on Windows operating systems, or in the Mac **Applications** folder.

3. In your disc burning program, select the option to burn a CD from an image file. For example, in **Nero Burning ROM**, this option is called **Burn Image** and is located on the **File** menu.

   Note that you can skip this step when using certain CD burning software; for example, **Disk Utility** on Mac OS X does not require it.

4. Browse to the ISO CD image file that you downloaded previously and select it for burning.

5. Click the button that starts the burning process.

Check the CD

After the burning process completes, browse to the CD and check its contents. If you have burned the disc correctly, it should contain a number of files and folders, including **GPL**, **README**, **LiveOS**, **EFI**, and **isolinux**. If you see only a single file named for example **Fedora-Live-Desktop-x86_64-19-1.iso**, you have burned the image file itself to the CD, rather than burning a CD from the image file. In this case, you cannot use the CD and must try again.

5. Boot your computer from the CD

Switch on your computer, load the Fedora 19 live CD into the CD or DVD drive, and restart the computer with the disc still in the drive. Ideally, you should soon see the Fedora boot screen and a ten-second countdown:
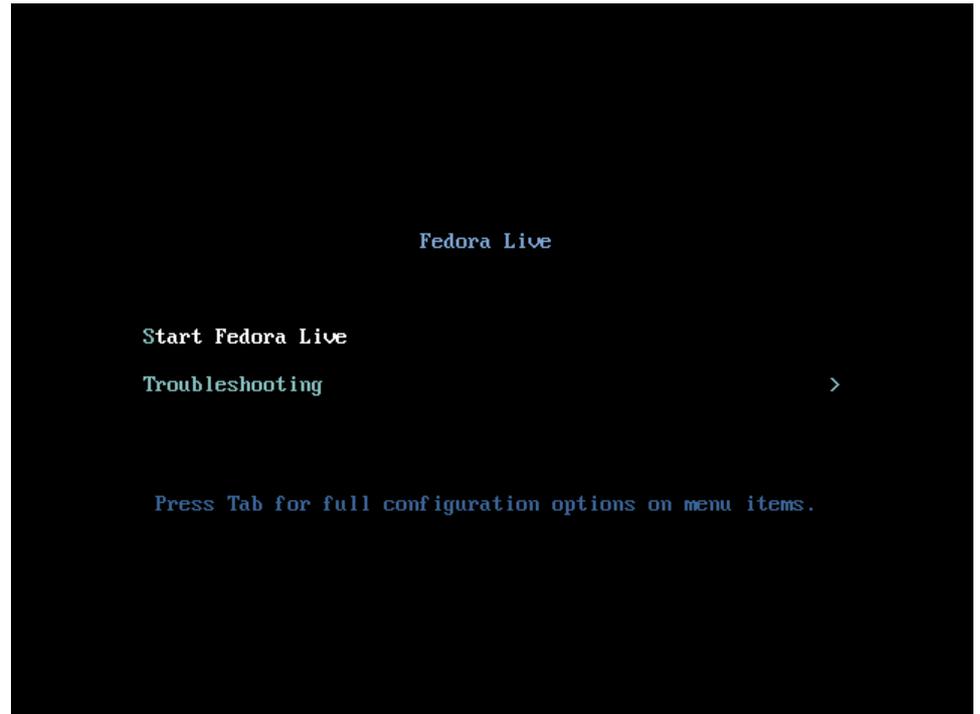

Figure 1. The Fedora live CD boot screen

Either press **Enter** to select the **Start Fedora Live** option, or wait for the countdown to expire.

If you do not see this screen, you might need to select an option manually to make your computer boot from the CD. Power your computer on, and watch the initial BIOS screen for a prompt that indicates which key to use for either:

- a boot menu, or
- the BIOS setup utility

The boot menu option is preferable. If you cannot see such a prompt, consult your manufacturer's documentation for your computer system, motherboard, or mainboard for the correct keystroke. On many systems, the required key will be **F12**, **F2**, **F1**, **Esc**, or **Delete**.

6. Fedora Live Desktop

After a ten-second countdown, your computer loads the Fedora live system and presents you with a login screen:
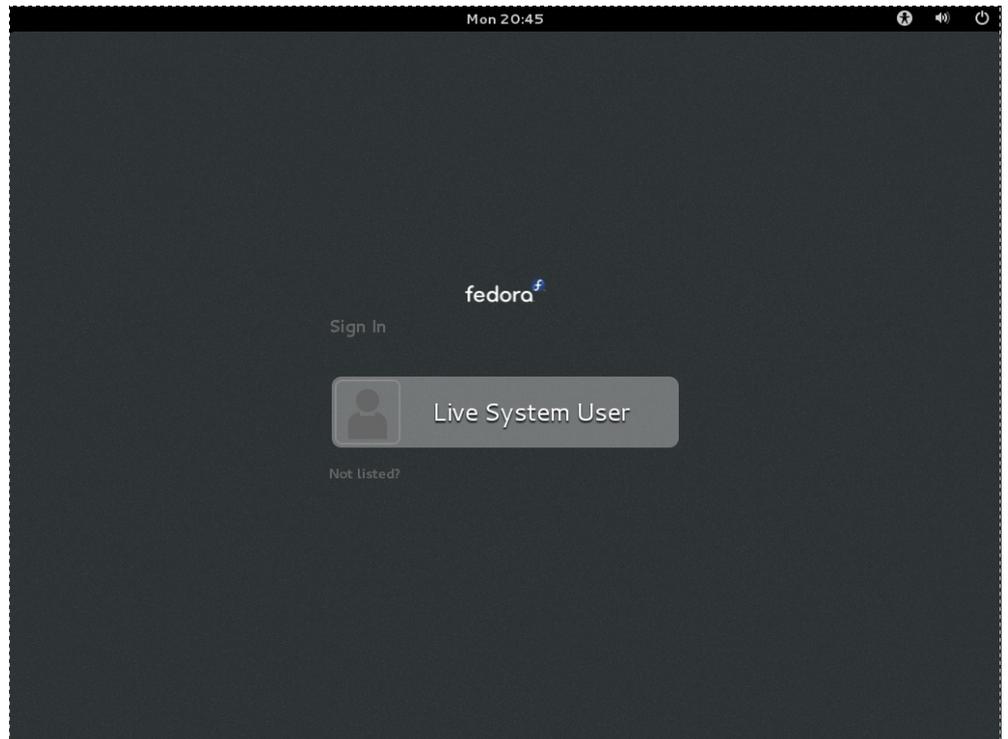
Figure 2. The Fedora live system login screen

Click the **Live System User** button. No password is required. The Fedora live system desktop will then load.

After a few seconds, a menu will appear offering two choices.

Figure 3. Try or install Fedora

To test out Fedora before installing, click **Try Fedora** to browse the desktop interface.

To install Fedora, click **Install to Hard Drive**.

7. Language Selection

At the **Welcome to Fedora 19** screen, use your mouse to select the language (for example, **English (United States)**) you would prefer to use for the installation and as the system default.

Alternatively, type your preferred language into the search box and select from the list of results.

To also set the keyboard layout to the default for your selected

language, click the checkbox below the search box.
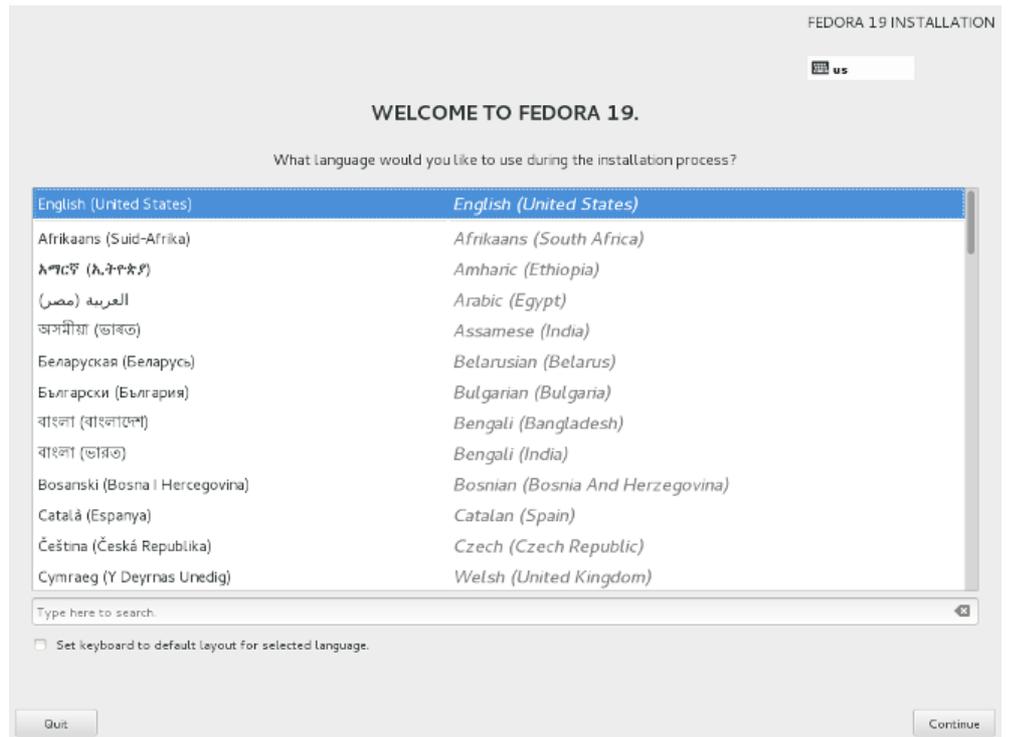
Once you have made your selection, click **Continue**.

Figure 4. Language Configuration

8. The Installation Summary Menu

The Installation Summary Menu is the central screen for setting up an installation.
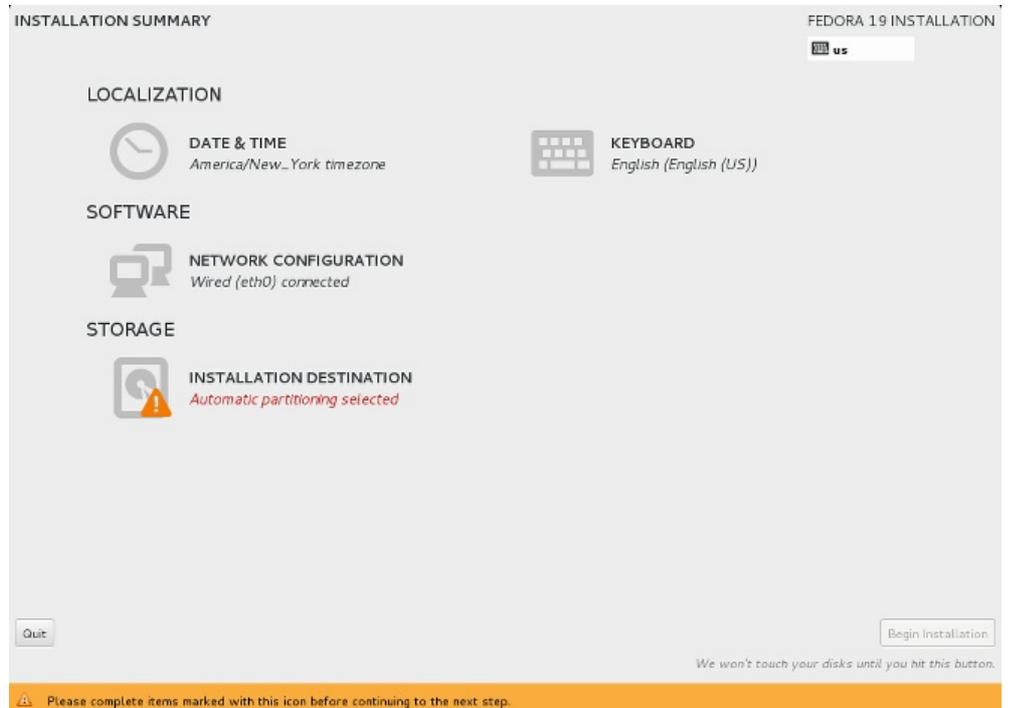

Figure 5. The Installation Summary Menu

Instead of directing you through consecutive screens, the Fedora installer allows you to configure your installation in the order you choose.

Use your mouse to select a menu item to configure a section of the installation. When you have completed configuring a section, or if you would like to complete that section later, click **Done**.

Only sections marked with a warning symbol are mandatory. A note at the bottom of the screen warns you that these sections must be completed before the installation can begin. The remaining sections are

optional. Beneath each section's title, the current configuration is summarised. Using this you can determine whether you need to visit the section to configure it further.

The keyboard icon at the top of the menu allows you to switch between your selected keyboard layouts (refer to Section 9, "Keyboard Configuration").

Once all required sections are complete, click **Begin Installation** (refer to Section 14, "Begin installation").

To cancel the installation, click **Quit**.

> **Note**
>
> When related background tasks are being run, certain menu items may be temporarily grayed out and unavailable.

9. Keyboard Configuration

Select **Keyboard** from the Installation Summary Menu.

In the left-hand pane, **English (United States)** is listed as the keyboard layout, unless you clicked the checkbox in Section 7, "Language Selection" to set the keyboard layout to the default for your selected language. If so, you may still want to select a more specific layout. For example, if you selected **French** as the language for this installation, the layout listed in the left-hand pane will be **French (French)**. However, you may want to change it to **French (French (Canada))**.
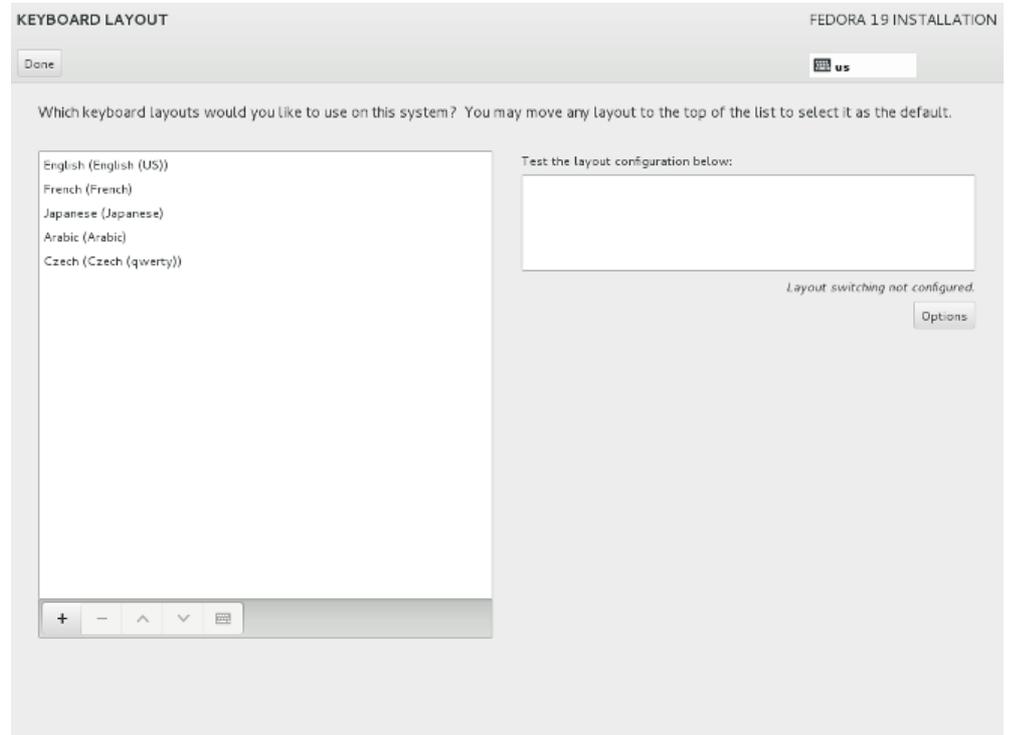

Figure 6. Keyboard Configuration

To change the layout or add additional layouts, click the **+** button and select from the list. To delete a layout, select it and click the **-** button. Use the arrow buttons to arrange the layouts in order of preference. For a visual preview of the keyboard layout, select it and click the keyboard button.

10. Date and time

Select **Date and Time** from the Installation Summary Menu.

Set your time zone by selecting the city closest to your computer's physical location.

There are two ways for you to select a city:

▷ Using your mouse, click on the interactive map to select a specific city. A red pin appears indicating your selection.
▷ You can also scroll through the **Region** and **City** drop-down menus at the top of the screen to select your time zone.

If your city is not available on the map or in the drop-down menu, select the nearest major city in the same timezone.
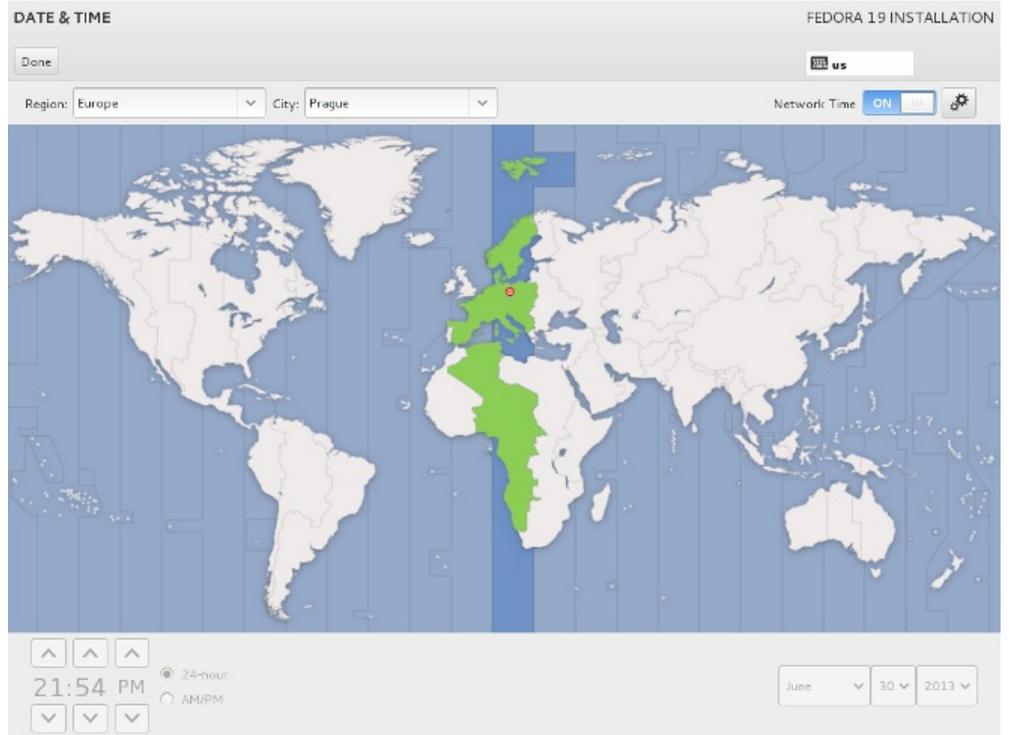
Figure 7. Configuring the Time Zone

Once you have made your selection, click **Done** to return to the Installation Summary Menu.

11. Network Configuration

Select `Network Configuration` from the Installation Summary Menu.

Enter a host name for this computer in the **Hostname** box. The hostname can be either a *fully-qualified domain name* (FQDN) in the format **hostname**.**domainname** or a *short host name* in the format **hostname**. Many networks have a *Dynamic Host Configuration Protocol* (DHCP) service that automatically supplies connected systems with a domain name. To allow the DHCP service to assign the domain name to this machine, specify the short host name only.

Valid Host Names

You may give your system any name provided that the full hostname is unique. The hostname may include letters, numbers and hyphens. Various programs provided by the Fedora distribution may prefer or require a FQDN as opposed to a short host name.
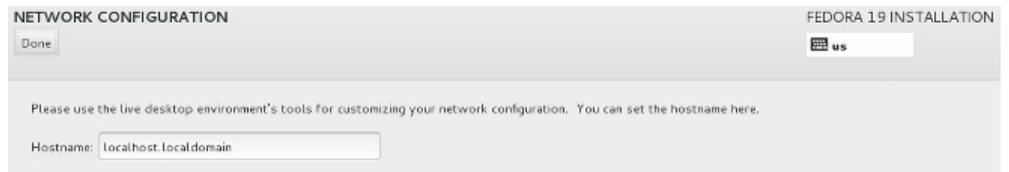

Figure 8. Configuring the Host Name

12. Storage and partitioning

Select `Installation Destination` from the Installation Summary Menu to select and partition the disks Fedora will be installed on.
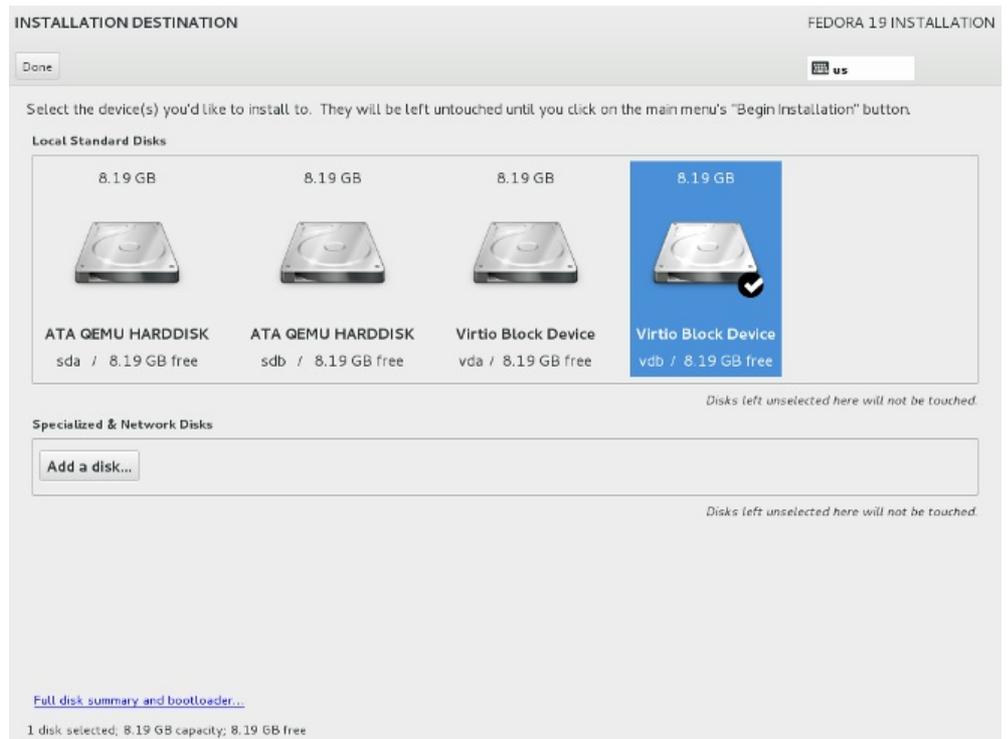
Figure 9. Disk Partitioning Setup

On this screen you can choose to create the default partition layout automatically, or choose to partition storage devices manually to create a custom layout.

Choose the disks to install Fedora on by clicking their graphical representations from the pane at the top of the screen. Each disk is marked with its label, size, and available space. Hold down **Ctrl** or **Shift** while clicking on the disks to select or unselect multiple disks. A tick icon will appear on the disk once it is selected.

You may want to simply install Fedora on all available disks. However, if you want to retain data or previously installed operating systems on one or more of those disks, do not include them in the installation.

> **⚠ Warning**
>
> All data will be erased during installation from the disks you select at this stage. Do not select disks that contain data you want to preserve.

Click **Done** once you have made your selections.

> **Note**
>
> Selecting a partitioning layout will not immediately affect your disks. The installer will make no changes to them until you return to the Installation Summary Menu and click **Begin Installation**.

The **Installation Options** dialog now appears, informing you if there is enough space on the selected drive to install Fedora.
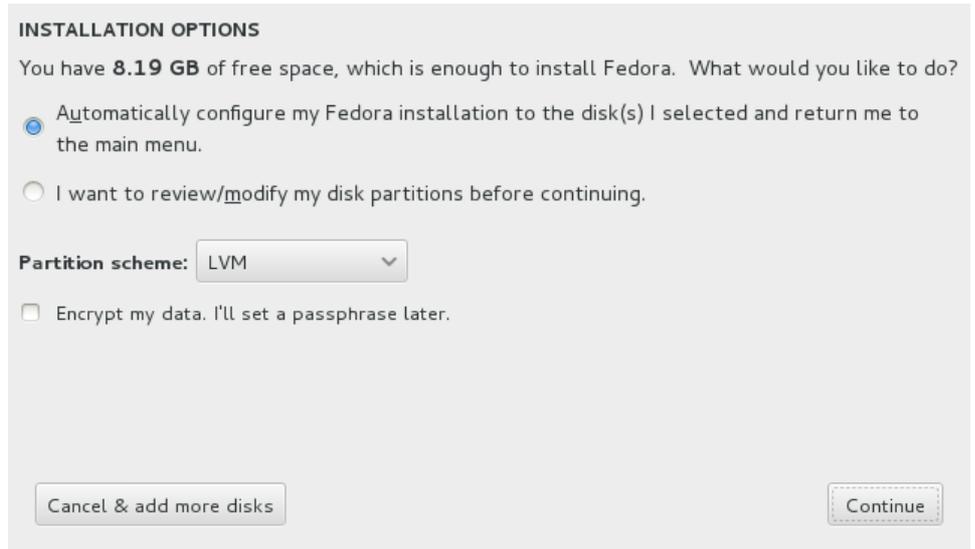
Figure 10. Installation Options dialog

To create and edit the partitions yourself, check the box labeled
`Let me customize the partitioning of the disks`, then click
`Continue` to reach the `Manual Partitioning` section. Refer to the
Fedora Installation Guide for instructions on manual partitioning.

Click `Continue` to allow Fedora to automatically configure the partitions
for you and return to the Installation Summary Menu.

13. Software Selection

If you install from a Fedora Live image, you cannot make package
selections. This installation method transfers a copy of the Live image
rather than installing packages from a repository. To change the
package selection, complete the installation, then use the
Add/Remove Software application to make desired changes.

If you are installing Fedora from a DVD, refer to Appendix A, *Software
Selection* for details of package selection.

14. Begin installation

When all required sections of the Installation Summary Menu have been
completed, the yellow admonition at the bottom of the menu screen will
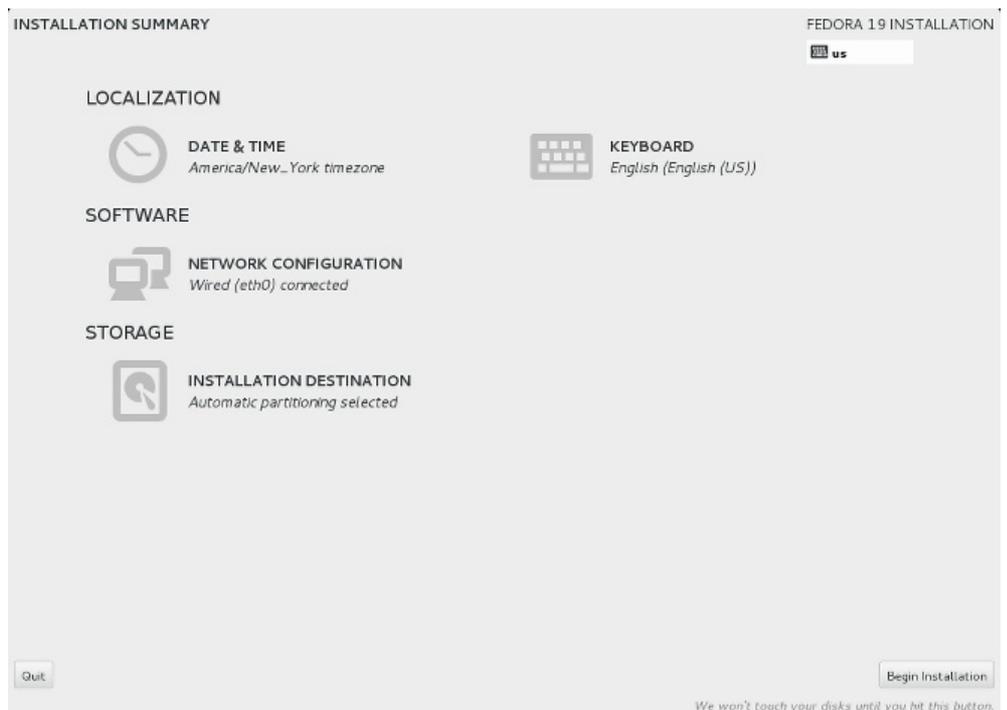disappear and the `Begin Installation` button can be selected.

Figure 11. Ready to install

If you have finished customizing your installation and are certain that
you want to proceed, click `Begin Installation`.

> ⚠ **Last chance to cancel safely**
>
> Up to this point in the installation process, the installer has made no lasting changes to your computer. When you click `Begin Installation`, the installer will allocate space on your hard drive and start to transfer Fedora into this space. Depending on the partitioning option that you chose, this process might include erasing data that already exists on your computer.
>
> To revise any of the choices that you made up to this point, return to the relevant section of the Installation Summary Menu. To cancel installation completely, click `Quit` or switch off your computer. To switch off most computers at this stage, press the power button and hold it down for a few seconds.
>
> After you click `Begin Installation`, allow the installation process to complete. If the process is interrupted (for example, by you switching off or resetting the computer, or by a power outage) you will probably not be able to use your computer until you restart and complete the Fedora installation process, or install a different operating system.

15. The Configuration Menu and Progress Screen

Once you click `Begin Installation` on the Installation Summary Menu, you will be directed to the Configuration Menu and Progress Screen. Fedora reports the installation progress on the screen as it writes the selected packages to your system.
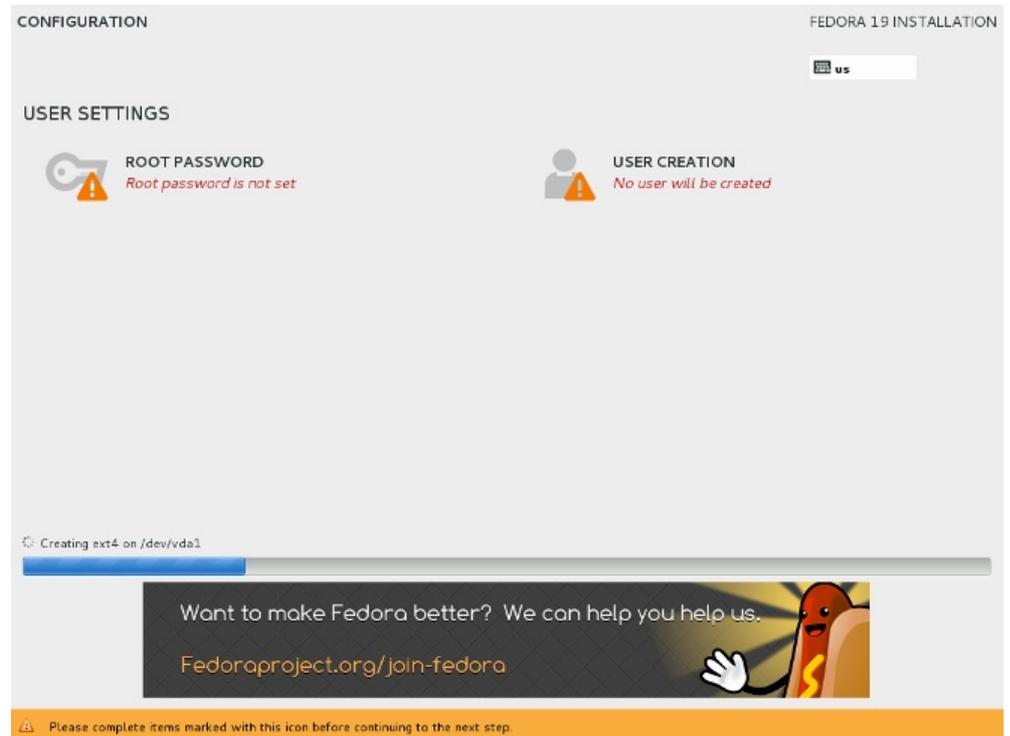

Figure 12. Installing packages

While the packages are being installed, select the menu items above the progress bar to create user profiles and a root password. These items must be configured in order to complete the installation.

16. Set the Root Password

Setting up a root account and password is one of the most important steps during your installation. The root account is used to install packages, upgrade RPMs, and perform most system maintenance. Logging in as root gives you complete control over your system.
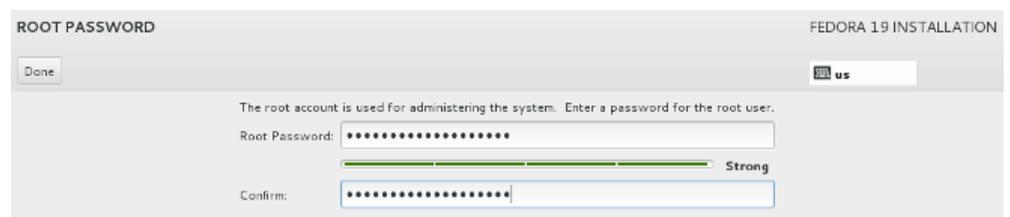

Figure 13. Root Password

Click the **Root Password** menu item and enter your nominated password into the **Root Password** field. Fedora displays the characters as asterisks for security. Type the same password into the **Confirm** field to ensure it is set correctly. After you set the root password, click **Done** to return to the Configuration Menu and Progress Screen.

17. User Creation

Create a user account for yourself with this screen. Always use this account to log in to your Fedora system, rather than using the **root** account.

Figure 14. The Create User screen

18. Reboot your system

Once the packages are installed and you have set the root password, click the **Quit** button that will appear at the bottom of the screen to exit to the Live Desktop.

Figure 15. Packages installed

Click `Live System User` in the top right of the Live Desktop. Click `Power Off` from the drop-down menu that appears, then `Restart` to reboot your system and begin the Firstboot process.

19. Your installation is complete

Fedora is now installed on your computer. Log in with the username and password that you created during the installation process.

To learn more about Fedora, visit the Fedora Project website at http://fedoraproject.org/. If you need help installing or using Fedora, visit http://fedoraproject.org/en/get-help.

20. We Need Feedback!

If you find a typographical error in this manual, or if you have thought of a way to make this manual better, we would love to hear from you! Please submit a report in Bugzilla: http://bugzilla.redhat.com/bugzilla/ against the product **Fedora Documentation.**

When submitting a bug report, be sure to mention the manual's identifier: *installation-quick-start-guide*

If you have a suggestion for improving the documentation, try to be as specific as possible when describing it. If you have found an error, please include the section number and some of the surrounding text so we can find it easily.

A. Software Selection

DVD or six-CD set only

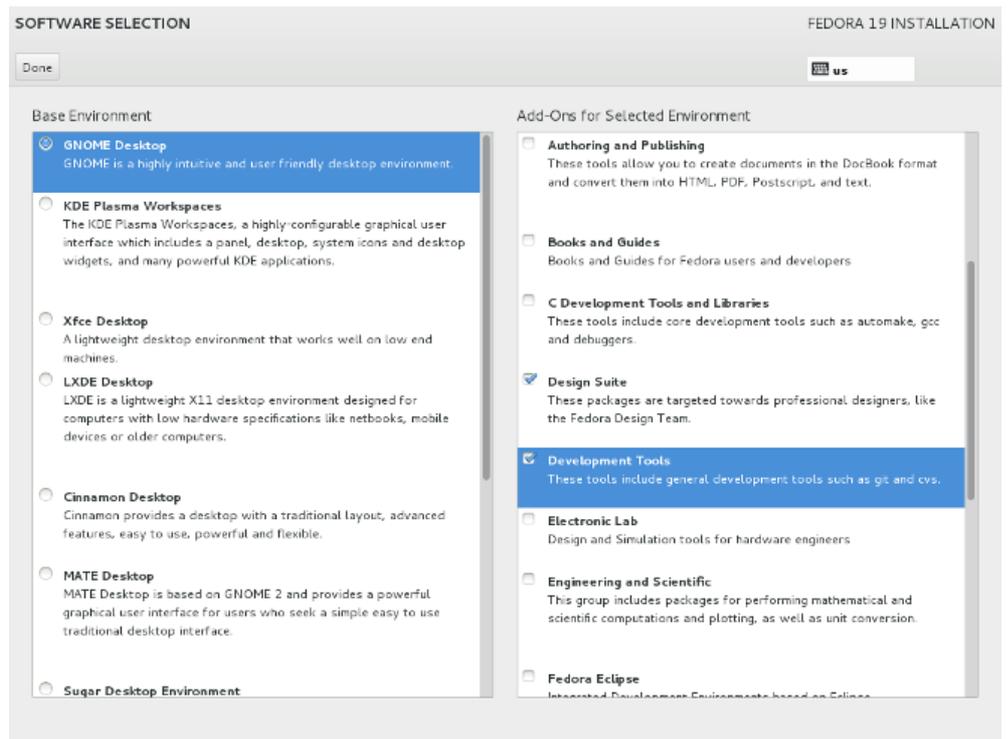You will not see this screen if you are installing Fedora from the live CD.

Figure A.1. Software Selection

To specify which packages Fedora will install, select `Software Selection` from the Installation Summary Menu.

By default, Fedora installs the GNOME Desktop Environment, but in `Software Selection` you can choose from a range of other environments and customise additional packages to be installed as add-ons. Available environments are listed in the left-hand pane. To select an environment, click the radio button that corresponds to one of the following options:

Graphical Desktops (multiple options, one radio button on each)
Fedora offers a variety of graphical desktop environments, which can be enhanced with add-ons such as the **LibreOffice** productivity suite, graphical tools such as the **GIMP**, and multimedia applications. The available environments are:

  ▸ GNOME Desktop

- KDE Plasma Workspaces
- Xfce Desktop
- LXDE Desktop
- Cinnamon Desktop
- MATE Desktop
- Sugar Desktop Environment

Development and Creative Workstation

This option provides the necessary tools to compile software and develop graphics and other content on your Fedora system.

Web Server

This option provides the **Apache** web server.

Infrastructure Server

This option provides a server for operating network infrastructure services.

Basic X Window System

This option provides the X Window System without a full graphical desktop environment.

Minimal Install

This option provides only the packages essential to run Fedora. A minimal installation provides the basis for a single-purpose server or desktop appliance and maximizes performance and security on such an installation.

> **Note**
>
> Only one desktop environment can be selected at install time. To install additional environments once Fedora is installed, use the **Software** tool or the **yum groupinstall** command.

Fedora will automatically install the base and mandatory packages for the environment you select, but you can select additional package groups, or add-ons, from the right-hand pane. The list of add-ons is refreshed when a new environment is selected, with packages specific to the environment at the top. Add-ons range from common utilities such as **Administrative Tools** and **LibreOffice** to specialist tools such as **RPM Development Tools** and **Design Suite**

To specify add-ons for installation as part of the environment, select the check box next to each add-on.

Once you have selected an environment and any additional packages you may wish to install, click **Done** to return to the Installation Summary Menu.

B. Revision History

Revision 1.0-3   **Mon Jul 1 2013**   **Petr Bokoč**
  Publishing for Fedora 19