

FIREFOX

Published : 2011-03-12
License : None

Introduction

1. Introduction to Firefox
2. About This Manual
3. Before You Get Started
4. What is FLOSS?
5. How the Internet Works

1. INTRODUCTION TO FIREFOX

Our guess is that you wouldn't be reading this unless you already know what a web browser is. However, if you don't: it's the software used to visit and view web pages on the Internet.

The Internet is a giant network of computers all connected to each other. It has grown from the first four systems that were originally connected in 1969 to currently over a billion systems and growing. Some of the computers connected to the Internet are "web servers." These web servers run software that allows them to deliver web pages. The vast network of web Servers on the Internet provides access to over 10 billion web pages and a continually growing and evolving set of web content and services. If you want to access these pages from your personal computer, laptop, or mobile device, you need to run a software program that knows how to do this. This is the purpose of a web browser.



HISTORY OF WEB BROWSING

Browsers have had one of the most public and interesting competitive lives of any software.

The first browser that could display images alongside text was known as Mosaic, and it really was an innovation that changed the world. In 1994, Marc Andreessen and a few of the original Mosaic developers banded together to start Netscape along with Jim Clark, a well known Silicon Valley entrepreneur. The early days of commercial browser development were marked by high energy and many innovations that continued to expand and improve the kinds of information the internet could provide. Every week it seemed that new sites popped up and new features appeared in browsers. A Wired Magazine article (<http://www.wired.com/wired/archive/2.10/mosaic.html>) captured some of the excitement from those early days when browsers and the web were starting to take off and grow rapidly.

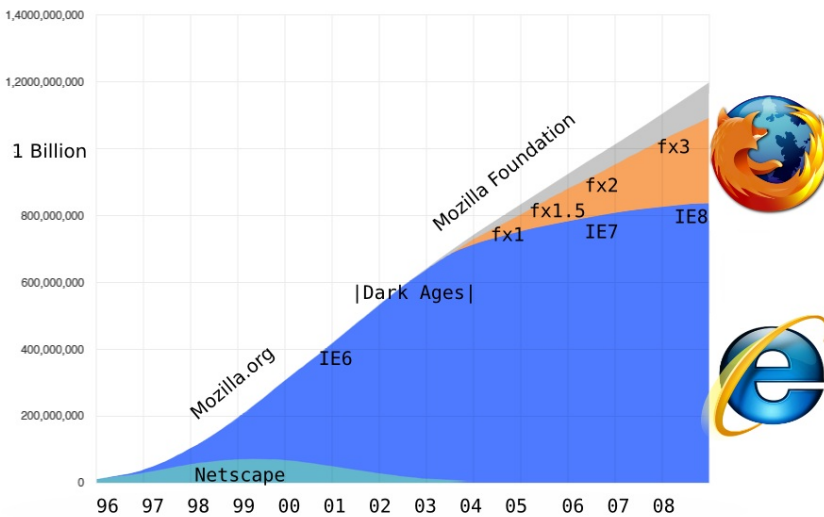
However, while Mosaic and then Netscape Navigator were first to enter the game, they failed to corner the market. After a relatively short and aggressive "browser war", Microsoft's Internet Explorer (IE) took the lead. Through spending over \$100 million on the development and promotion of IE and aggressive business practices, Microsoft was able to capture around 96% market share of all browsers in use. Some of the business practices Microsoft engaged in during the "browser war" were later determined to be anti-trust violations (http://www.usdoj.gov/atr/cases/ms_index.htm). With control of the market and no perceived business case for improving the browser Microsoft began scaling back development in 2002 and 2003. In 2003 it announced there would be no more standalone versions of Internet Explorer (http://www.usdoj.gov/atr/cases/ms_index.htm).

With Microsoft out of the game, Netscape in decline, and many websites using pop-ups and untargeted advertising schemes, some consider 2001-2004 as a dark age of innovation and improvements for browsers and the web.

DEVELOPMENT OF FIREFOX

A new chapter was added to this story with the debut of Firefox. Firefox is a distant descendant of Mosaic and Netscape. In 1998, Netscape set up the Mozilla Project and made its browser code freely available as an experimental strategy to gain a competitive advantage against Microsoft. This allowed programmers around the world to study the Mozilla code and follow its development. As time passed, this community of developers continued to contribute to its development. Netscape and AOL (which had acquired Netscape) remained heavily involved with Mozilla and released several Netscape and AOL products from the evolving Mozilla code. However, interest in browser development waned at AOL over time and in early 2003 AOL decided to reduce involvement, setting the project free to chart its own course.

In 2003, the Mozilla Foundation was created as an independent organization. The stage was set for the growing Mozilla community to leverage Netscape's past investment in browser code and make its own mark. This passionate community focused on the creation of a next-generation browser named Firefox. The goals for Firefox were simple: Make a light-weight browser that was fast and easy to use. It would put users back in control of their web surfing experience. It would not compromise on any part of the user experience with annoyances. It would also add an extension system that would give users the power to customize, experiment with, and tune the browser in thousands of ways.



In 2004, Firefox 1.0 was released. Since then the number of users has grown steadily. As of 2009, Firefox has about a 23% worldwide market share, with more than 300 million of the 1.2 billion Internet users around the world using Firefox as their web browser. The day Firefox 3 was released, in an event known as "Download Day", more than **8 million** users downloaded the new version in a single day.

Firefox continues to innovate. With features such as an easy method for subscribing to automatically updated news headlines, home page tabs that help you get to content on the web faster, built-in pop-up blocking, and the expanding number of extensions that allow you to tailor your browser, Firefox helps you to stay in control of the way you interact with the web. Firefox has sparked renewed interest in improving web browsers.

In response to Firefox, Microsoft changed its plans, restarted its browser development and released IE7 and recently IE8. Apple and Google have also become involved in efforts to build new web browsers (Safari and Chrome, respectively). Innovation and choice is returning to browsers and the web.

Firefox runs on any operating system and is localized in over 75 different languages. It is built by a community of developers around the world who are passionate about improving the browser and the web. Best of all, Firefox is **free!**

2. ABOUT THIS MANUAL

This manual evolved during a two-day Book Sprint at the Doctrain West conference. Scott Abel extended the invitation, and the sprint was a collaborative effort by FLOSS Manuals, Doctrain West, and the Mozilla Foundation.

Janet Swisher and Anne Gentle did the organization for the event with assistance by David Tenser (Mozilla) and Adam Hyde.

Chris Hofmann (Director of Special Projects at Mozilla) also attended.

25 writers collaborated over two days in virtual and real space to produce a book in two days! In addition to original content, large amounts of material was reused from the excellent Firefox Support Knowledge Base.

On the 16th May 2009 the Mozilla community got together for a one-day sprint to copy-edit and polish the manual. Lastly, on the 16th of July 2009, the Mozilla community once again came together to update this manual for Firefox 3.5. This consisted of simple things such as updating screenshots to major jobs such as writing about new Features for this release. We would like to thank all who participated for their hard work to create this excellent resource.



3. BEFORE YOU GET STARTED

Firefox is entirely free software. You do not have to pay anything to download and install it.

Taking advantage of its popularity, some sites have recently appeared on the Web that attempt to charge money for the download, installation, or support services of Firefox. Such sites are not authorized by the Mozilla Foundation and may misuse personal information that you give to them. If you spot one of these sites, or hear about someone being charged for Firefox, please report it at <http://www.mozilla.com/legal/fraud-report/index.html>. If you can include the actual address of the site where the download was offered or the site where you submitted your credit card, that helps in tracking down the bad guys. Your credit card records might also list details about the business or name of the company charging your account. This kind of information helps the Mozilla team investigate for trademark and fraud violations and get bad sites shut down.

The official and free download of Firefox can be found at <http://getfirefox.com> or <http://mozilla.com>. Free support for Firefox can be found at <http://support.mozilla.com>. These are the sites you should use for downloading or getting continued support for Firefox.

4. WHAT IS FLOSS?

FLOSS is an abbreviation for *Free/Libre/Open Source Software*. The terms *Free*, *Libre*, and *Open Source* are all used to describe software that guarantees certain freedoms both to users and to programmers. Groups that promote the use of FLOSS software often use different terms to refer to it. For example, the Free Software Foundation and the GNU project often refer to "free" software, while other groups including Debian and the Open Source Initiative promote "Open Source" software. In English, the term "free" can mean either "no-cost" or "having liberty", so "libre software" is often used to emphasize that the software provides freedom rather than simply being free of cost.

The ideas encapsulated in the terms "free" and "open" are similar but not identical. While there are dozens of variations of these terms in use, all FLOSS software shares some of the same basic ideals of software freedom, including:

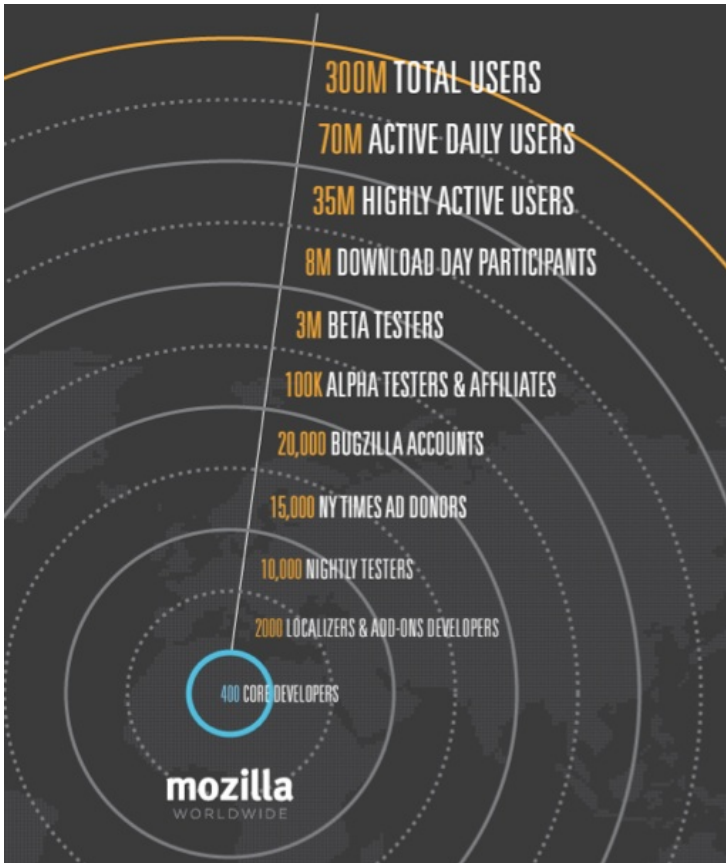
- Freedom to run the program
- Free access to complete source code
- Freedom to study the code
- Freedom to modify the code
- Freedom to redistribute the modified code

The specific freedoms provided by each software project can vary, but these ideas form the basis for most FLOSS licenses. From a user's perspective, FLOSS software is always free to use and to copy, both now and in the future. There are some unclear boundary lines and gray areas that must be kept in mind when copying or distributing FLOSS software, including trademarks and "proprietary" drivers in the Linux kernel. Each FLOSS software project includes detailed information on what rights are guaranteed by the *software license*. A wide variety of FLOSS is available for all common platforms, including Windows, Mac OS, and Linux.

FIREFOX

For many users, Firefox is their first introduction to FLOSS and the ideas it represents. FLOSS is a core aspect of the Mozilla project, which develops the Firefox web browser. As a result, everyone is free to use, copy, improve, and extend Firefox. Another core aspect of the Mozilla project is its *participatory development* strategy, which means anyone can get involved with making Firefox better. Millions of community members help make Firefox better every day.

Who are these people and how are they connected?



Growing the use of Firefox is a grassroots effort. With no massive advertising campaigns and mostly word-of-mouth and technology-based message passing, the user base of Firefox has reached 220 million people. One way to describe the growth is "viral" (but in a good way, not like "software viruses") — passing from developers, to bloggers, to users, to more users.

At the core, around 400 developers work on the *source code* that powers Firefox. More than 30% of Mozilla code is contributed by volunteers, with the rest being contributed by full-time contributors who are paid either by Mozilla or by other companies involved in Mozilla development. In case you were wondering, "Mozilla" was the original name of the dinosaur-like mascot created in 1994 for Netscape Communications Corporation. "Mozilla" is now the name of both the non-profit foundation and its fully owned corporation that brings us Firefox and maintains the code base that it's built on.

All participants in the Mozilla project, from volunteer coders to paid contributors, highly value the community and collaborative efforts that go into Firefox development. They want to both improve the browser itself and make the web better. Contributors to Mozilla include industry leaders in particular areas of expertise such as networking, CSS, HTML, graphics, and wide array of other technologies that power the web. Mozilla is a diverse set of people, and nearly anyone can make a big difference, whether by developing code, writing documentation, testing software, or just telling friends about Firefox!

Beyond "core" developers, many different groups of dedicated people help make the Mozilla project successful. In the Mozilla community, there are:

- More than 500 people who localize and help to deliver Firefox into over 60 languages.
- Hundreds of other developers of "add-ons", who create extensions to customize Firefox and experiment with innovation.
- 10,000 people who help to test "nightly" development releases and help to maintain quality and provide feedback during the development process.
- 15,000 people who opened up their wallets to contribute \$30 each to pay for a \$250,000 two page ad in the New York Times to promote the release of Firefox 1.0. The idea for this campaign came from a community of marketing developers that help to promote Firefox in many different ways.
- 20,000 people are active in "bugzilla", the Mozilla Project bug and feature tracking system. All these are contributing to future Firefox improvements.
- 8 Million people recently participated in "Download Day" which set a world record for the most downloads of a software package on the first day of the Firefox 3 release.

These examples demonstrate how many different communities and people with different skills all coming together can build and maintain a viable project. We hope that Firefox serves as an ideal introduction to FLOSS and to the concept of community-powered software development.

5. HOW THE INTERNET WORKS

The **Internet** is a decentralized worldwide network of computer networks. Although many people use the terms "the Internet" and "the Web" interchangeably, the Internet is the physical connection of computer networks together with certain methods of communication. The Web is one of many ways of communicating using the Internet. You can also use the Internet for **e-mail**, **file sharing**, **Usenet news**, and **chat**.

CONNECTING TO THE INTERNET

The easiest way to use the Web is often to find a local Internet café or telecenter that provides Web access. If you need to set up your own computer with an Internet connection, you would, typically, open an account with an **Internet Service Provider (ISP)**. You may need some extra equipment, such as a modem or a **router**, to enable your computer to connect with the ISP.

The ISP in turn may purchase its own Internet access from a national provider (unless it is a branch of a national provider). National providers may similarly receive their connection from one of the multinational companies that maintain and operate the servers and connections that are called the **backbone** of the Internet. The backbone is made up of major server installations at critical points, and global connections between them via fiber optic cables and satellites. These connections enable communications between Internet users in different countries and continents. National and international providers connect to this backbone through special **routers** known as **gateways**, which are connections that allow one network to communicate with another. Gateways, just like other routers, may be a point at which Internet traffic is monitored or controlled.

When you connect to the Internet, your computer is normally assigned a numeric **IP address**, which can be written as four numbers in the range 0-255, separated by dots. Like a postal address, it uniquely identifies a single computer on the Internet. Depending on your Internet Service Provider, your computer may be assigned different IP addresses at different times that it connects to them. All Web sites and Web servers also have IP addresses. For example, the IP address of www.frontlinedefenders.org is 217.173.101.253.

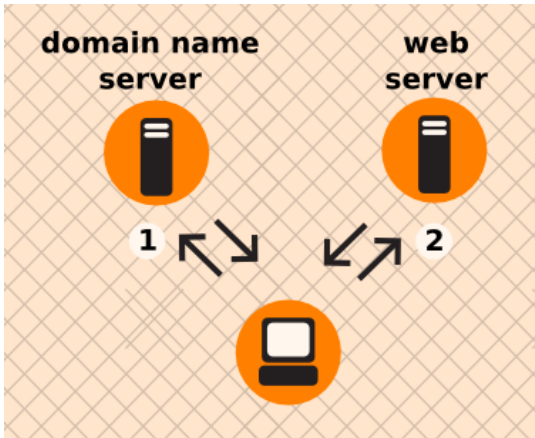
VISITING A WEB SITE

When you want to visit a Web site, you normally type the "name" of the Web site into your browser and not the IP address. For example, to access the Frontline Web site you would type in `http://www.frontlinedefenders.org` instead of 217.173.101.253. The name of the Web site is also called the **domain** or **domain name**.

After you type the domain name into the browser, your computer sends a message with this name to the **Domain Name System (DNS)**. This system consists of dedicated computers on the Internet that translate names into IP addresses. The DNS means that you need to remember only the Web site's name rather than a complex string of numbers. After the DNS server translates the domain name into an IP address, it shares that information with your computer.

Now your computer can try to connect to the Web site using its IP address. A path from your computer to the destination Web site must be found. This path may travel through countries, oceans and space; it could be thousands of miles long and could pass through numerous computers. How does it know which way to go, when there are hundreds of millions of different Web sites? The task of directing your message to the Web site (and back) is performed by routers, and the process is known as **routing**.

For our purposes, it's worth noting that routers can be given simple instructions on how to behave and can be used as a tool for censorship. Any router can be manipulated to record, re-direct, or block access to certain Web sites.



Example of what happens when you find a Web page:

1. You type in <http://globalvoicesonline.org/>. The computer sends the domain name to a selected DNS server (using its numeric address), which sends a message back, containing the IP address for the Global Voices Web site.
2. The browser then sends a request for a connection to that IP address.
3. The request goes through a series of routers until it reaches a router that finds the specific computer needed.
4. This computer sends information back to you, allowing your browser to send the full URL and receive the data to display the page.

Every connection between computers or routers that a message goes through is called a **hop**. The number of hops is the number of computers or routers your message comes in contact with along its way. Below is a sample path taken by a computer to get to www.globalvoicesonline.org. This request passes through at least fourteen computer connections (hops) before reaching its destination.

```
tracert to globalvoicesonline.org (72.249.186.50), 64 hops max, 40 byte packets
 1 192.168.1.1 (192.168.1.1)  2.425 ms  0.673 ms  0.637 ms
 2 192.168.15.1 (192.168.15.1)  3.824 ms  1.068 ms  1.139 ms
 3 10.92.32.1 (10.92.32.1)  10.712 ms  9.581 ms  98.359 ms
 4 gig-5-3-lbrtnymtn-rtr1.hvc.rr.com (24.164.160.173)  10.720 ms  10.774 ms  11.147 ms
 5 pos-3-1-nycmnya-rtr1.nyc.rr.com (24.164.160.78)  12.533 ms  12.042 ms  11.206 ms
 6 tenge-0-3-0-nwrknjmd-rtr.nyc.rr.com (24.29.97.6)  12.456 ms  13.922 ms  13.821 ms
 7 ae-4-0-cr0.nyc30.tbone.rr.com (66.109.6.78)  15.844 ms  22.984 ms  14.024 ms
 8 ae-1-0-pr0.nyc20.tbone.rr.com (66.109.6.163)  14.605 ms  14.592 ms  43.455 ms
 9 207.88.182.73.ptr.us.xo.net (207.88.182.73)  14.707 ms  14.437 ms  22.936 ms
10 te-4-0-0-rar3.nyc-ny.us.xo.net (207.88.12.26)  24.168 ms  16.683 ms  16.947 ms
11 207.88.14.9.ptr.us.xo.net (207.88.14.9)  45.446 ms  45.360 ms  46.136 ms
12 207.88.14.10.ptr.us.xo.net (207.88.14.10)  70.949 ms  69.782 ms  70.112 ms
13 207.88.185.38.ptr.us.xo.net (207.88.185.38)  70.162 ms  73.824 ms  73.137 ms
14 switch19.rimuhosting.com (65.99.204.18)  70.630 ms  70.344 ms  70.264 ms
15 server1.globalvoicesonline.org (72.249.186.50)  72.347 ms  72.747 ms  74.179 ms
```

Destination reached!



If you have used the Internet, you know that normally all of these complex processes are hidden and you don't need to understand them in order to find the information you need. However, when people or organizations attempting to limit your access to information interfere with the operation of the system, your ability to use the Internet may be restricted.

WHY THIS MATTERS

Censorship can occur at different points in the Internet infrastructure, covering whole domains or subdomains, individual protocols, or specific content identified by filtering software. The best method to avoid censorship will depend on the specific censorship technique used. You may need to understand these differences in order to use the appropriate measures to use the Internet effectively and safely.

Installation

6. Installing Firefox on Windows
7. Installing on Mac OS X
8. Ubuntu
9. Updating Firefox
10. Uninstalling Firefox

6. INSTALLING FIREFOX ON WINDOWS

Firefox requires a computer with a minimum of a 233 MHz processor, running Windows 2000 or later.

To check system requirements for Firefox, go to:

<http://www.mozilla.com/firefox/system-requirements.html>

DOWNLOAD AND INSTALL FIREFOX

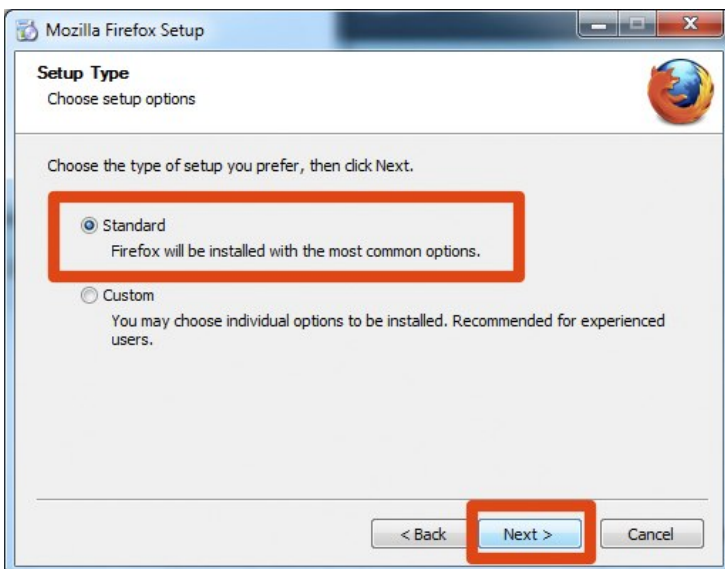
1. Visit the Firefox Download Page at <http://www.mozilla.com/firefox/> in any browser (such as Microsoft Internet Explorer). The download page automatically detects the operating system and language on your computer and recommends the best edition(s) of Firefox for you. If you want to download Firefox for a different language or for a different operating system than the one detected, click "Other Systems and Languages" to see a list of all the others available.



2. Click the download button and the setup file will begin to download to your computer. Once the download completes, it is recommended that you exit all your running programs before running the installation.
3. Double-click the file to start the Firefox install wizard.
 - If you are running Windows Vista, you may get a User Account Control prompt. In this case, allow the setup to run by clicking **Continue**.

A welcome screen appears.

4. Click **Next** to continue. The **Setup Type** screen appears. A "Standard" setup is selected by default (using the custom option is only recommended for experienced users).



5. Firefox installs itself as your default browser. If you do not want Firefox to be your default browser, clear the check box **Use Firefox as my default web browser**.
6. Click **Next**.
7. Once Firefox has been installed, click **Finish** to close the setup wizard.



If the **Launch Firefox now** check box is checked, Firefox will start after you click **Finish**.

Windows Vista Users:

If at any time throughout the installation process you are prompted with a User Account Control (UAC) window, press Continue, Allow, or Accept.

TROUBLESHOOTING

If you have problems starting Firefox, see <http://support.mozilla.com/kb/Firefox+will+not+start>

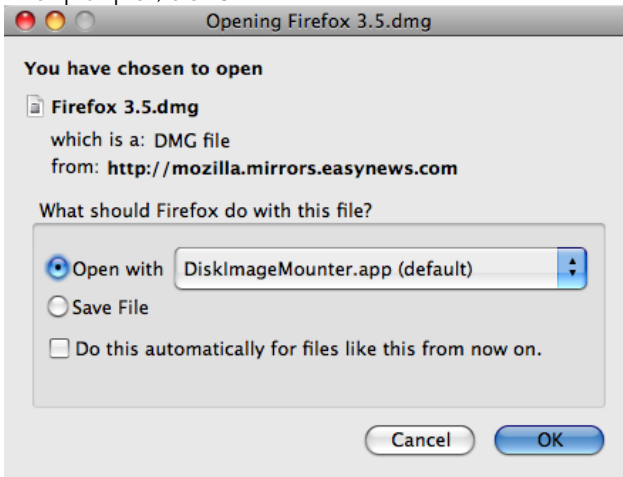
7. INSTALLING ON MAC OS X



1. To download **Firefox**, visit <http://www.mozilla.com/> and click on the big green button labeled "Firefox 3.5 Free Download." The page shown below opens, and the download starts. If it does not, click the link on the page.



2. When prompted, click **OK**.



Once the download is complete this window appears:



3. Click and hold the **Firefox.app** icon, then drag it on top of the **Applications** icon. When it is on top of the **Applications** icon, release the mouse button. This starts copying the program files to the Applications directory on your computer.
4. When the installation step is finished, close the two small Firefox windows.
5. Eject the Firefox disk image. If this does not work by normal means, select the disk image

Thank You for previewing this eBook

You can read the full version of this eBook in different formats:

- HTML (Free /Available to everyone)
- PDF / TXT (Available to V.I.P. members. Free Standard members can access up to 5 PDF/TXT eBooks per month each month)
- Epub & Mobipocket (Exclusive to V.I.P. members)

To download this full book, simply select the format you desire below

