

Fedora

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April 8, 2019



Outline



PREAMBULO (corto)

A Linux distribution consists of the components needed to create a working Linux system and the procedures needed to get those components installed and running. Technically, Linux is really just what is referred to as the kernel. Before the kernel can be useful, you must have other software such as basic commands (GNU utilities), services you want to offer (such as remote login or web servers), and possibly a desktop interface and graphical applications. Then, you must be able to gather all that together and install it on your computer's hard disk.



HISTORIA & EVOLUCION

Entra en escena Red Hat

Before long, many other Linux distributions were created. Some Linux distributions were created to meet special needs, such as KNOPPIX (a live CD Linux), Gentoo (a cool customizable Linux), and Mandrake (later called Mandriva, which was one of several desktop Linux distributions). But two major distributions rose to become the foundation for many other distributions: Red Hat Linux and Debian.



Nace Fedora

Red Hat, Inc. gave away the source code, as well as the compiled, For years, Red Hat Linux was the preferred Linux distribution for both Linux professionals and enthusiasts. ready-to-run versions of Red Hat Linux (referred to as the binaries). But as the needs of their Linux community users and big-ticket customers began to move further apart, Red Hat abandoned Red Hat Linux and began developing two operating systems instead: Red Hat Enterprise Linux and Fedora. (Linux Bible, Cristopher Negus)



Tecnología de punta

Using Fedora While RHEL is the commercial, stable, supported Linux distribution, Fedora is the free, cutting-edge Linux distribution that is sponsored by Red Hat, Inc. Fedora is the Linux system Red Hat uses to engage the Linux development community and encourage those who want a free Linux for personal use. Fedora includes more than 16,000 software packages, many of which keep up with the latest available open source technology. As a user, you can try the latest Linux desktop, server, and administrative interfaces in Fedora for free. As a software developer, you can create and test your applications using the latest Linux kernel and development tools. Because the focus of Fedora is on the latest technology, it focuses less on stability. (Linux Bible, Cristopher Negus)



Razones para usar Fedora

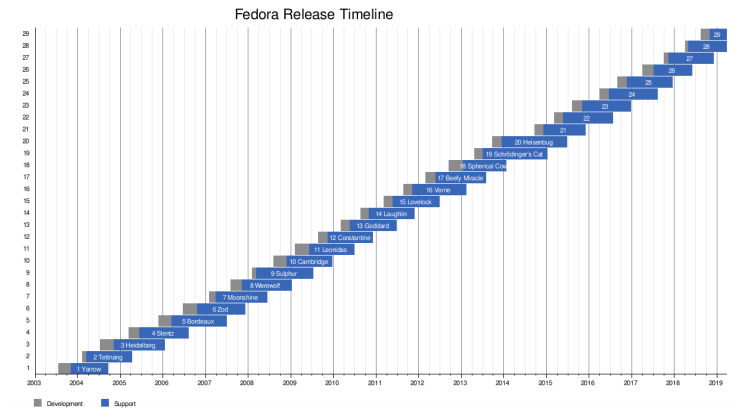
- ▶ Cambió el paradigma de archivos comprimidos a archivos con metadatos (local RPM database, removerlo, actualizarlo, etc)
- ▶ Instalación simple, al estilo de los "wizard", en muchos casos los valores predefinidos bastaban.
- ▶ Administración gráfica: se podía utilizar sin necesidad de hacer comandos.
- ▶ Incluye funcionalidad de Red Hat de tipo empresarial (por ejemplo, facilidad para montar una base de datos para una red interna).

Ejemplos de funcionalidades empresariales

- ▶ Kickstart files
- ▶ PXE boot
- ▶ Satellite server (Spacewalk)



Historia de las versiones



(Tomado de: www.fedoraproject.org)



<https://docs.fedoraproject.org/en-US/project/>

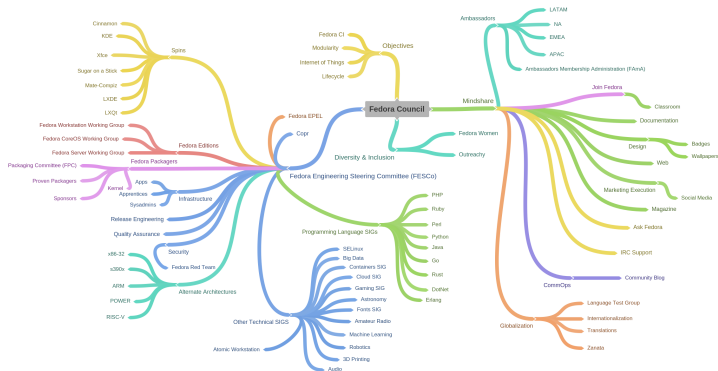
The Fedora Project is not a separate and distinct legal entity. Red Hat, the primary sponsor of the Fedora Project, is actively involved in legal matters relating to Fedora, along with other Fedora participants. For example, Red Hat lawyers assist Fedora Project contributors in issues pertaining to free and open source software licensing, trademarks and patents. Refer to the Legal page for more information. (Tomado de: www.fedoraproject.org)

Jugadores Principales

- ▶ Red Hat Inc.
- ▶ Fedora Council
- ▶ Fedora Engineering and Steering Committee (FESCo)



Organización



(Tomado de: www.fedoraproject.org)



CARACTERISTICAS

- ▶ Freedom
 - ▶ Repositorios principales son Open Source
 - ▶ Licencias https://fedoraproject.org/wiki/Licensing:Main#Good_Licenses
- ▶ Friends
 - ▶ Comunidad robusta
 - ▶ Ayuda técnica
 - ▶ Interfáz pulida
 - ▶ Instalación fácil
 - ▶ Documentación
- ▶ Features
 - ▶ Workstation
 - ▶ Server
 - ▶ Atomic
 - ▶ Y muchos spins...
- ▶ First
 - ▶ Innovación
 - ▶ Rolling Release

Estas han hecho que Fedora se conozca como "para desarrolladores".



Una nota sobre "Features"

- ▶ Versiones
 - ▶ Workstation
 - ▶ Silverblue
 - ▶ Server
 - ▶ Atomic
- ▶ Ediciones
 - ▶ Plasma
 - ▶ XDE
 - ▶ XFCE
 - ▶ LXQT
 - ▶ Cinammon
 - ▶ Mate etc.
- ▶ Fedora Labs
 - ▶ Astronomy
 - ▶ Design Suit
 - ▶ Scientific
 - ▶ JAM
- ▶ Rawhide



APLICACIONES



Instalación Base (GNOME)

- ▶ Suite Libre Office
- ▶ Mapas
- ▶ Rythmbox
- ▶ Cajas(Boxes)
- ▶ Calculadora
- ▶ Fotos
- ▶ Cheese
- ▶ Calendario
- ▶ Contactos

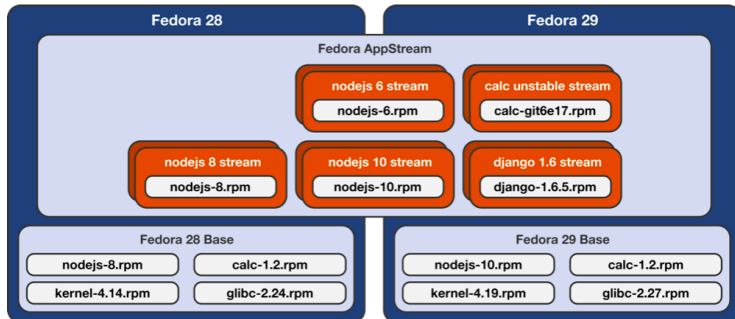


Aplicaciones CLI

- ▶ Compatibilidad con Docker incorporada
- ▶ GNOME Boxes
- ▶ COPR
- ▶ Modularity
- ▶ Git
- ▶ Dev Assistant
- ▶ Ver más en : <https://developer.fedoraproject.org/>



Ejemplo de Modularidad



Prueba para montar servidor Apache

```
sudo dnf install httpd  
sudo systemctl start httpd.service  
// verificar http//:localhost
```



Iniciar proyecto con dev assistant

```
da create java maven --name MyJavaApp --github
```

Al parecer este paquete ya no está en uso, pero inició solo como un paquete de Fedora, luego se generalizó a un paquete de Python que se puede instalar con

```
pip3 install devassistant --user
```



Iniciar Proyecto con Docker

```
da create python django --name MyAppName --docker
```



HERRAMIENTAS DE SUPERVISION DE RENDIMIENTO

CLI

- ▶ ps
- ▶ top
- ▶ jobs (foreground/background)
- ▶ kill
- ▶ killall
- ▶ nice
- ▶ renice

GUI

- ▶ Son dependientes del entorno de escritorio
- ▶ En GNOME está monitor
- ▶ hay guis simplificadas (system-config-[expresion]) dentro de los repositorios de Fedora, ejemplo: system-config-language



REQUERIMIENTOS

- ▶ Mínimos
 - ▶ 1GHZ or faster processor
 - ▶ 1GB System Memory
 - ▶ 10GB unallocated drive space
- ▶ Recomendados
 - ▶ 2GHz dual core processor
 - ▶ 4GB System Memory
 - ▶ 20GB unallocated drive space



VENTAJAS & DESVENTAJAS

Principales

Pros

- ▶ muy fácil de instalar
- ▶ muchísimo soporte
- ▶ Apariencia "comercial"
- ▶ cubre muchos casos de uso (programadores, músicos, etc)
- ▶ Une lo mejor de los dos mundos (OpenSource con enfoque empresarial)

Cons

- ▶ no soporta drivers propietarios (toca usar third party software)
- ▶ es gigante: 10gb el iso
- ▶ Excesiva funcionalidad
- ▶ hay problemas con actualización de un lanzamiento a otro
- ▶ puede ser lento (la VM a veces se queda con más de las especificaciones mínimas)



fedora

Debian

Fedora

ciclo de vida corto

OpenSource + RedHat

RPM

Anaconda

Configuración robusta

Innovación

Funcionalidad

Debian

ciclo de vida largo

Meritocracia

DEB

Documentación, aunque ya no

Configuración manual

Estabilidad

Seguridad



Windows

Fedora

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Funcionalidad

Windows

Ciclo de vida largo
Orientado a empresas
trabaja con .exe
El de windows, similares
Todo "funciona"
Extensión (hardware y drivers funcionan)



Arch

Fedora

Lanzamientos rapidos
OpenSource + RedHat
RPM-Yum,-DNF
Anaconda
Configuracion robusta
Innovacion
Funcionalidad
Inestable

Arch

"frozen" release
Meritocracia
Pacman (una sola herramienta)
La 'mejor' documentación
Recae completamente en el usuario
Customizacion
Simplicidad
Más inestable (tú eres responsable)
Es "la que sirve para aprender"

