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GNOME ENVIRONMENT



- **The GNU Network Object Model Environment also known as (Gnome), is a powerful and easy to use environment consisting primarily of a panel, a desktop, and a set of GUI tools with which program interfaces can be instructed.**

GNOME ENVIRONMENT

Invention

- It was started in 1997 by Miguel de Icaza of the Mexican Autonomous National University.

License

- It is free under the GNU Public License (GPL) and has no restrictions.

GNOME ENVIRONMENT

- **Gnome is strongly supported by Red Hat.**
When you install Red Hat, the default interface is Gnome.
- **The default look for Gnome are the colors purple and dark grey, however any color may be favored.**

KDE ENVIRONMENT

Invention

- KDE was founded in 1996 by Matthias Ettrich, a student of Eberhard Karls of the University of Tübingen.

License

- It is an entirely free and open software provided under a GNU public license and is available free of charge along with its source code.

KDE ENVIRONMENT

- Like Gnome, it fully supported by Red Hat and is included as a fully functional alternate desktop with Red Hat Linux distributions.
- KDE by default (this can be changed) favors blue and grey. KDE can be made to be orange.

DIFFERENCE BETWEEN GNOME & KDE

Difference b/w Gnorm and KDE

Gnome

- It has two toolbars (one at the top, one at the bottom), and splits its menu into three submenus—Applications, Places, and System.
- The Gnome menus can be combined.

KDE

- KDE has one toolbar at the bottom of the screen, and has one main menu.
- New KDE menus can be added.

GNOME ENVIRONMENT

Menu Navigation

Gnome

- In Gnome you have separate buttons for applications, for folder navigation, and for system preferences.
- To go to your Home Folder or Documents folder, you click on *Places* and then select the location you want to go to.

KDE

- In KDE, there is a KMenu through which you access all programs. There is a quick-navigation button that looks like a folder. If you want to go to your Documents folder, you would go to the quick navigation button and then select *Documents*. Then you would click *Open* to open it.

GNOME ENVIRONMENT

Gnome



KMenu

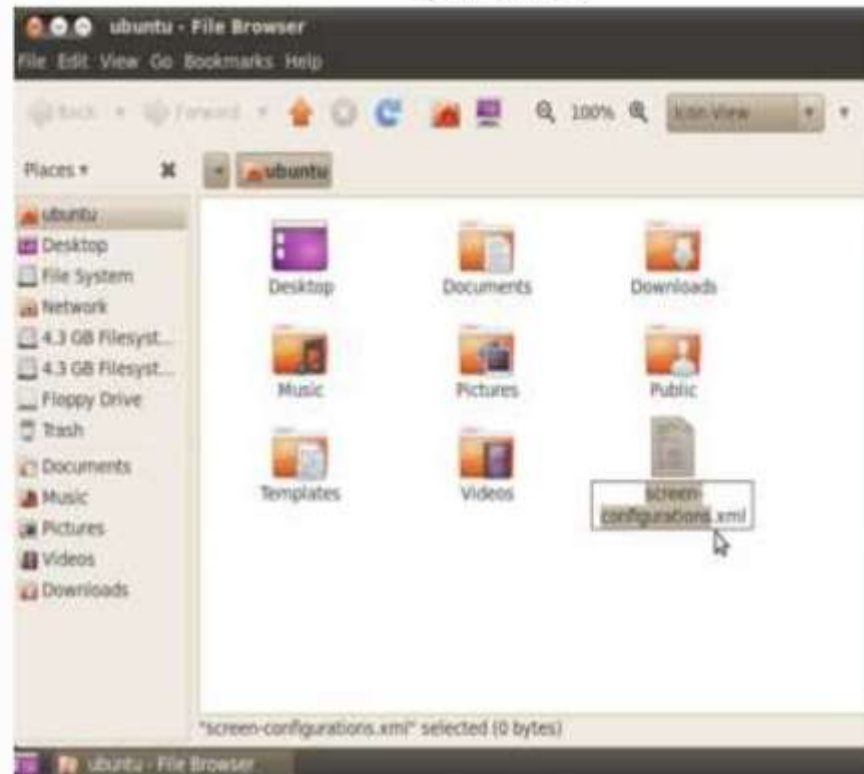


GNOME ENVIRONMENT

Renaming Files

■ In Gnome, renaming a file also focuses on the main file name, not with a pop-up window.

Gnome

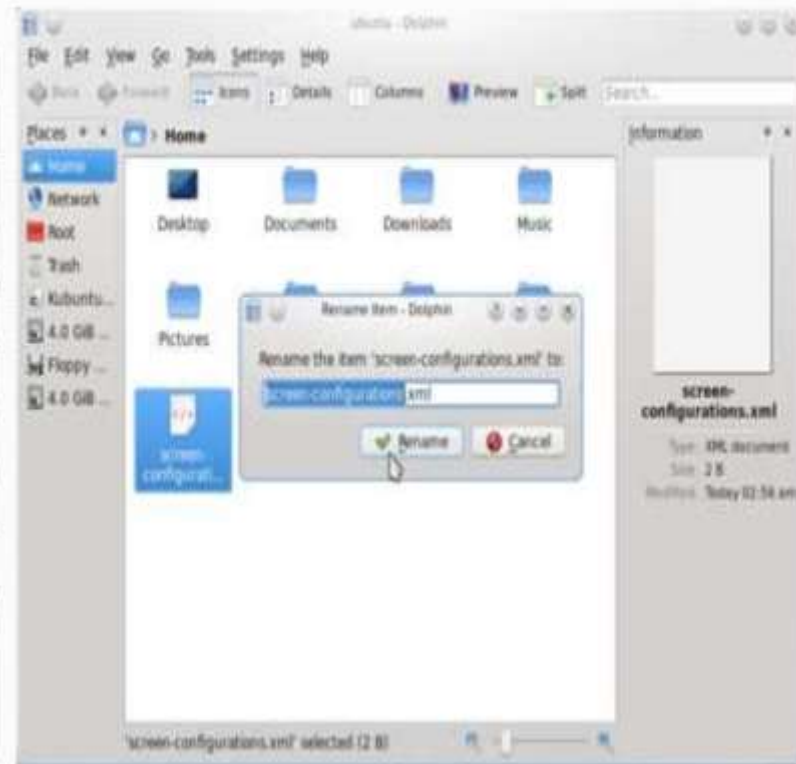


KDE ENVIRONMENT

Renaming Files

■ KDE, the rename would focus on the entire filename, including the extension. The renaming happens in a pop-up window, which you can confirm or cancel when you're done.

KDE



GNOME ENVIRONMENT

File Browser Preferences

Gnome

In Gnome, you see six main options and then a bunch of other minor options in each submenu.

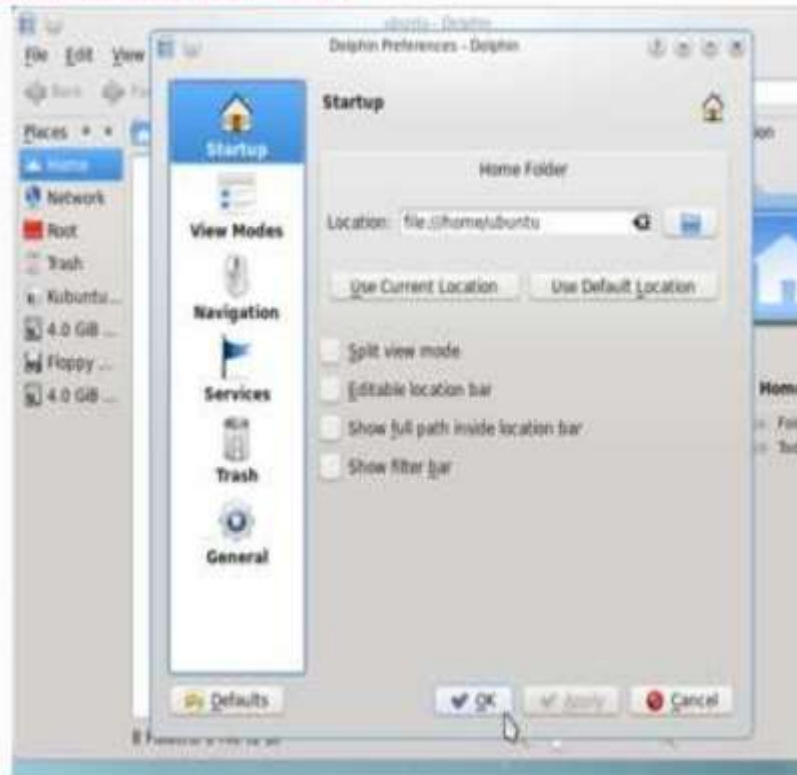


KDE ENVIRONMENT

File Browser Preferences

KDE

■ In the file browser preferences, you see five main options and then a lot of minor options in each submenu.

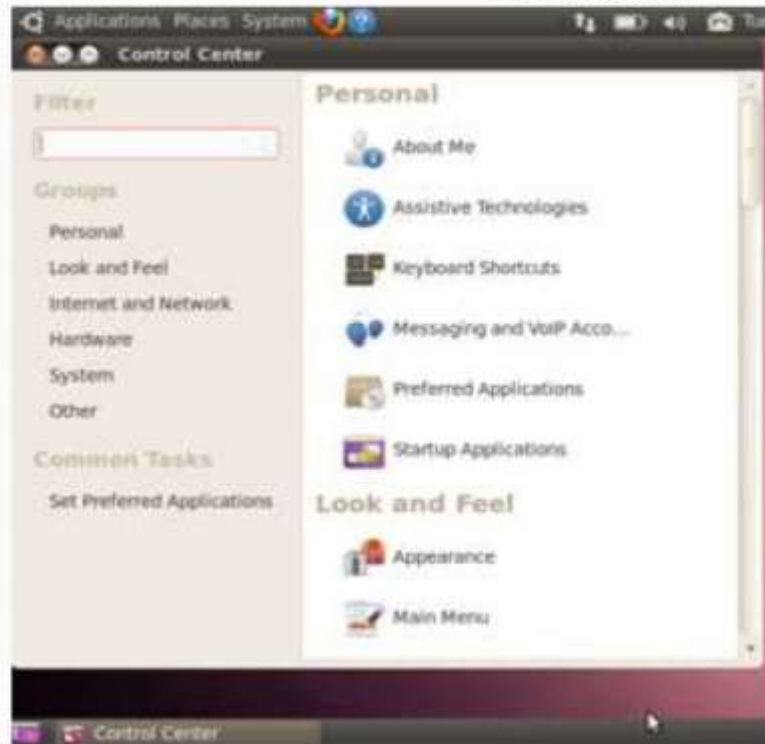


GNOME ENVIRONMENT

System Preferences

Gnome


■ In Gnome, by default, you access each preference one at a time by going to System > Preferences > and then selecting the item you want.



KDE ENVIRONMENT

System Preferences KDE

■ KDE has a System Settings central location for configuring system preferences. This can be accessed through the KMenu.



The screenshot shows the KDE System Settings application window. The window title is "System Settings" and it has a search bar in the top right corner. The window is divided into several sections:

- Look & Feel:** Contains icons for Appearance, Desktop, Notifications, and Window Behavior.
- Personal:** Contains icons for About Me, Accessibility, Default Applications, and Regional & Language.
- Network & Connectivity:** Contains icons for Network Settings and Sharing.
- Computer Administration:** Contains icons for Add and Remove Hardware, Date & Time, Display, Font Installer, Input Actions, Keyboard & Mouse, Multimedia, and Printer.

GNOME ENVIRONMENT

Panel Options

Gnome

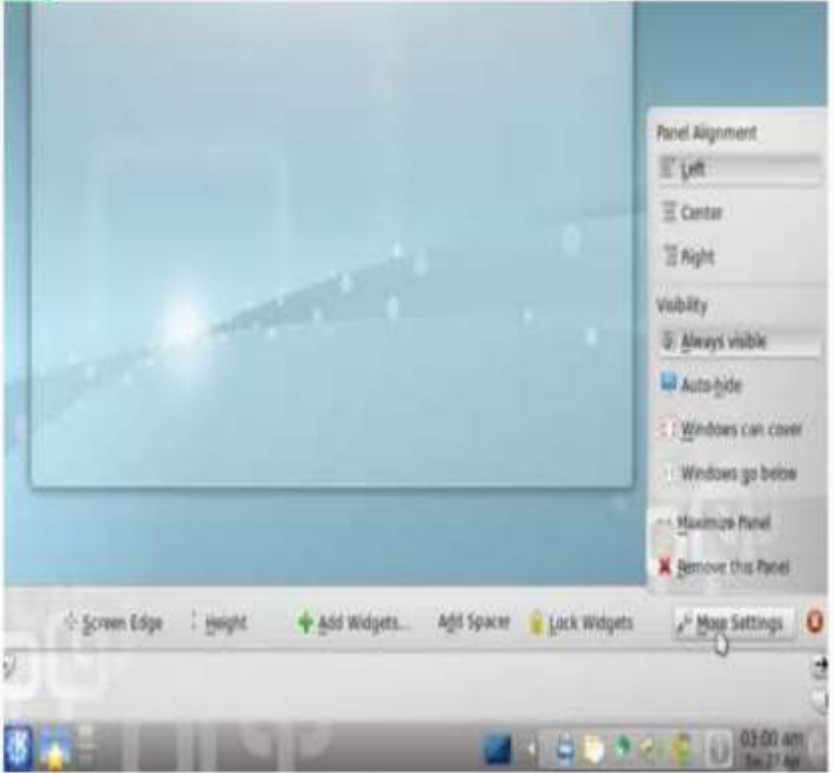
■ In Gnome, the options are straightforward for modifying the panel.



KDE ENVIRONMENT

Panel Option KDE

- In KDE, it used to be so simple to change as the panel was on the top instead of the bottom. It is now mysteriously called *screen edge*.

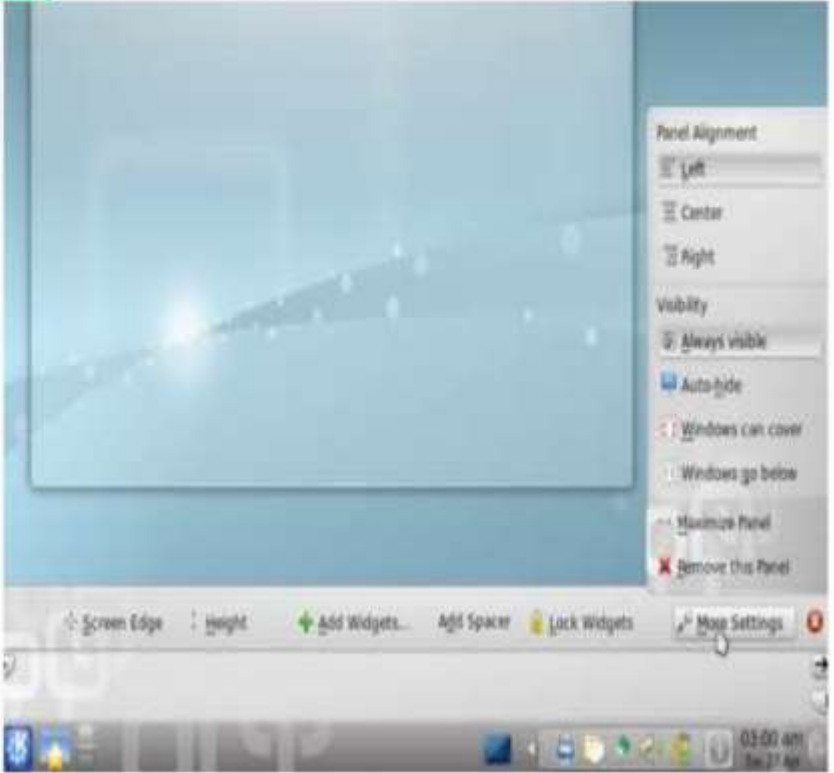


The screenshot displays a KDE desktop environment with a blue background. A context menu is open over a panel, showing options for Panel Alignment (Left, Center, Right), Visibility (Always visible, Auto-hide, Windows can cover, Windows go below), Maximize Panel, and Remove this Panel. The panel itself has icons for Screen Edge, Height, Add Widgets..., Add Spacer, Lock Widgets, and More Settings. The system tray at the bottom shows the time as 03:00 am on 06/27/09.

KDE ENVIRONMENT

Panel Option KDE

- In KDE, it used to be so simple to change as the panel was on the top instead of the bottom. It is now mysteriously called *screen edge*.



The screenshot displays a KDE desktop environment with a light blue background. A context menu is open over a panel, showing options for 'Panel Alignment' (Left, Center, Right), 'Visibility' (Always visible, Auto-hide, Windows can cover, Windows go below), 'Maximize Panel', and 'Remove this Panel'. The panel itself has icons for 'Screen Edge', 'Height', 'Add Widgets...', 'Add Spacer', 'Lock Widgets', and 'More Settings'. The system tray at the bottom shows the time as 03:00 am on 06/27/09.

GNOME ENVIRONMENT

Exiting

■ In Gnome, the exit option moved from in the System menu to its own applet. You click it and the options come down.



Gnome

KDE ENVIRONMENT

Exiting

■ In KDE, if you want to exit, you click on the KMenu and select *Leave* and then the next option and then the shutdown button.

KDE



GTK PROGRAMMING

- What is GTK+ program?
- The GTK+ is a library for creating graphical user interfaces. The library is created in C programming language. The GTK+ library is also called the GIMP Toolkit. Today, most of the GUI software in the open source world is created in Qt or in GTK+.

GTK PROGRAMMING

- The GTK+ is an object oriented application programming interface. The object oriented system is created with the Glib object system, which is a base for the GTK+ library.
- The GObject also enables to create language bindings for various other programming languages. Language bindings exist for C++, Python, Perl, Java, C# and other programming languages.

GTK LIBRARIES

- Pango library
- ATK library
- GDK library
- GdkPixbuf library
- Cairo library

GTK LIBRARIES

- It provides various data types, string utilities, enables error reporting, message logging, working with threads and other useful programming features.
- Pango - a library which enables internationalization.
- ATK - accessibility toolkit. This toolkit provides tools which help physically challenged people work with computers.

GTK COMPILATION

- To compile GTK+ applications, we have a handy tool called pkg-config.
- The pkg-config returns metadata about installed libraries. The pkg-config program retrieves information about packages from special metadata files.
- Command-`gcc -o simple simple.c`
- ``pkg-config --libs --cflags gtk+-2.0``

DOWNLOAD AND INSTALL GTK+

- Get glib-1.2.10.tar and gtk+-1.2.10.tar from www.gtk.org.
copy glib and gtk source gz and untar using xvf, then
cd glib*
./configure --prefix=/home/fanfan/local
make
make install
export LD_LIBRARY_PATH=/home/fanfan/local/lib
cd gtk*
./configure --prefix=/home/fanfan/local --with-glib-
refix=/home/fanfan/local
make
make install

DOWNLOAD AND INSTALL GTK+

Then create a gtkenv.sh

```
export LD_LIBRARY_PATH=/home/fanfan/local/lib
```

```
export PATH=/home/fanfan/local/bin:$PATH
```

```
alias gcc='gcc -Wall -g `gtk-config --cflags` `gtk-config --libs`'
```

Download gqcam-0.8.tar from <http://webcam.soruceforge.net/>

```
make
```

```
start gqcam
```