Linux on the desktop: A computer for Mom

Abstract:
My Mom belongs to a generation which grew up without computers. This article is probably valid for most people who first started to use a computer beyond the age of 60.

Introduction

Mom had actually been using computers for a few years but she had always a special machine where DOS would directly start a word processor application. Nothing else was installed and the only function of that computer was to be a better type writer.

Now that her kids have left the house and live somewhere else she wanted to use the Internet to see the latest photos of her grand children or to send e-mails.

My brother and sister had given Mom a Windows 98 computer because it would be "most user friendly" and probably best suited for her. After a few computer courses and long evenings with "please help me" telephone calls the idea of a computer for Mom was more or less given up.

There where simply too many problems:

- double click: it seems to be very difficult for older people to use a double click. Windows makes often use of double clicks to open things or start applications. That is basically impossible to use for older people. The cause of the problem seems to be that Mom would slightly move the mouse while double clicking. Therefore configuring the double click speed did not help.
- Windows saves your session when you log out. When you accidentally reconfigure the desktop or remove icons then they are not restored at next login. Once you have managed to create a mess on the desktop that mess stays there.
• Windows has no concept of home directory. You can store files all over the place and you never know where you are. Suddenly important files are "lost".
• To give remote support over telephone for graphical applications is very difficult if you can’t see what the other persons sees on her screen.

Linux on the desktop

After almost everybody had given up all hope I suggested: Let’s install Linux for Mom.

Linux gives you a choice of desktops and window mangers. You can pre-configure things that are impossible to configure in other operating systems. It’s a bit of work but it can be done.

I decided to use fvwm2 as desktop and window manger. People who used Linux long before kde and gnome will know fvwm. It used to be very popular on the Linux desktop until 1996. The advantages are:

• it is very light weight
• it has no concept of session (logout and login again and you see again the environment you are used to)
• it is extremely customizable via a single configuration file.

I configured her a menu bar where she could do everything she need:

• connect to the Internet
• fetch or send e-mail
• start a word processor
• start a web browser
• start a pocket calculator
• mount a CD with photos and start automatically the gqview photo viewer

I configured fvwm2 such that she would never need a double click. The only place where a double click was originally needed was to de-iconise applications. I changed it to open the applications with a single click. The double click problem was solved!

As word processor I used Ted (http://www.nllgg.nl/Ted/). It is basic but it can do everything Mom would need to write letters. The less complicated features an application has the better.

On the computer I configured a small home page for Mom. When she would login the Mozilla Firebird web browser would start automatically with that homepage. That homepage contained already documentation and instructions for her how to use the various applications.

For e-mail I used lfwmail. It is very simple but is still a fully functional and mime compatible e-mail program. Most important: I has no folders where you can lose you mail by accidentally putting it into a wrong folder. All e-mails are in a long list sorted by time. That’s exactly what Mom needed.

lfwmail is a webmail program but I installed the Apache Webserver locally so it is basically a local mail program with access via the web browser.
Going online

The concept of this computer was that everything should be straight forward to use. I used gpppwrap as an application to connect via modem to the Internet. The Internet service provider was pre-configured and gpppwrap has just 2 buttons: "go online" or "go offline". I changed gpppwrap to show the IP address of the computer when it was connected to the Internet. Why? Remote support!

Giving remote support

Don’t believe those people who tell you that graphical applications are more intuitive. Graphical applications can open quite confusing dialogs and if you don’t really see the screen of the person that you want to help it is often very hard to understand in which state an application is.

You don’t have that problem on the command line. To spell a few commands over the telephone is very easy and the other person simply has to type them in. Problem solved. So it was good have the possibility to start a xterm window. Under Linux you can fix almost every problem on the commandline.

In addition to that I configured sshd. If Mom would tell me the IP address of her computer then I could remotely log in and configure things or install software. Very convenient.

How it looked like

Here is a screen shot of the desktop. A CD with photos is being viewed with gqview and you see the lfwmail mail program in the web browser.
Conclusion

I had always known it: Linux is the most user friendly OS you can get. Now that is proven. You can configure a computer to fit exactly to the needs of the user(s). This is probably also a very good thing for companies, schools, clubs, ... One 

competent

system administrator can really increase the productivity by configuring the computers to the needs of the users.

Mom has now a computer and she can use it. In a few month she will be a more advanced user and then I will add more applications for her.

Links

- Some icons and the .fvwm2rc file which I used: dot_fvwm2rc.tar.gz
- gpppwarp and lfwmail can be found on my homepage: http://home.linuxfocus.org/~guido/
- gpppwarp is also described in this article: LinuxFocus March 2001, Using different ISPs for your Internet access
- The Ted word processor: http://www.nllgg.nl/Ted/
- The gqview photo viewer: http://gqview.sourceforge.net/

Remarks

I have done the above setup with Redhat 7.3. Recently I had to try it on Mandrake 9.2. Mandrake 9.2 has even packages in the contrib area for fvwm and fvwm2 however you get a permanent busy cursor when you run them. This is because mandrake does a "xsetroot -cursor_name watch" in /etc/X11/Xsession. To solve this add "/usr/X11R6/bin/xsetroot -cursor_name left_ptr" in the start script for fvwm in /etc/X11/wmsession.d. On top of that mandrake seems to have some race conditions in the initialisaton of X11 which you can solve with a sleep (not nice):

```bash
# /etc/X11/wmsession.d/09fvwm2 file:

NAME=Fvwm2
EXEC=/usr/X11R6/bin/fvwm2
DESC=A popular window manager
SCRIPT:
sleep 1
/usr/X11R6/bin/xsetroot -cursor_name left_ptr
sleep 1
exec /usr/X11R6/bin/fvwm2
```