Using Linux in a Windows world

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Introduction

Linux users stumble upon many problems when interacting with the Windows-using world. Most of these problems arise from Windows "features" designed to prevent interoperability.

This lecture will show you how to solve some of the most frequent problems.

I hope that after this lecture you will boot into Windows much less than you did before, and perhaps even remove Windows enitrely from your HD.

Problems discussed

- Files
  - Office files (Word, PowerPoint, Excel)
  - Executable files (Viruses, Flash Animations, Legacy apps)
  - MultiMedia files - (QuickTime, Flash)
- Networking
  - MSIE-only websites
  - Messengers
  - P2P networks (Kazza, Gnutella, AudioGalaxy, Napster)
  - Local File sharing (SMB)
  - Remote access
- Games
- Anything Else?

Office Files

Problem: People/Sites/Organizations are sending you files in properiatary DOC/PPT/PPS/XLS format.

Solutions:

1. Tell them not to - It works! Send a **polite** e-mail asking for the file in a standard format such as TXT, PS or PDF. Don't forget to include instructions how to do it: For PS, all they have to do is install a PostScript printer and print to file. This way, you will teach the sender why sending files in this format is wrong.
2. Use a free office suite - If the document is in English, you can see it quite well using a combination of the free office suites or apps available: KOffice, OpenOffice, AbiWord, gnumeric, etc.
3. Run a Windows VM - We will discuss this solution later.

Word (DOC) Files - antiword

If you got a hebrew DOC file and you only need the text, you can use **antiword** - a utility to extract text from Word documents.

After installing antiword, you should put the files `fontnames` and `8859-8.txt` in your `~/.antiword` directory, and then run antiword by typing:

```
antiword -m 8859-8.txt filename.doc
```

which will output the text of the document to stdout. If you wish to view the hebrew right-to-left, you can use **bidiv** to reverse the hebrew, and then pipe it all to **less** for viewing on a terminal with hebrew fonts, as shown below:

```
xterm -fn heb6x13
antiword -m 8859-8.txt filename.doc | bidiv | less
```

For more information about Hebrew and Linux, ask Tzafrir.

Executable Files

Problem 1: Someone sent you an e-mail worm with "New photos from the party" or asking for your advice.

Don't open it!

Problem 2: Someone sent you an EXE file saying that this is a real funny joke, and which is actually a flash animation.

It isn't that funny anyway!

Problem 3: Your boss/school wants you to use some specific old Windows 3.11/95 app that does some very specific stuff.

Switch schools/jobs!

Problem 4: You get a free cd-rom enclosed with some other product that promises some presentation/game inside.

They're just trying to sell you stuff!

Problem 5: Your stupid bank has a windows-only app for its online banking access, that was written in unportable JAVA.

Switch banks!

WINE Development HQ

A free implementation of Windows for Unix.

If you can't beat 'em - Emulate!

Wine is an implementation of the Windows 3.x and Win32 APIs on top of X and Unix. `wine` is a recursive acronym standing for "wine is not an emulator"

With wine, you can run windows excutables on linux as easily as you can run them on windows. For example `wine notepad.exe` will load the windows notepad (if you have `notepad.exe` in the current directory).

Wine may be setup to either use an existing installation of M$-Windows, or run without Windows on a clean system.

Wine works best with simple applications, especially those written for Win3.1.

Wine spinoffs

Wine has been the basis for some commercial projects:

- CodeWeavers Crossover plugin - designed for MultiMedia apps.
- TRANSGAMING TECHNOLOGIES WineX - designed for DirectX games.
- LindowsOS - A whole OS based on wine.

Still having problems?

Problem: Wine doesn't work for some of the apps I'm using.

Solution: Use VMWare!

VMWare emulates an entire virtual Intel-based machine on your Intel hardware. On this virtual machine you can run any OS such as DOS, XINU, Solaris, Linux or even Windows.

You will ofcourse need a Windows license to use this, and also to purchase VMWare.

VMWare enables you to use a real partition on your HD, a virtual HD that is kept as a file on your system, or a combination of both.

VMWare is a generic solution for almost all Linux/Windows interaction problems. For more information, see the website.

MultiMedia files

Problem: I've found this great movie/trailer/sound file but I can't play it.

Solution: Try `mplayer` for AVI/MPEG/ASF/WMV files. Try `mtv` for VCDs. For non-sorenson QuickTime files use `xanim`-based players. Other media files - check the MultiMedia lecture.

For sorenson-codec QuickTime files, or other unsupported windows media, use the crossover plugin from codeweavers to run QuickTime.

For Windows media streams, use ASFRecorder to save them to disk.

Networking Linux and Windows

MSIE-only websites

Problem: A website tells me I must use MSIE to visit the site, or works only with MSIE.

Solutions:

1. Tell them not to - Write a polite email to the site administrator (which can be found by running whois on the domain) telling them that they are losing buisness by making their site non-accessible. Also, point out the fact that search engines such as Google will not index their site, as they are blocked as well.
2. Stop using those sites - If a commercial site doesn't want you, don't give them your money. If they start losing customers, they will learn to treat you well.

3. Make your browser spoof IE - you can tell Mozilla or Konqueror to send a different user-agent string to sites.
4. Debug the site - You can view the JavaScript code the site and find out what it meant to do and do it yourself. You can use Mozilla's DOM inspector to bypass hidden fields, etc.

Messengers

Problem: All my online buddies use ICQ/AIM/Yahoo/MS Messanger

Solutions:

1. If you're using all the above try Everybuddy which lets you connect to all above messangers.
2. If you only need ICQ, use LICQ, which is the most popular ICQ client on Linux, and supports console, qt, and gtk GUIs.
3. There are many clones and official versions for all the messengers. For example, there is ICQLite at `http://lite.icq.com/`.

P2P Networks

Problem: I want to get all those c00l mp3s and vids from p2p networks.

Solutions:

1. Gnutella (=Morpheus) - There are many open-source gnutella clients for Linux such as Qtella or LimeWire .
2. audiogalaxy have released a native Linux client that can be used with their web interface.
3. KaZaa (=FastTrack) - can be accessed via giFT GNU Internet File Transfer , which is an open-source client.

SAMBA file and printer sharing

Problem: My friend has a share at `\\HISPC\STUFF` and I want that stuff.

Problem: My friends ask me to share my stuff otherwise I can't download stuff from their shares.

Problem: I want to print on my friend's printer, or he wants to print on mine.

Solution:

SAMBA is a complete implementation of the SMB protocol, which is used for (among other things) file and printer sharing between Windows machines.

SAMBA allows access to remote shares and printers, and sharing of local files and printers.

Remote Access

Problem: I have a Windows PC, but it's not here and I want to use it.

Problem: My friend has a Windows PC and he needs some help using it, but I'm not there.

Problem: I need access to my Linux desktop, but I'm now on a Windows PC.

Solution:

VNC lets you connect from any desktop to any other desktop over an IP network.

With TightVNC you can even connect over a slow dialup link.

A secondary machine with a VNC server can be a useful solution for running Windows apps.

Games

Problem: I want to play c00l games with my friends or alone.

Solutions:

1. There are many games written for linux. Many can be found on .
2. and other games have native Linux versions.
3. LOKI have created Linux ports of many popular Windows games before they were closed.
4. WineX lets you run some Windows games on Linux.

But I...

Problem: I need Photoshop for image editing

Solution: Use The Gimp Instead.

Problem: What do YOU need Windows for?

Solution: Nothing!