

Interoperabilnost LINUX-Windows

It is easily possible
for Linux & Windows
to coexist & even work together.

1. Crossplatform software
2. File formats
3. Remote control
4. Samba
5. Running Windows in Linux
6. Running Linux in Windows

A lot of software
will run on both Windows & Linux.
Most is open source.

Examples:

Mozilla/Netscape/Firebird (Web)

Thunderbird (email)

OpenOffice.org (office)

Adobe Acrobat Reader (PDF)

Gaim (IM)

Dia (diagramming)

Audacity (sound editing)

The GIMP (image editing)

Nmap (port scanning)

Real Player (sound)

In the area of Web development,
you can go LAMP
(Linux, Apache, MySQL, PHP or Perl or Python)
or WAMP
(Windows, Apache, MySQL, PHP or Perl or
Python).

Of perhaps more importance
is the ability to share file formats
between Windows & Linux.
With true file format compatibility,
it shouldn't matter if you're using
Windows, or Linux, or Mac OS X.

Examples of file format interoperability:

- TXT
- HTML, plain text email, IM
- PDF
- DOC, XLS, PPT
- CSV, TSV
- ZIP
- JPG, GIF, PNG, TIFF, PSD
- MPG, AVI, WMV
- MP3, OGG, WMA, RA

Every office needs an office suite –
word processor, spreadsheet, presentations.
OpenOffice.org is an open source office suite
that runs on Windows & Linux.
www.openoffice.org

OpenOffice.org is powerful,
easy to use,
& featurecomplete.

You can create PDFs from any document.
And, OOO has one particularly killer feature:
it can read *and* write
Microsoft Office file formats!

Some caveats:

Conversion is not 100%.

Microsoft has not opened its file formats,
so all work is reverse engineered.

Using VNC

it's possible to remotely control
Linux & Windows (& Mac OS X) machines.
VNC is free, open, & works well.

www.tightvnc.com

www.realvnc.com

VNC stands for Virtual Network Computing.
You can log in (securely, using SSH, if you'd like)
& control
Windows from Linux,
Linux from Windows,
Mac OS X from Windows or Linux,
& on & on.

Samba

Samba is one of the most important pieces of software in existence today.

www.samba.org

It's an open source reverse engineering of Microsoft's SMB (now CIFS) protocol.

In simpler terms, it allows Windows & Linux (& Mac OS X) to share files, share printers, & authenticate.

Linux machines can act as
file servers,
print servers,
or PDCs/BDCs,
serving to Linux or Windows clients.
Linux clients can connect
to Windows shares,
Windows printers,
Windows Domains,
or Windows ADS Domains.

Got a Windows file server? Replace it with a Linux box running Samba. Your Windows clients will never know. And Samba is a superb file server.

Or, if you're allowing client machines to serve files, Windows machines can share files & folders, Linux machines can share files & folders, & everyone can play nice together.

To configure Samba server on a Linux box, you're really editing `/etc/samba/smb.conf`. It's a welldocumented, wellcommented text file which you can edit by hand.

However, a variety of GUI tools are available to make editing `smb.conf` easier.

- SWAT
- YAST
- Webmin
- KSambaPlugin

SWAT

SWAT is provided by the Samba group. Also free, it's a Webbased tool for editing smb.conf.

us4.samba.org/samba/docs/man/howto/SWAT.html



The screenshot shows the SWAT web interface. At the top, there is a horizontal navigation bar with seven buttons: HOME (house icon), GLOBALS (globe icon), SHARES (folder icon), PRINTERS (printer icon), STATUS (info icon), VIEW (magnifying glass icon), and PASSWORD (key icon). Below the navigation bar, the main content area has a light beige background. It starts with the heading "Welcome to SWAT!" followed by the instruction "Please choose a configuration action using one of the above buttons". Below this is a section titled "Documentation" with a bulleted list of links:

- **Daemons**
 - [smbd](#) - the SMB daemon
 - [nmbd](#) - the NetBIOS nameserver
- **Administrative Utilities**
 - [smbstatus](#) - monitoring Samba
 - [SWAT](#) - web configuration tool
 - [smbpasswd](#) - managing SMB passwords
 - [make smbcodepage](#) - codepage creation
 - [testparm](#) - validating your conf file



HOME



GLOBALS



SHARES



PRINTERS



STATUS



VIEW



PASSWORD

Share Parameters

Choose Share

h:\me: ▾

Delete Share

Create Share

Commit Changes

Reset Values

Advanced view

Base Options

[Help](#)

comment

Бс1matvz333ci3hnia

Set Default

[Help](#)

path

Set Default

Security Options

[Help](#)

guest account

nobody

Set Default

[Help](#)

read only

No ▾

Set Default

[Help](#)

create mask

0750

Set Default

[Help](#)

guest list

No ▾

Set Default

[Help](#)

hosts allow

Set Default

[Help](#)

hosts deny

Set Default

Browse Options

[Help](#)

browseable

No ▾

Set Default

Miscellaneous Options

[Help](#)

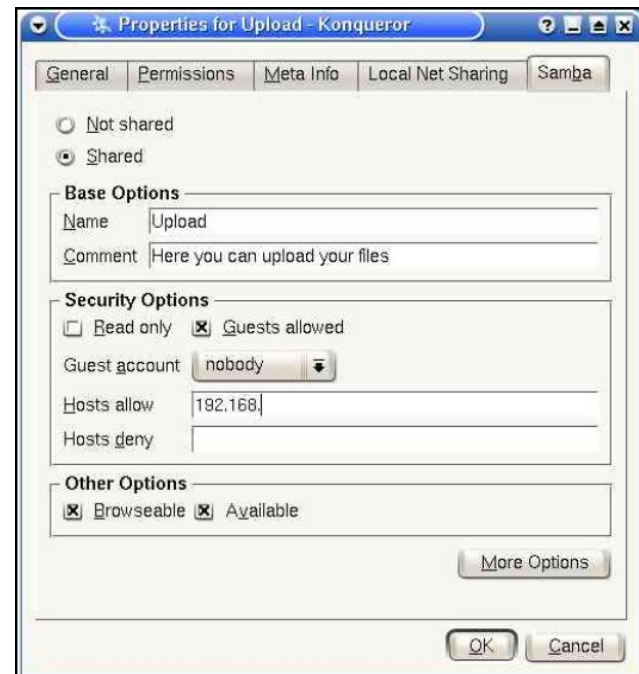
available

Yes ▾

Set Default

KSambaPlugin is a free, open source addon for KDE. It makes enabling shares as easy as rightclicking on a folder.

ksambakdeplugin.sourceforge.net



Samba Configuration - Control Center

File View Help

Index Search Help

- Appearance & Themes
- Desktop
- File Browsing
- Help
- Internet & Network
 - Desktop Sharing
- Serial
- File Sharing
- LAN Browsing
- Preferences
- Proxy
- Samba Configuration**
- Web Browser
- Windows Shares
- KDE Components
- Peripherals
- Power Control
- Regional & Accessibility
- Security & Privacy
- Sound & Multimedia
- System Administration
- YaST2 modules

Changes in this module require root access.
Click the "Administrator Mode" button to allow modifications in this module.

Basic settings Shares Printers Users Domain/Win Advanced

Samba Config file /etc/samba/smb.conf

Server identification

Workgroup WORKGROUP
NetBIOS Name MYCOMPUTER
Server string This is my Samba server

Security level

- Share Use the *share* security level if you have a home network or a small office network. It allows everyone to read all share names before a login is required.
- User
- Server
- Domain

Further options

Password server address/name

allow guest login Guest account nobody

encrypt passwords (Note: if you have a Windows version higher than NT 4 SP3 or 98 as Client this must be true)

Help
For detailed help about every option please look at: [man:smb.conf](http://man.samba.org)

Administrator Mode

It's really pretty easy to run Windows inside Linux.

I don't mean dualbooting.

I mean,

run Windows *as an application* inside Linux.

Several good options:

VMWare

Win4Lin

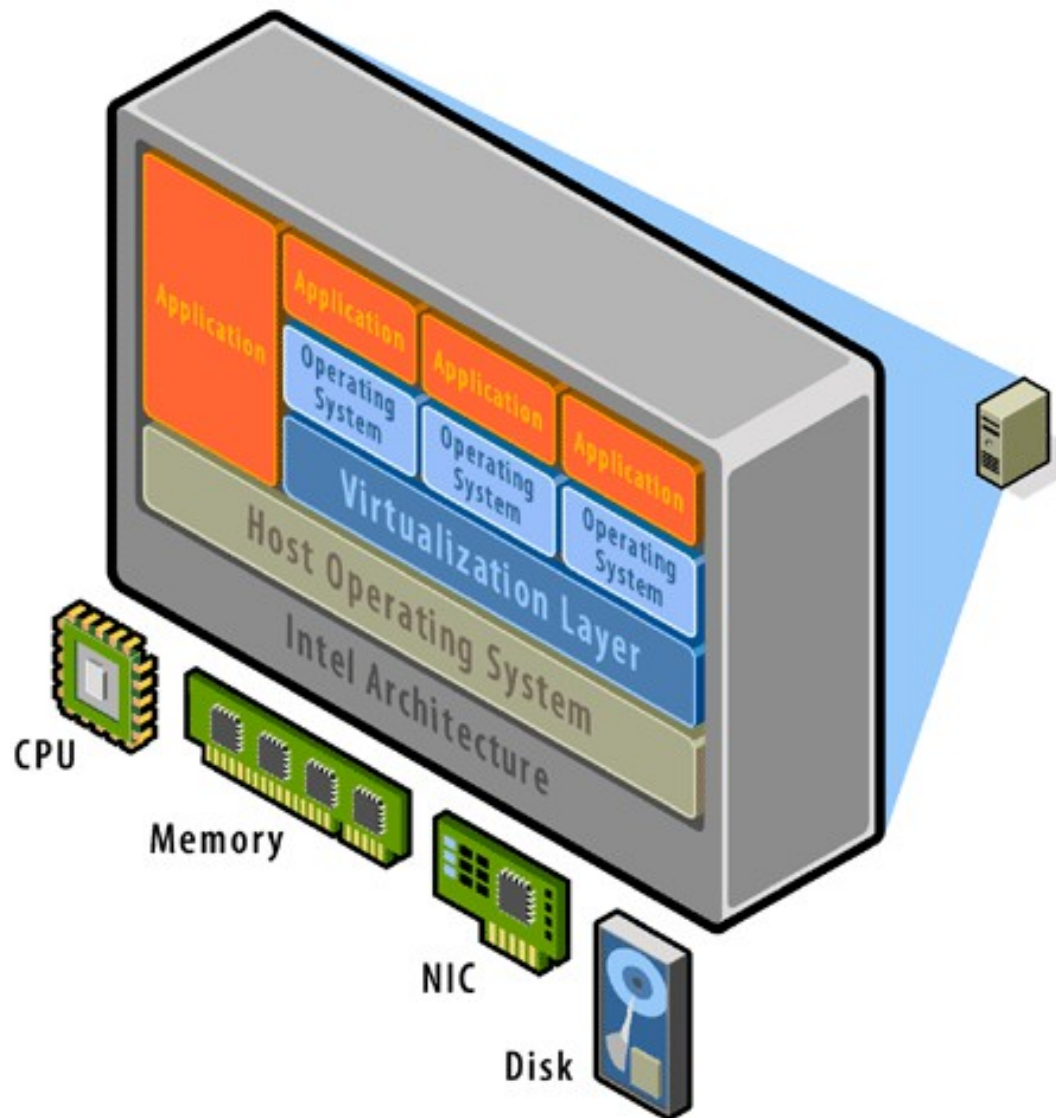
WINE

VMWare is a commercial, proprietary program that lets you run multiple operating systems on a single computer.

You can run Windows inside Linux, or Linux inside Windows.

\$189

www.vmware.com



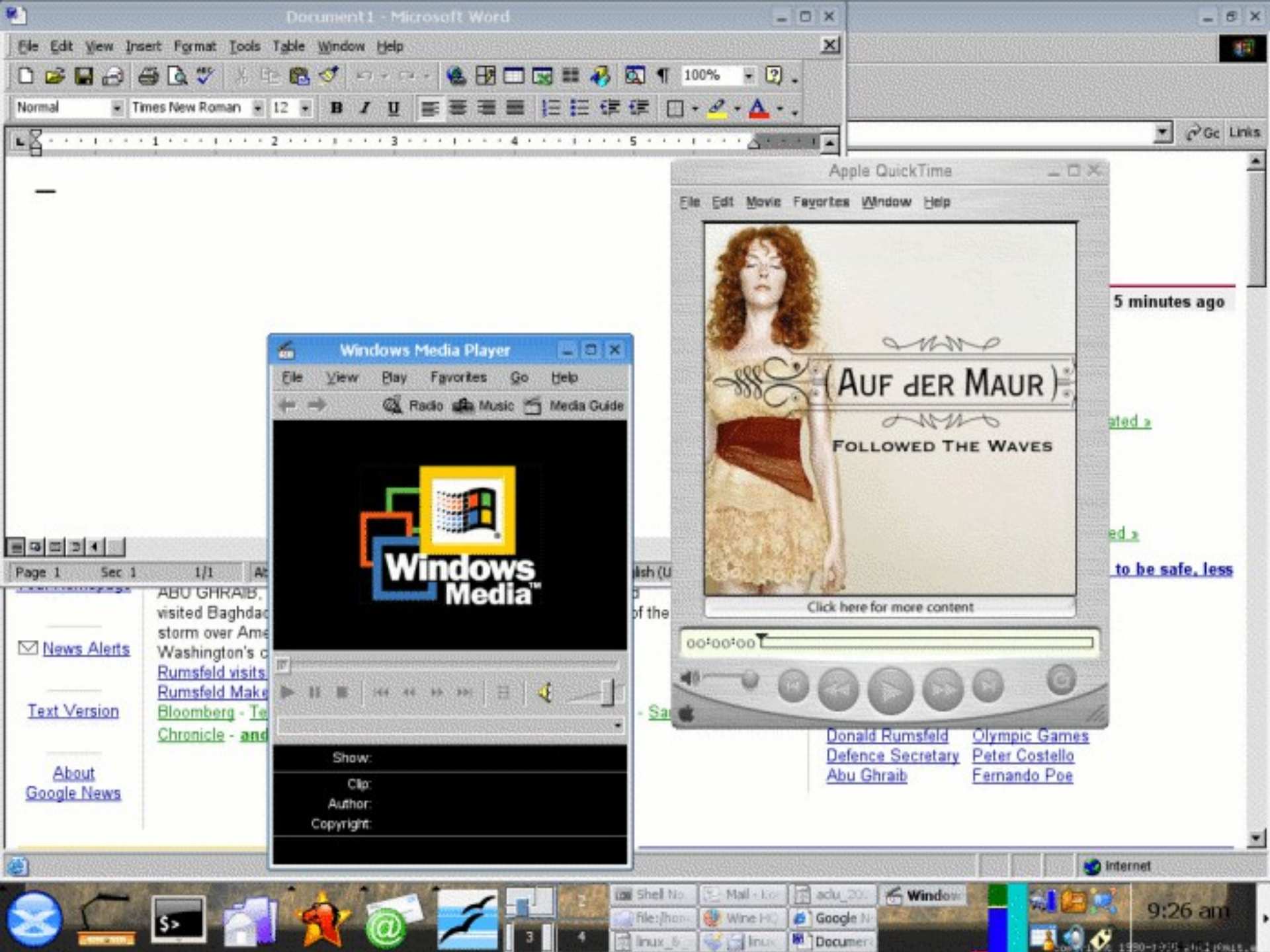
WINE

WINE

(which stands for “WINE Is Not an Emulator”)
is an open source project
reverse engineering
all the Windows APIs.

www.winehq.com

Not all Windows apps work,
but you can run a lot of Windows apps directly inside Linux.
The Windows apps think they're on Windows.
They have no idea they're really running in Linux.



File Edit View Insert Format Tools Table Window Help

Normal Times New Roman 12 B I U

1 2 3 4 5

Apple QuickTime

File Edit Movie Favorites Window Help



Click here for more content

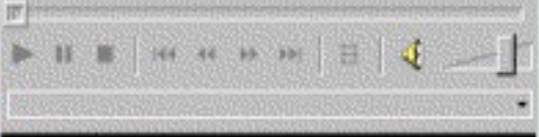


Donald Rumsfeld Olympic Games
Defence Secretary Peter Costello
Abu Ghraib Fernando Poe

Windows Media Player

File View Play Favorites Go Help

Radio Music Media Guide



Show:
Clip:
Author:
Copyright:

Page 1 Sec 1 1/1

ABU GHRAIB,
visited Baghdad
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Internet

9:26 am

Finally, you can run Linux inside Windows.
A variety of projects & software
make this possible:

VMWare

Cygwin

coLinux

Cygwin is a free, open source “Linuxlike environment for Windows”.

You can run a huge number of Linux tools, even GUIs like KDE and GNOME.

It’s a great way to provide SSH access to a Windows box.
www.cygwin.com

Cooperative Linux (AKA coLinux)

is a new free, open source project for running Linux inside Windows at native speeds.

www.colinux.org