MINISTRY OF FOREIGN AFFAIRS
ARAB REPUBLIC OF EGYPT

WORLD INTELLECTUAL
PROPERTY ORGANIZATION

WIPO NATIONAL TRAINING WORKSHOP ON INTELLECTUAL PROPERTY FOR DIPLOMATS

organized by
the World Intellectual Property Organization (WIPO)

and
the Institute for Diplomatic Studies

Cairo, December 13 to 16, 2004

THE OSS PARADIGM SHIFT

Document prepared by Dr. Sherif El Kassas, Deputy Director, Center for Academic Computing, The American University, Cairo

Open Source Software

- The Open Source Definition
  - Free Redistribution
  - Source Code
  - Allow the creation and distribution of Derived Works
  - Integrity of The Author's Source Code
  - No Discrimination Against Persons or Groups
  - No Discrimination Against Fields of Endeavor
  - …

Dec 13 to 16, 2004   WIPO National Training Workshop

`http://opensource.org/docs/def_print.php`

What are typical examples?

- Operating systems: Linux, FreeBSD
- Specialized servers: Apache, Sendmail, Samba, OpenLDAP
- Tools: GCC, Perl, PHP, XML processors
- Office: OpenOffice, StarOffice,
- Middlewares: JONAS
- DBMS: MySQL, PostgreSQL
- Graphics: GIMP
- Security: Nessus, nmap, Snort, GPG, OpenSSL, OpenSSH

Dec 13 to 16, 2004   WIPO National Training Workshop

Who is using them?

- Business:
  - Amazon
  - Hotmail
  - SecurityFocus.com
  - Service providers (TE DATA)
- Universities
- Governments
- Individuals

Dec 13 to 16, 2004   WIPO National Training
Workshop

Motivation and support

Dec 13 to 16, 2004   WIPO National Training
Workshop

		1	2	3	4	5	6	7	8
1.	Inter-operability								
2.	Security								
3.	Respect to standards								
4.	Functionalities								
5.	Easy to use								
6.	Low Cost								
7.	Source code available								
8.	User Friendliness								
9.	Stability								
10.	Support and training								
11.	Politic reasons								
12.	Because IBM, HP, etc.								

`http://banners.noticiasdot.com/termometro/boletines/docs`
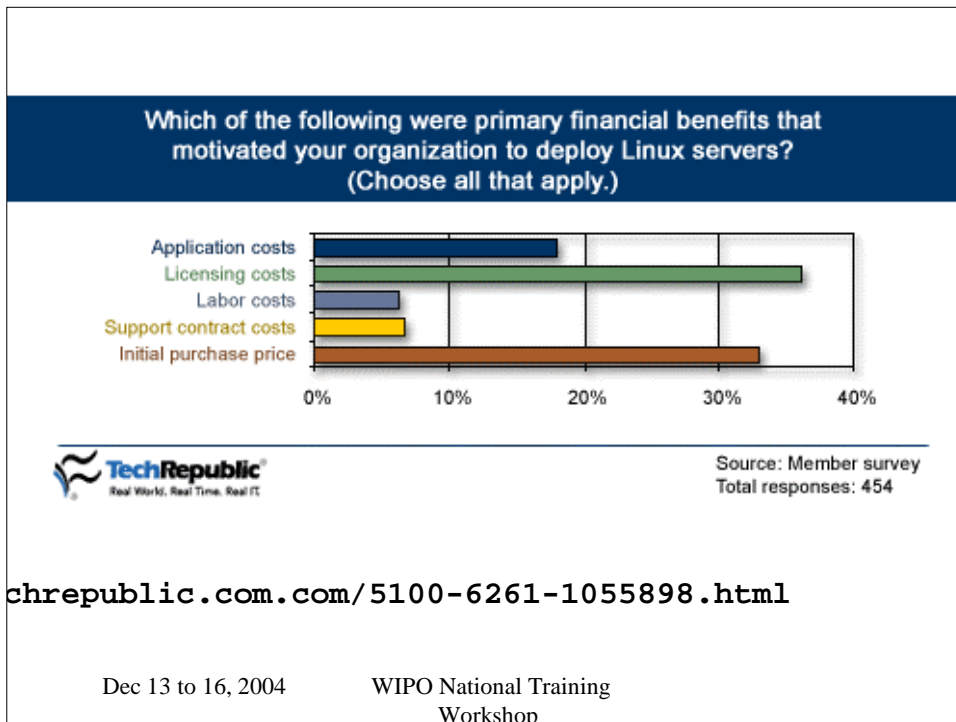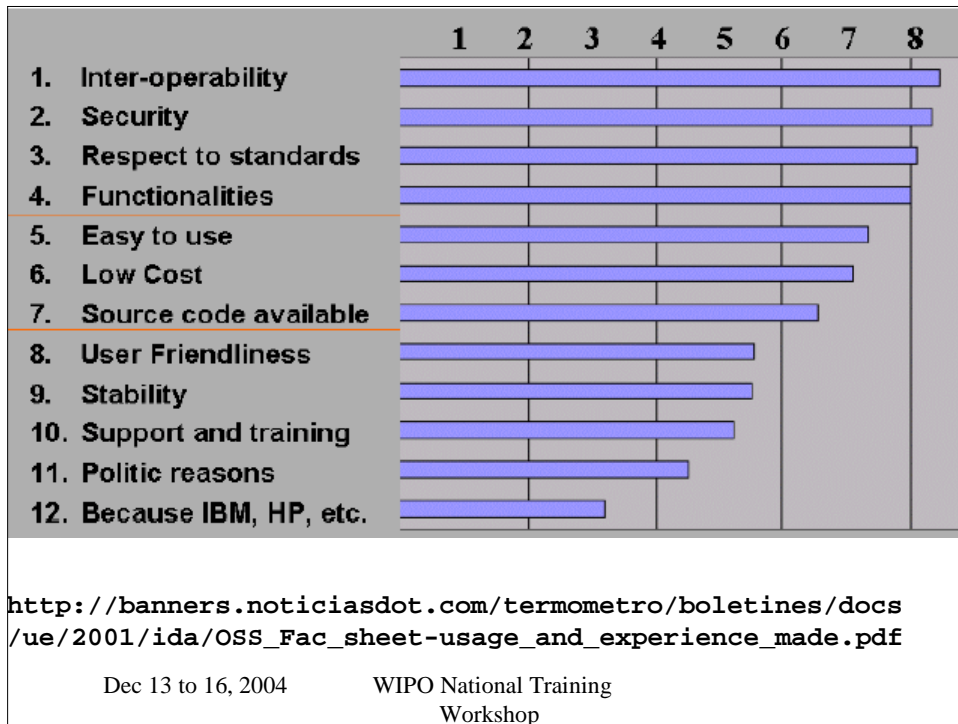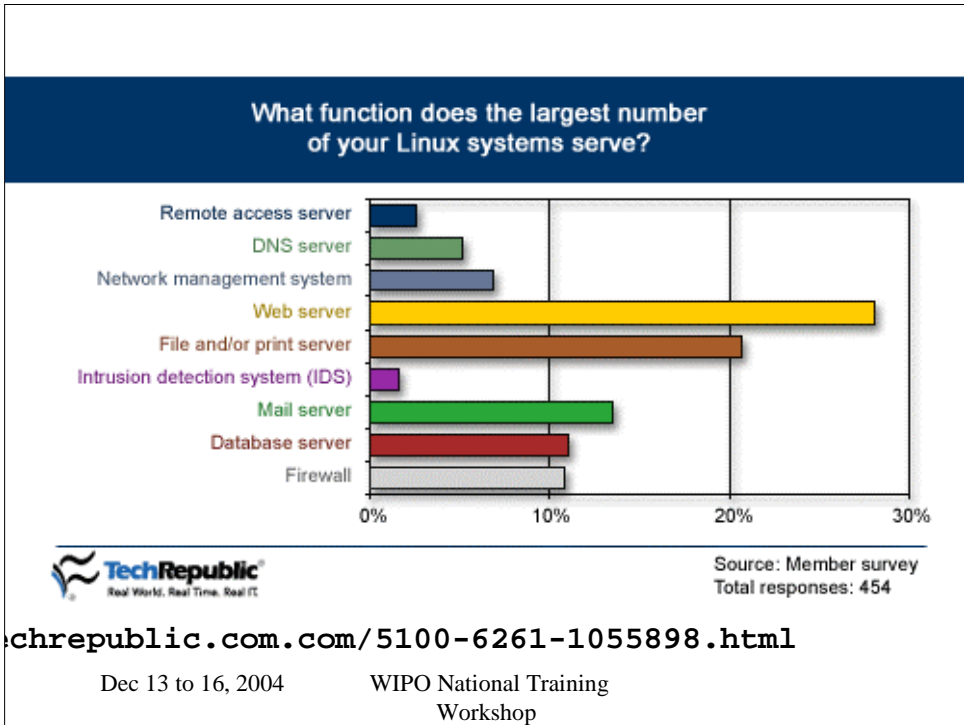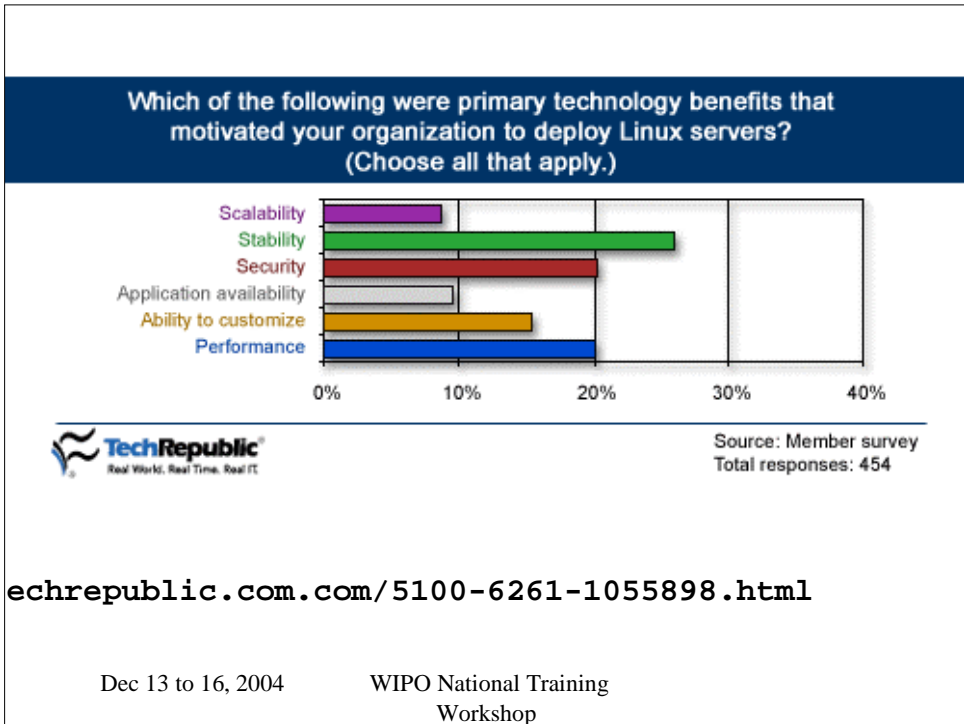`/ue/2001/ida/OSS_Fac_sheet-usage_and_experience_made.pdf`

Dec 13 to 16, 2004   WIPO National Training
Workshop

Which of the following were primary financial benefits that
motivated your organization to deploy Linux servers?
(Choose all that apply.)

Application costs
Licensing costs
Labor costs
Support contract costs
Initial purchase price

0%   10%   20%   30%   40%

TechRepublic®
Real World. Real Time. Real IT.

Source: Member survey
Total responses: 454

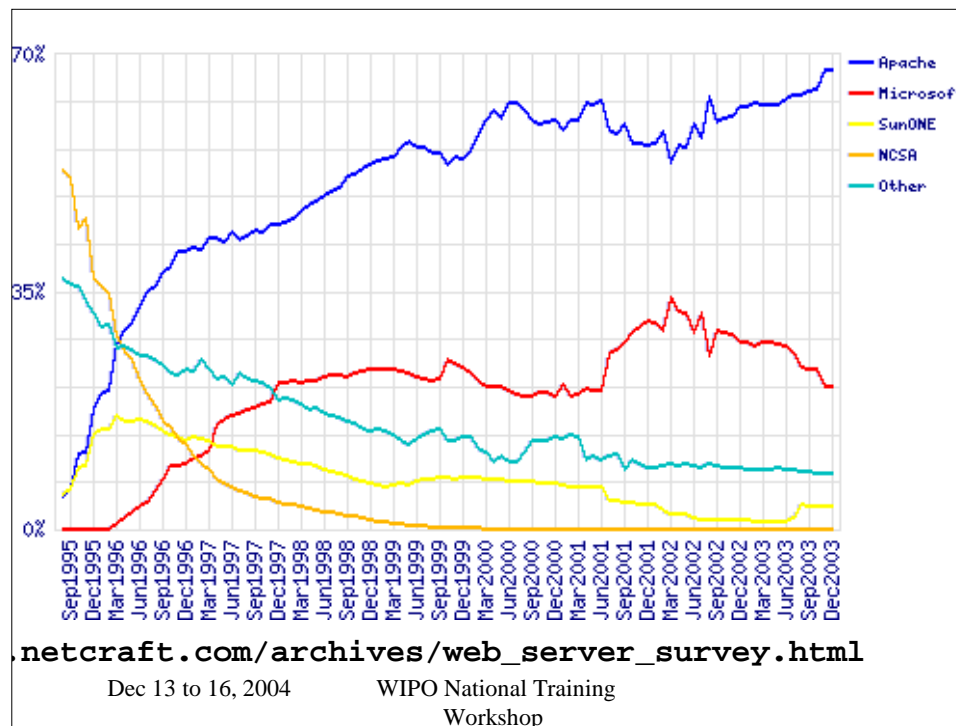`chrepublic.com.com/5100-6261-1055898.html`

Dec 13 to 16, 2004   WIPO National Training
Workshop

Which of the following were primary technology benefits that motivated your organization to deploy Linux servers? (Choose all that apply.)

- Scalability
- Stability
- Security
- Application availability
- Ability to customize
- Performance

0%   10%   20%   30%   40%

TechRepublic
Real World. Real Time. Real IT.

Source: Member survey
Total responses: 454

echrepublic.com.com/5100-6261-1055898.html

Dec 13 to 16, 2004   WIPO National Training
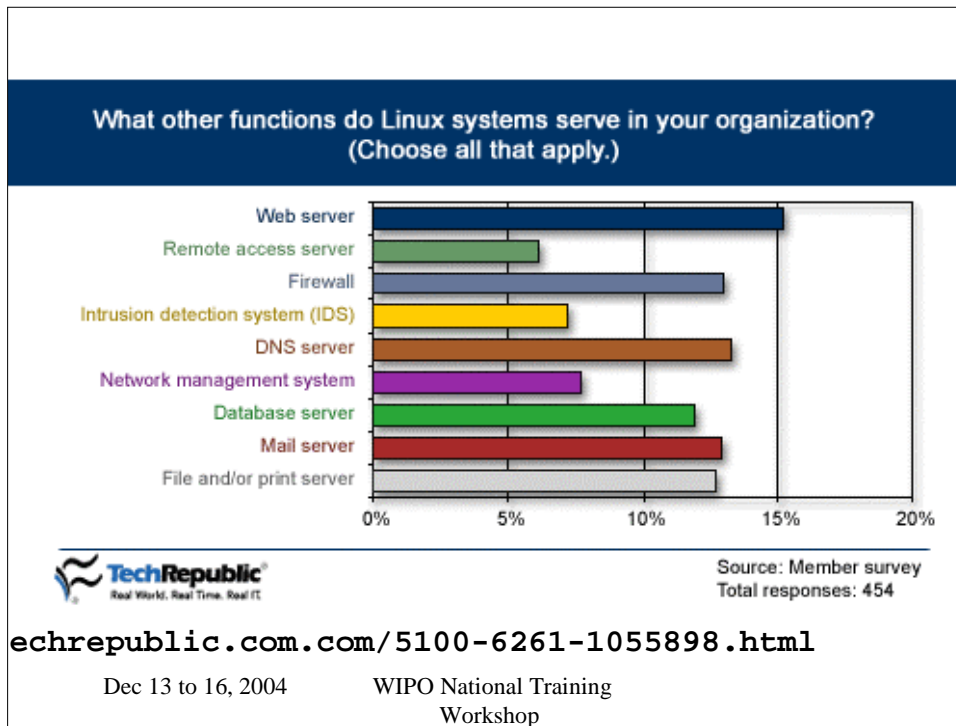Workshop

What function does the largest number of your Linux systems serve?

- Remote access server
- DNS server
- Network management system
- Web server
- File and/or print server
- Intrusion detection system (IDS)
- Mail server
- Database server
- Firewall

0%   10%   20%   30%

TechRepublic
Real World. Real Time. Real IT.

Source: Member survey
Total responses: 454

chrepublic.com.com/5100-6261-1055898.html

Dec 13 to 16, 2004   WIPO National Training
Workshop

What other functions do Linux systems serve in your organization? (Choose all that apply.)

Web server
Remote access server
Firewall
Intrusion detection system (IDS)
DNS server
Network management system
Database server
Mail server
File and/or print server

0%   5%   10%   15%   20%

TechRepublic
Real World. Real Time. Real IT.

Source: Member survey
Total responses: 454

echrepublic.com.com/5100-6261-1055898.html

Dec 13 to 16, 2004   WIPO National Training
                                          Workshop

70%

Apache
Microsoft
SunONE
NCSA
Other

35%

0%

Sep1995 Dec1995 Mar1996 Jun1996 Sep1996 Dec1996 Mar1997 Jun1997 Sep1997 Dec1997 Mar1998 Jun1998 Sep1998 Dec1998 Mar1999 Jun1999 Sep1999 Dec1999 Mar2000 Jun2000 Sep2000 Dec2000 Mar2001 Jun2001 Sep2001 Dec2001 Mar2002 Jun2002 Sep2002 Dec2002 Mar2003 Jun2003 Sep2003 Dec2003

.netcraft.com/archives/web_server_survey.html

Dec 13 to 16, 2004   WIPO National Training
                                          Workshop

OSS political support

EC administration

France

Germany

Belgium
Italy
Sweden

Spain

OSS realisations

anners.noticiasdot.com/termometro/boletines/docs/paises
a/ue/2001/ida/OSS_Fact_sheet-market_structure.pdf

Dec 13 to 16, 2004   WIPO National Training
Workshop

IT Vendors

Dec 13 to 16, 2004   WIPO National Training
Workshop

HW/SW vendors supporting Linux

- IBM
  - Linux on Intel servers, mid-range AS/400 (iSeries) and mainframes
  - should unify IBM heterogeneous platforms
- HP
  - Linux in addition to HP-UX and Windows
  - develop on Linux, deploy on Linux, Windows and HP-UX

`idei.asso.fr/Commun/Conferences/Internet/OSS2002`
`Papiers/Valduriez.PDF`

Dec 13 to 16, 2004   WIPO National Training Workshop

SW vendors

- Netscape
  - Mozilla.org to manage development
  - NPL = compromise GPL/BSD
  - sale server software, services and content (with AOL)
- Oracle
  - commitment to Linux
  - high-value proprietary software

`idei.asso.fr/Commun/Conferences/Internet/OSS2002`
`Papiers/Valduriez.PDF`

Dec 13 to 16, 2004   WIPO National Training Workshop

Service vendors

- Linux distributors
  - RedHat, Caldera, SuSe, Conectiva, TurboLinux, MandrakeSoft, etc
  - Sale customer support
  - UnitedLinux.com to unify the various distributions
- Application Service Providers
  - ASP1
  - OSS and proprietary software as service

`i.asso.fr/Commun/Conferences/Internet/OSS2002`
`Papiers/Valduriez.PDF`

Dec 13 to 16, 2004   WIPO National Training Workshop

Open source vs. closed source security!

- "demand open source code for anything related to security"
- "Open Source Software certainly does have the potential to be more secure than its closed source counterpart. But make no mistake, simply being open source is no guarantee of security."

`.dwheeler.com/secure-programs/Secure-Programs-HOWTO.pdf`

Dec 13 to 16, 2004   WIPO National Training Workshop

Illustration: Linux server market revenues, in Million $
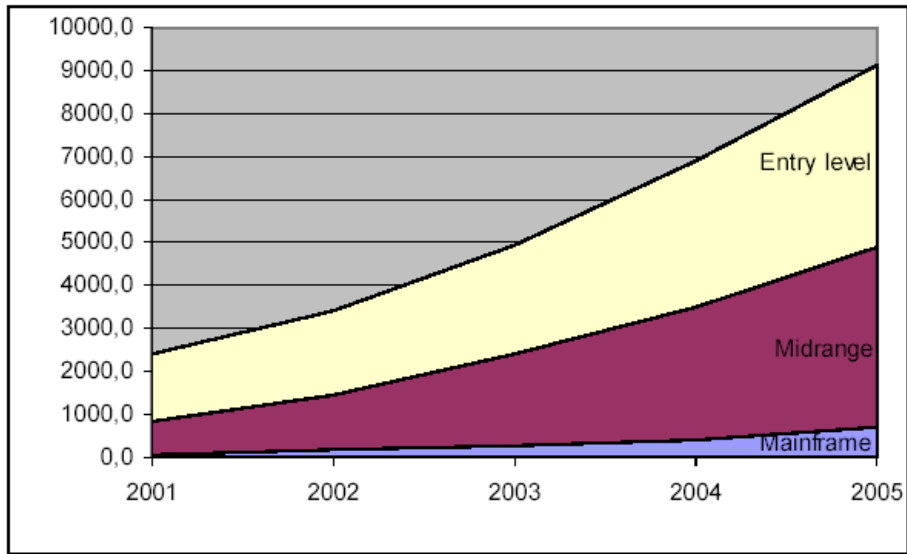
anners.noticiasdot.com/termometro/boletines/docs/paises
a/ue/2001/ida/OSS_Fact_sheet-market_structure.pdf

Dec 13 to 16, 2004   WIPO National Training
Workshop
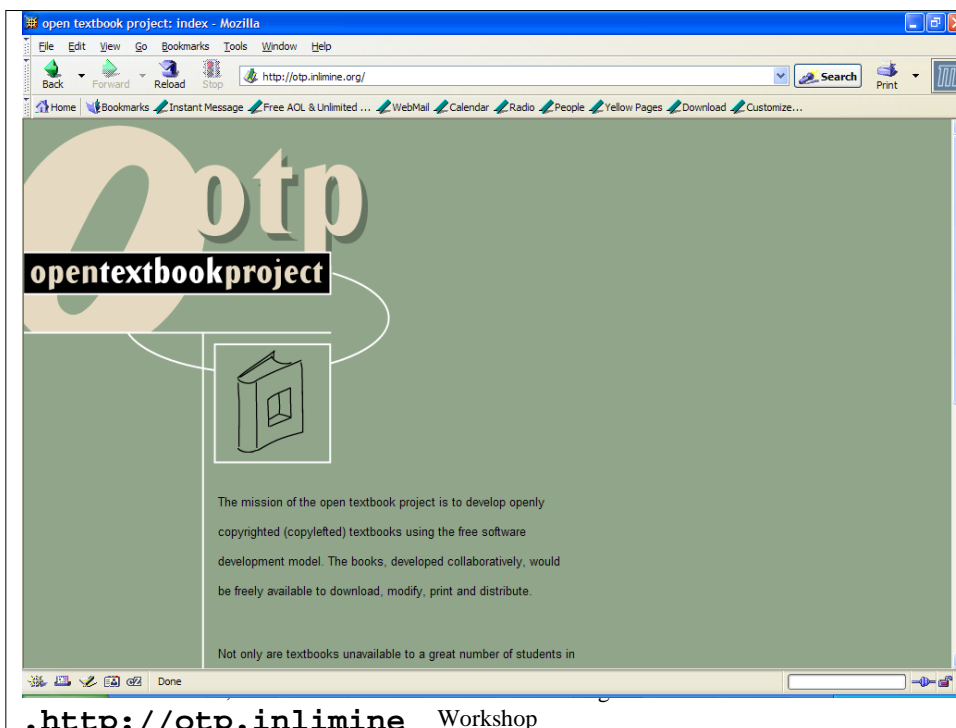
OSS In Education

Dec 13 to 16, 2004   WIPO National Training
Workshop

AT AUC

- The AUC mail system
- Computer science courses
  - Operating Systems
  - Security
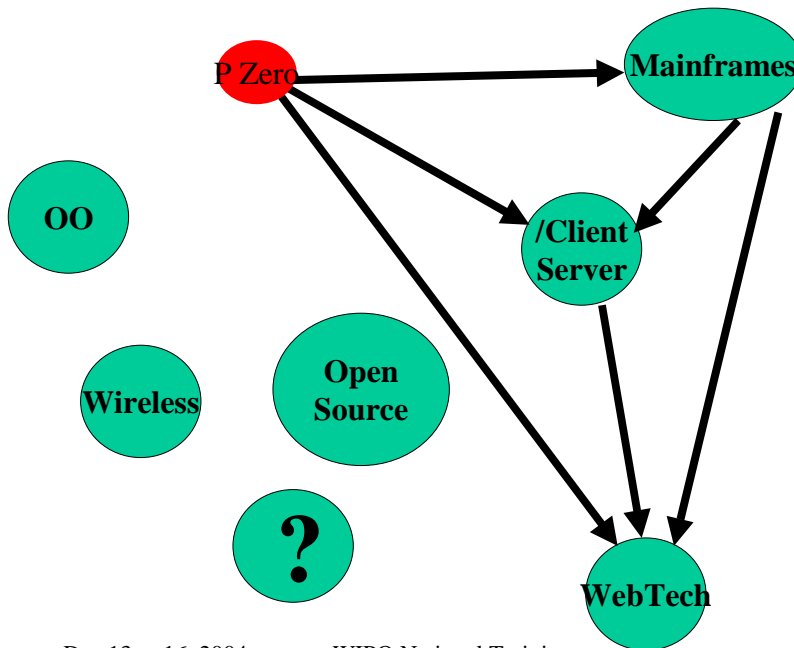 - Student Projects
  - Others...

Dec 13 to 16, 2004   WIPO National Training
Workshop

`.http://otp.inlimine`   Workshop

Is it a Paradigm Shift?

Dec 13 to 16, 2004   WIPO National Training
Workshop

Dec 13 to 16, 2004   WIPO National Training
Workshop

"As the rule goes, *when a paradigm shift occurs, everyone goes back to zero*, which brings people back *onto a level playing field or the same starting block*."

http://www.transknowformance.com/page.cfm?name=aprilnewsletter

Dec 13 to 16, 2004   WIPO National Training Workshop

Conclusions

- Is it a paradigm shift?
- It will not totally replace what we know
- But we can benefit from it greatly in:
  - CS and IT education
  - Research
  - IT security
- Others are building a new software (and copyright industry) based on new principals!

Dec 13 to 16, 2004   WIPO National Training Workshop

Questions?

Links:

sherif@aucegypt.edu

http://www.cs.aucegypt.edu/~skassas/oss/

Dec 13 to 16, 2004   WIPO National Training
                                          Workshop

[End of document]