

Providing public access to information on the Internet

An additional method to provide access to information

- **More and more useful information becomes available online on the Internet**
 - » free of charge
 - » by using standard, affordable hardware
 - » accessible by using only 1 integrated Internet client program (which includes client software for WWW, gopher, downloading by ftp, e-mail, Usenet...)
- **Therefore, offering public access to this information has become feasible in libraries and similar environments.**

Why libraries and information centers should offer access to the Internet

- **The links between documents in print and on CD-ROM with information on the Internet become increasingly important:**
 - » Many documents in print or on CD-ROM refer to information on Internet (or explain how to use the Internet)
 - » Many references to printed material can be found on the Internet (in particular, in the form of bibliographic databases)
- **Many potential users still lack the opportunity to access information on the Internet.**

Access to information versus access to networks

- **Many systems focus on offering access to Internet network “services” discussed in terms of protocols, NOT on offering access to information.**
- **This puzzles and confuses many inexperienced users.**
- **Even many information-oriented institutes, such as libraries, follow this road.**



How to offer access to the Internet? Many questions and possible answers

When you want to offer access to information on the Internet:

- » Many questions and problems arise.
Many decisions must be made.
- » No standard answers exist.
Optimal solutions depend on the local environment.
- » Everything must fit in the budget.



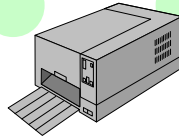
Questions & answers related to the workstations

- **Use the computers available for access to**
 - » the online public access catalogue
 - » CD-ROM products**or install dedicated (better?) machines?**
- **Use reservation lists for the public Internet access workstations?**
- **Allow users to connect their own hardware to the network?**



Questions & answers related to microcomputer hardware

- What should be the specifications of the client computers?
- Which video displays to install?
- Which spatial resolution and number of colours to use?
- Offer print facilities?
If yes: black and white, or colours?
- Add speakers or headphones, or disable sound?
- ...



Questions & answers related to server computers

- Where to keep the *Internet client software*:
on each client computer or on a server in the LAN?
- Where to keep the *WWW pages offered by the local institute*:
on each client computer or on a server in the LAN?
- When using a server computer in the LAN:
use an available server (for instance of a computer centre), or install an independent server (for instance at library level)?

Questions & answers related to data communication

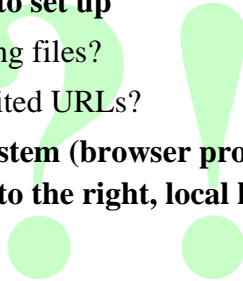
- **Which operating system and compatible TCP/IP network stack software to use?**
 - » *Microsoft Windows 95, 98, ME;*
 - » *Microsoft Windows NT4, 2000, XP...?*
 - » ...
- **How fast should the Internet connection be? Which type of Internet access to offer: modem(s) or ISDN, with (SLIP or) PPP; direct, continuous access;...?**

Questions & answers related to the browser software

- **Offer only 1 WWW client browser program? Or several WWW clients + other, more specialised programs for**
 - » e-mail,
 - » text chatting,
 - » Usenet News...
- **Which WWW client program to offer in Windows?**
 - » *Netscape,*
 - » *Microsoft Internet Explorer...*

Questions & answers related to the installation of the browser

- **How to set the numerous options in the WWW browser?**
In particular: How to set up
 - » caching of incoming files?
 - » the memory of visited URLs?
- **How to make the system (browser program) return automatically back to the right, local home page?**



Questions & answers related to additional software

- **Should a telnet client be offered on the public Internet workstation?**
If yes, then which one?
- **For public Internet workstations, additional software to view various types of files should be considered as candidates for installation**
(besides the programs that have already been incorporated in the WWW browser)



Internet workstations: examples of additional software

- *Java Virtual Machine!*
- *Adobe Acrobat PDF viewer/reader!*
- *Microsoft Word (or viewer only)!*
- *Microsoft Excel (or viewer only)!*
- *Microsoft PowerPoint (or viewer only)!*
- *Microsoft Access (or viewer only)*
- *Microsoft e-book reader*
- *Microsoft Media Player for sound and video!*
- *Apple QuickTime (various programs)*
- *Real player for sound and video*
- *Macromedia Flash viewer*
- *Macromedia Shockwave viewer*
- *OpenOffice*
- *some VRML viewer*



Questions & answers related to the personal disk space for users

- **Allow users to save files to diskette?**
- **Offer personal, private disk space to the user?**
If yes:
 - » temporary disk space on the client computer?
 - » more permanent, private space on a server in the LAN?
(If yes: Which network software to use for this?)



Questions & answers related to the personal files in the client

- **Allow users to apply and save personal files related to the Internet client software?**

for instance: client display options, visited URL's, cached pages (files), bookmarks = favorites = ..., cookies

- **Which method to use for this?**

- » Saving the files containing the personal settings on personal disk space
- » Allowing direct usage of personal portable computers

Questions & answers related to security risks on the client computers

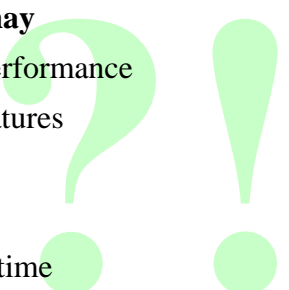
- **How to reduce the security risks on the client computer?**

- » At the level of the operating system
- » At the level of the Internet client/application programs (e.g. by blocking active contents: ActiveX components, Java applets,...)
- » By installing additional security software
- » ...

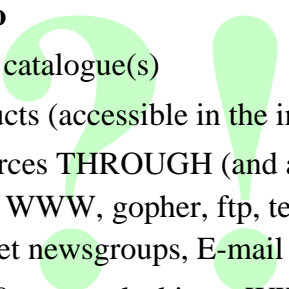


- **How to maintain disk backups?**
- **How to reinstall disk backups when required?**

Questions & answers related to upgrading of software

- **When to upgrade software?**
knowing that it may
 - ++ yield better performance
 - ++ offer more features
 - disturb users
 - cost money
 - cost personnel time
 - cost users time to adapt and learn the novelties
- 

Questions & answers related to the lack of integration

- **How to integrate access from each public access microcomputer to**
 - » the local library catalogue(s)
 - » CD-ROM products (accessible in the institute's LAN ?)
 - » information sources THROUGH (and also those ABOUT) the Internet (via WWW, gopher, ftp, telnet, locally accessible Usenet newsgroups, E-mail interest groups,...)
 - » WAIS or Z39.50 sources lacking a WWW gateway
 - **How to make clear the lack of integration existing today?**
- 

Questions & answers related to software levels and interactions

How to deal with the fact that the inexperienced user is confronted with various levels of software interacting at the same time:

- 1 Operating system + basic TCP/IP networking software
- 2 Browser + additional application software
- 3 Contents (both classical, static, hypertext + dynamic, active contents; interfaces to databases,...)

Questions & answers related to possible restrictions

- Offer the complete WWW or a (filtered) selection only?
- Offer also local access to Usenet News?
If yes: to which newsgroups?
- Develop and implement an Internet access and fair use policy? If yes: How to make this clear to users?
- Allow use without supervision or supervise users to avoid “misuse” according to the local policy?
- Allow use to adults only?
- Restrict the time of usage per user?

Questions & answers related to electronic mail

- Allow the use of e-mail systems through the WWW to read and send messages?
- Offer one or more e-mail client software packages on the workstations (like *Eudora*, *Netscape mail*, *Outlook Express*...)

If yes:

Then how to fill in automatically the reply address and the user name?

Then choose for deletion of messages from the e-mail server after downloading (and reading), or not?

Questions & answers related to marketing

- How to inform and attract potential users?
 - » Distribute leaflets about the service?
 - » Install posters about the service?
 - » Organise classes about Internet applications?
- Where to place the Internet client computers within the public access area?
Grouped or scattered around?
- How to receive feedback and evaluations?
- ...

Questions & answers related to “free or fee”

- **Charge for usage of online access facilities or not?**
Charge for usage of a printer or not?
If yes: How to collect fees?
- **How to make clear the distinction between information sources which are**
 - » directly accessible without passwords and free of charge
 - » more “hidden” and fee-based

Questions & answers related to personnel / staff

- **Is additional personnel / staff or a shift of functions required**
 - » to install and maintain the Internet access system?
 - » to guide users?
- **How to motivate, prepare and train the personnel when their tasks change?**
- ...

Questions & answers related to user guidance

- **How to assist first-time and inexperienced users?**
 - » Offer printed leaflets?
 - » Create and display posters near the public access PCs?
 - » Offer help page(s) in the WWW browser software?
- **How much effort should be spent in setting up WWW pages to guide users to information?**
- **How to optimise access for patrons with various disabilities?**

!! Task - Assignment !!

Read

Wayne, Richard

An overview of public access computer software management.

Computers in Libraries, June 2004, pp. 24-30.

- **Computer setup**
- **Security programs**
- **Integrity maintenance software**
- **Browser control tools**
- **Antivirus software**
- **Anti-spyware software**
- **Patch management tools**
- **Session managers**
- **Print management systems**
- **System utilities**



!! Task - Assignment !!

Read

Wayne, Richard

Security-control software.

(The helping you buy series:
Comparing competing library technology products:
your guide to vendor product facts)
Computers in Libraries, June 2006.



!! Task - Assignment !!

Read

**about authentication and authorisation
of local and remote users of Internet-based information:**

Webster, Peter

Remote patron validation. (Posting a proxy server...)

Computers in Libraries, September 2002, pp. 19-23.



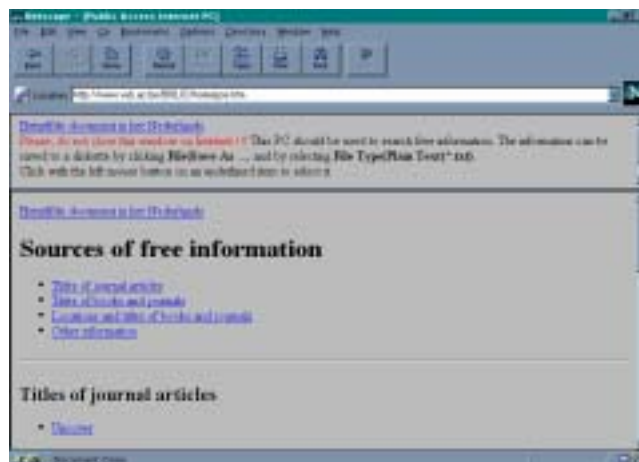
Internet access for the inexperienced user

- **How to use hypertext / hypermedia is not understood immediately by inexperienced users, while public access computers are mainly aimed at this type of users.**

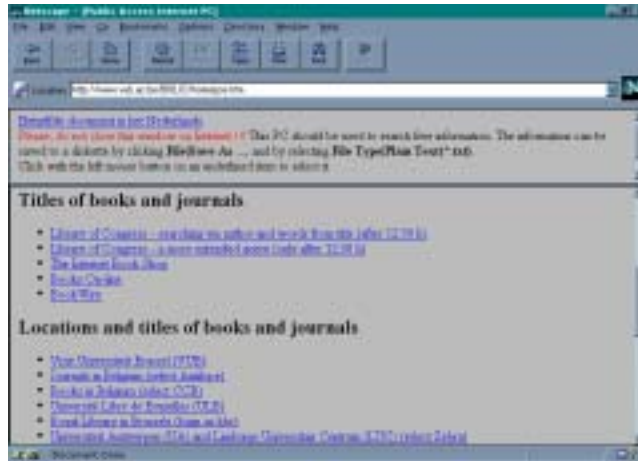
Therefore:

- » Complete blocks or phrases should be linked, instead of small parts of a page
(for instance: a menu line instead of only 1 word)
- » Some guidance should be provided, for instance about the basics of hypertext and about saving to diskette (possibly in a separate HTML frame on the display)

A WWW page with links to information sources: screen shot 1



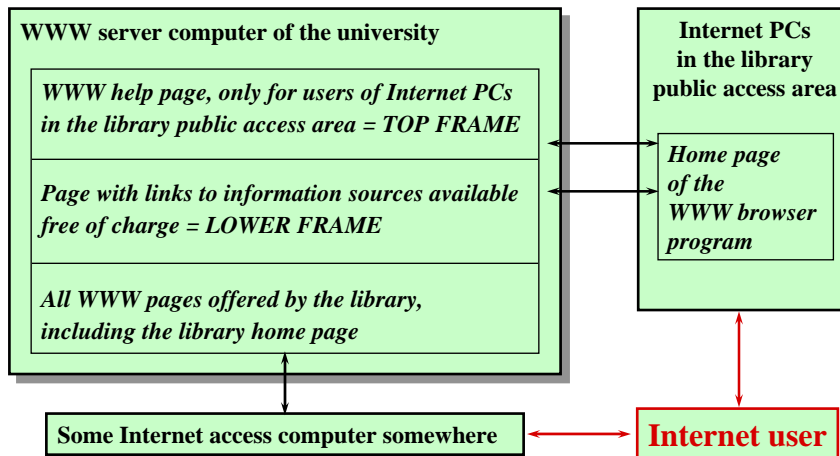
A WWW page with links to information sources: screen shot 2



An application of HTML frames and the client-server architecture

- **Application of HTML frames allows to provide guidance to the (potential) user on dedicated machines!**
 - » The top frame explains the usage of the system and is offered (only) as a part of the home page of dedicated public access computers.
 - » The lower frame offers links to information sources.
 - » The contents of the lower frame is offered as one of the WWW pages offered by the library to all users on the Internet. NOT the top frame, because it would be not be useful for most users.

Organization of WWW pages on the server and the library client PCs



Co-ordination of system components to optimise the display

- **Several components of the system should be well co-ordinated to optimise the display:**
 - » The contents and initial size of the top frame (about the system)
 - » The video display hardware (resolution and thus size of characters)
 - » The preferences set in the WWW browser client program concerning display formats of various types of texts (plain text, headings, lists, ...)

User feedback through WWW and e-mail

- **Users should be enabled to use the system itself**
 - » To provide feedback to the manager(s)
 - » To ask questions about the system
 - » To make suggestions for improvement
- **This can be done by offering a hypertext link to a URL of the *mailto:* type**

Providing public access to the Internet: tips ON the Internet

- <http://sunsite.berkeley.edu/Web4Lib/RefCenter/lwmrcpublic.html>
about public access Internet workstations
- Web4lib@library.berkeley.edu
E-mail interest group about WWW applications in libraries
- Publib-net@nysernet.org
E-mail interest group about Internet applications in public libraries

- **You are free to copy, distribute, display this work under the following conditions:**



» Attribution:

You must mention the author.



» Noncommercial:

You may not use this work for commercial purposes.



» No Derivative Works:

You may not change, modify, alter, transform, or build upon this work.

- **For any reuse or distribution, you must make clear to others the license terms of this work.**