World Wide Web ©

● HEP W3 ◉ Other W3 ○ W3 prospective ◉ Other accessible service
(only a small selection shown)

Global Hypertext:

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                                                        CERN Welcome
                          C.E.R.N.

  European Laboratory for Particle Physics,  Geneva, Switzerland

  Help[1]                 on W3 programs. Also: about the World-Wide Web[2]

  About CERN[3]           Also phone numbers, offices and e-mail for People[4],
                          Yellow Pages[5], or french Pages Jaunes[6].

  News[7]                 Public news, e.g. User's Office[8], student news[9].
                          Also private groups[10] and Internet news[11].

  Computer center         Documentation and newsletter index[12], computing
                          news[13] , VMS Help[14].

  Systems/Projects[15]    Systems available from CERN, and related projects.

  Experiments[16]         and collaborations at CERN.

  H E P[17]               Other High-Energy Physics institutes.

  See also:               Type of service[18], and OTHER SUBJECTS[19]
  1-19, Back, Up, <RETURN> for more, Quit, or Help:
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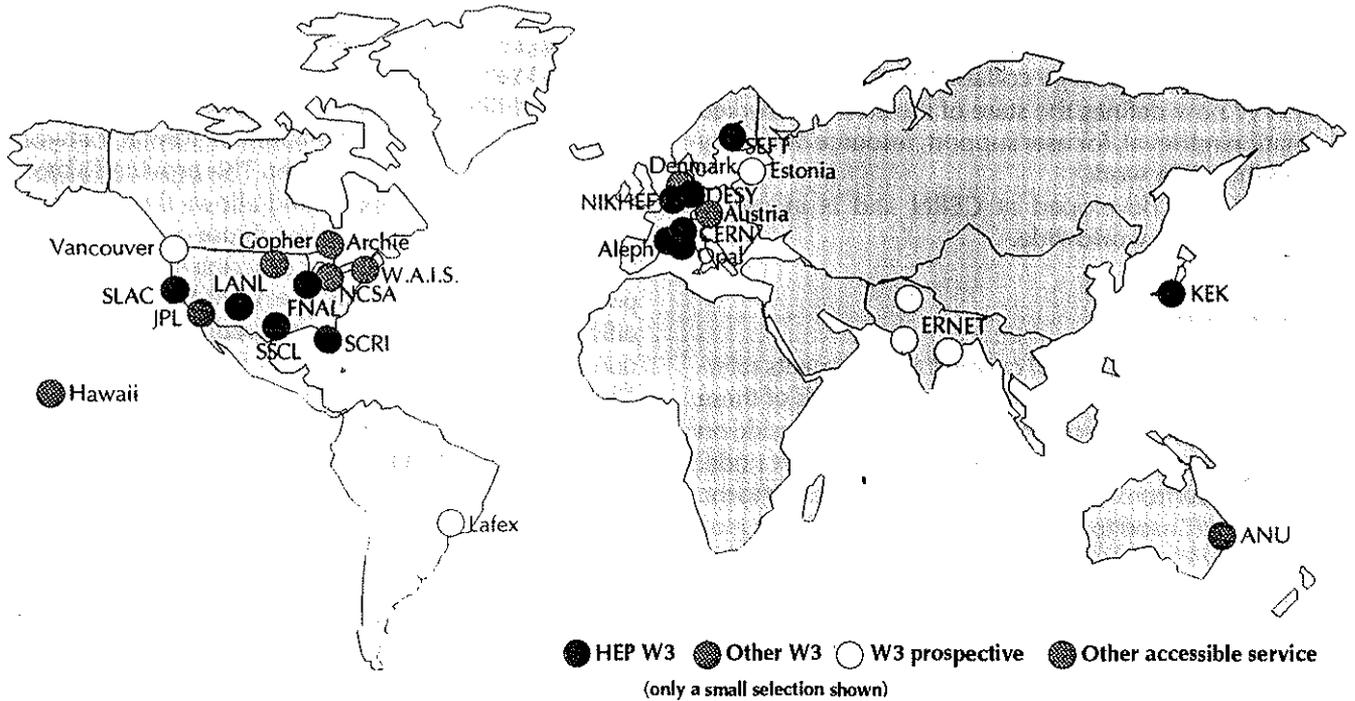
Aims

The WWW project merges the techniques of networked information retrieval and hypertext to make an easy but powerful global information system. It aims to allow information sharing within internationally dispersed groups of users, and the creation and dissemination of information by support groups. Given WWW's ability to provide implementation-independent access to data and documentation, it is the ideal candidate to support the development activities of a large collaboration.

WWW now defines the state of the art in networked information retrieval, for user support, resource discovery and collaborative work.

WWW was developed at CERN and is in use at academic centres worldwide.

Reader view

The WWW world (the Web) consists of documents referring to each other by links. The technical details of these links are invisible to the reader. Documents can reside on nodes throughout the Internet, or upon your host node. Following a link from the SLAC home page (the entry to the Web of a SLAC user) to the NIKHEF telephone book is as easy and quick as following the link to a SLAC Working Note. To follow a link, a reader "points and clicks" with a mouse on a sensitive part of the document text (or types in a number if there is no mouse)

Indices are special documents which, rather than being read, may be searched. The result of such a search is another document containing links to the documents found.

The web contains documents in many formats. All documents look similar to the reader and are contained within the same addressing scheme. To search an index, a reader gives keywords (or other search criteria). These are the only operations necessary to access the entire world of data.

Information provider view

Authors can create documents by simply typing files (in plain text, using HTML markup or a WWW editor) and linking them into the Web. This is most useful in collaborative work: the latest text is accessible on-line, no copies, drafts or out-of-date printouts. If the data is stored in an existing data-base, a server can be tailored to provide its data to the Web. The WWW browsers automatically access many existing data systems via their own protocols (FTP, NNTP, Gopher) or via HTTP and a gateway. In this way, the critical mass of data is quickly exceeded: readers and information suppliers encourage each other through increasing use of the system.

Making data public involves running the FTP or HTTP daemon, and making at least one link into your web from another.

In fact, any file available by anonymous FTP can be immediately linked into the Web. The very small start-up effort is designed to allow small contributions. At the other end of the scale, providers of large information bases may install an HTTP server with full text or keyword indexing without changing the way their databases are managed. Such gateways have already been made into Digital's VMS/Help, Thinking Machine's "W.A.I.S." systems etc. In addition, existing information servers based on telnet or FTP can be referenced and accessed seamlessly from the Web. The WWW model gets over the frustrating incompatibilities of data formats between suppliers and readers by allowing negotiation of format between a smart browser and a smart server. This provided a basis for extension into multimedia, and allows those who share application standards to make full use of them across the Web. This summary does not describe the many exciting possibilities opened up by the WWW project, such as efficient document caching, the reduction of redundant out-of-date copies, and the use of knowledge daemons. There is more information in the online project documentation, including some background on hypertext and many technical notes.

Try it

To find out about WWW,

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telnet info.cern.ch
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This will give you the very basic line-mode interface. Don't be disappointed: use it to find out how to install it or more advanced graphical interface browsers on your local system. The source code, binaries and various articles are available by anonymous FTP from info.cern.ch, under directory /pub/www. [info.cern.ch is currently 128.141.201.74]

All the information about the WWW project is on the Web, so you should look for it there. A plain text version of the installation instructions is included in the "tar" file for the line-mode browser. Please install this on your machine if you find yourself telnetting to info.cern.ch several times. It will be faster for you and will save us CPU time!

There are versions of an X11 browser ("xmosaic") and other browsers available in binary form for some machines. A NeXTStep hypertext editor is also available.

If you are interested in announcements of new data and software for the web, or have any questions,

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mail www-bug@info.cern.ch.

Mailing lists (subscribe at listserv@info.cern.ch):
announcements: www-announce@info.cern.ch
technical discussion: www-talk@info.cern.ch
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