

Metalibrary

Virtual Library of Three Universities

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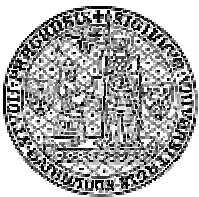
Metalibrary is the name of distributed system of virtual libraries, which offers – as one complete – direct access to the great variety of information sources. That means nonstop availability of the scientific databases (both bibliographic and full-text), multimedia CD titles, educational and teaching software and web links.

The project began to be realized in the year 2000 and its main aim is an easy and constant access to selected information sources for the students and lecturers of three universities – Charles University in Prague, University of West Bohemia and Masaryk University in Brno.

From the technical point of view Metalibrary is the virtual distributed system of CD-ROM servers, built up on Ultra*Net and Citrix MetaFrame technologies.

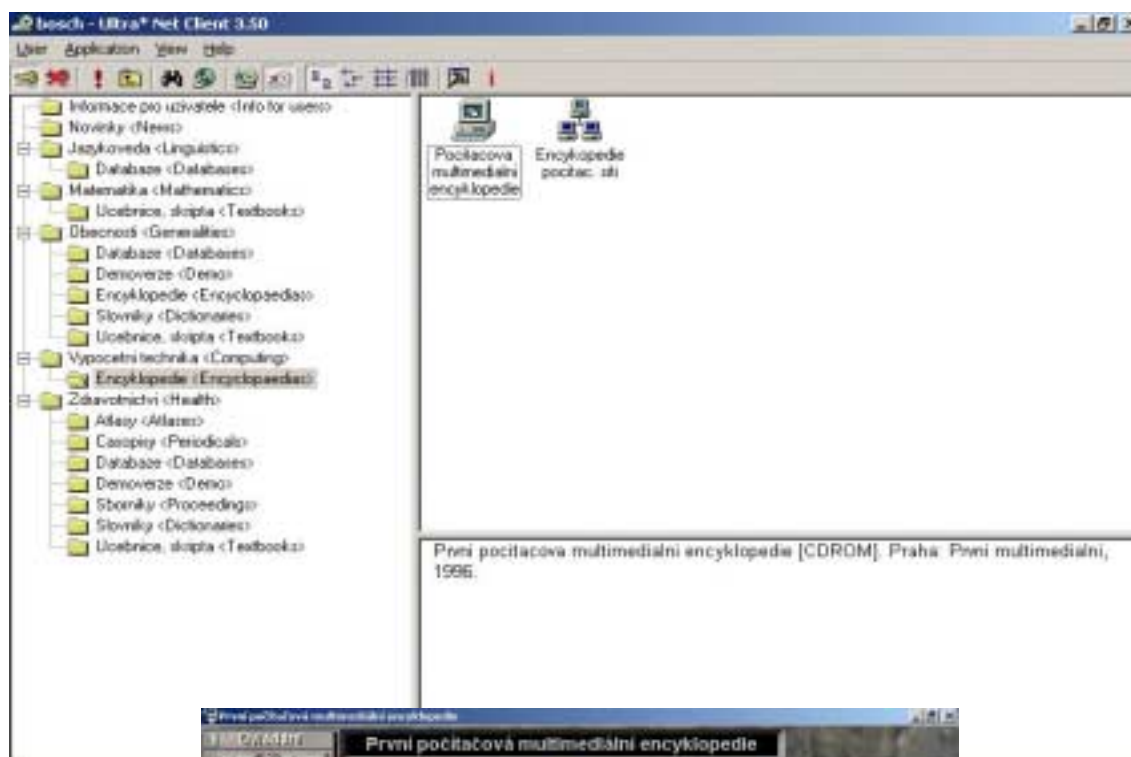
The communication between the servers is realized on the background of Czech high-speed academic network (TEN-155 CZ). The system and the users communicate through local computer networks and Internet.

Metalibrary consists of primary and secondary sources of information from eight disciplines and all the titles are divided into nine groups. The most frequently used titles are dictionaries, encyclopedias and professional databases.



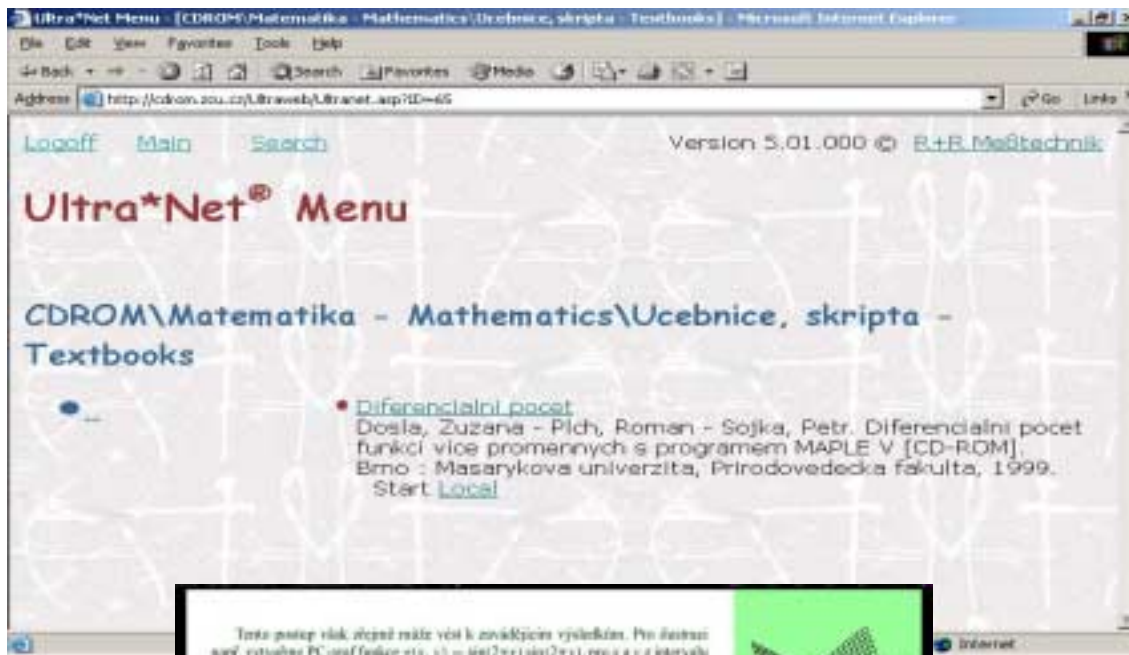
Masaryk University Brno

- model view on Metalibrary menu
- access provided via Ultra*Net Client
- high user comfort
- ideal for local computer network (computer laboratories, multimedia study rooms)



University of West Bohemia

- big number of users (hundreds to thousands)
- difficult administration
- access via web browser (Microsoft Internet Explorer, Netscape Communicator)
- Ultra*Net Web system enables both direct access to Metalibrary (Ultra*Net technology) and indirect access (Ultra*Net in combination with application server technology)
- the access type is transparent for the user



Tento postup však zjevně máte vět k zaveděním výsledků. Pro ilustraci například vytvořte PC-graf funkce $z(x, y) = \sin(2\pi x) \sin(2\pi y)$ pro x, y z intervalu $(0, 2\pi)$ bez režimy implicitního nastavení parametrů:

```
= plot3d(sin(2*pi*x)*sin(2*pi*y), x=0..2pi, y=0..2pi, axes=boxed, labels=[x, y, z]);
```

Podrobněji analyzujte různé funkce však zjevně, že získaný PC-graf (ob. 10.4) neodpovídá skutečnosti. Funkce $\sin(2\pi x)$ a $\sin(2\pi y)$ jsou periodické s periodou 1 a tedy PC-graf na obrázku 10.4 neodpovídá. Zvažte nyní následující výsledek Maple:

```
= plot3d(sin(2*pi*x)*sin(2*pi*y), x=0..2pi, y=0..2pi, axes=boxed, grid=[80,80], labels=[x, y, z]);
```

ob. 10.4

ob. 10.5

Další problémy vznikají při tvorbě grafů neprotých funkcí. Nejzajímavější situace nastává v případě, kdy studovaná funkce není v bodě (x_0, y_0) spojitá (viz

Generování grafiky v Mapu

Nápř.
Obraz
Vesta a řada
x y
z
Zařít
Návra
Maple V 5.00

Faculty of Medicine in Pilsen

- part of the Charles University
- distant computers use ICA client
- client computer uses server, so the whole process is fluent even though the web connection is slow or the computer is not powerful

