

WWW.HR – An entry point to the Croatian Cyberspace

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Abstract

WWW.HR is a Web-based information service project supported by the Croatian Academic and Research Network (CARNet). WWW.HR tends to be a thematic portal, providing regional information specifically concerning Croatia. WWW.HR consists of two services: general info on Croatia and a directory of the Croatian Web sites. Besides a touch-sensitive map of the Republic of Croatia, general info on Croatia provides “Short info about Croatia”, covering national history, tourism, economy, nature, geography, politics, arts, culture, sport and Internet resources. A directory of Croatian Web sites is hierarchically organized in 15 categories and 344 subcategories. The content of the directory is fully searchable by keyword and/or by Boolean expression. Sites are added based on submissions from webmasters. All newly submitted sites are reviewed by the administrator and added to the directory. This article presents WWW.HR as a national Web portal, retrospectively reviewing its past and reviewing its current status, with a special emphasis on a new, improved directory of the Croatian Web sites, tailored according to users demands.

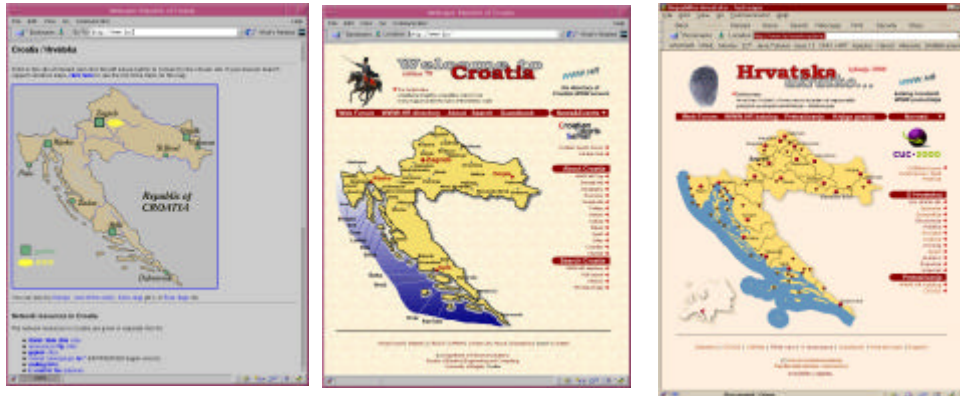
Introduction

The beginnings of the today's WWW.HR may be traced to the late 1993, when a first experimental WWW server was started at the Department of Telecommunications on Faculty of Electrical Engineering and Computing of the University of Zagreb. In February 1994, the server was registered with the CERN international directory of WWW servers as the entry point to the Croatian cyberspace. Today, WWW.HR is homepage of the Republic of Croatia and an official directory of Croatian Web pages. For more details, an interested reader is referred to [1], [2], [3]. This paper is organized as follows: Section 1 describes the concept of WWW.HR. Section 2 deals with finding information in WWW.HR. Section 3 gives an overview of future tasks and concludes the paper.

1. Concept of the WWW.HR

WWW.HR includes two services, general information about the Republic of Croatia, and a directory of the Croatian Web sites. All pages of WWW.HR are presented in both English and Croatian version. Main feature of the Homepage of Republic of Croatia is a touch sensitive map of Croatia. All Croatian counties are shown, together with major cities. Smaller cities, as well as islands are marked with special signs (triangles and squares), and when a user moves the mouse over them, a popup appears with the name of the selected city (or island). That solved the problem of overcrowding that was threatening to make the map of Croatia useless. As shown on Figure 1a, in the beginning there were only a few places in Croatia that had Web pages. In time, as more people have realized Web's potential in tourist presentation of their cities, the map became crowded, especially in the seaside area. Figure 1b shows a temporary solution, using

arrows to point on some cities and islands. Finally, as Figure 1c shows, current solution enables the administrators to put almost all Croatian cities on the map, without worrying about name overlapping some other city.



a) 1994.

b) 1999.

c) 2000.

Figure 1. WWW.HR homepage

The Homepage also gives general information about the Republic of Croatia. It is a set of sub-sites with selected, most important information on national history, tourism, economy, nature, geography, politics, arts, culture, sport, and Internet. There are up to three pages covering each topic in that part of the Homepage, providing a concise overview of the subject with many relevant, up-to-date pointers to external pages.

Second service of the WWW.HR project is a directory of Croatian Web sites. In the beginning it was just a list of URLs, but with the increase of the number of the Croatian related web sites, it became very difficult to maintain and update the list manually. Therefore, a set of shell scripts was written to automate the site management. Also a hierarchical, searchable directory was created. The Yahoo directory structure served as an initial guideline, but it was adapted to the specifics of the Croatian web. The initial 15 root directories included:

- About Croatia
- Art and Culture
- Business and Economy
- Computers, Networking
- Directories
- Education
- Entertainment
- Events
- Law and Politics
- News, Media, Magazines
- Organizations, Societies
- Science and Research
- Sports and Recreation
- Society
- Tourism and Traveling

As of August 2000, directory of Croatian Web sites has about 4500 links in 379 different categories. Statistics (Figure 2) show that the most frequently visited sites are those in the following categories: Tourism and Traveling; News, Media and Magazines; Education, Business and Economy; Art and Culture. Directory has an average of 400.000 hits each month. While directory is mainly (about 50%) accessed from Croatia, the Homepage of Republic of Croatia is mostly accessed from the abroad. Due to CARNet's slow international links, it is important to keep the file sizes of all WWW.HR pages at minimum. For example, the Homepage of Republic of Croatia has only 18 KB.

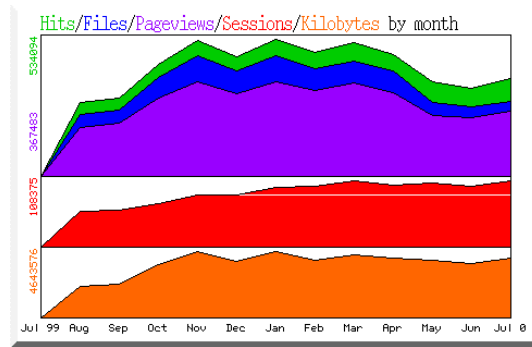


Figure 2. Statistics for Director y – July 1999 – July 2000

2. Finding information in WWW.HR

Users of WWW.HR often refer to it as a *portal*. As defined by the *whatis* online directory, a portal is a "World Wide Web site that is or proposes to be a major starting site for users when they connect to the Web or that users tend to visit as an anchor site". WWW.HR is a local and thematic portal, providing information specifically concerning Croatia.

As mentioned earlier, directory of Croatian Web sites started as a list of URLs. The development of the directory is illustrated by Figure 3.



a) 1994.



b) 1996.



c) 1999.

Figure 3. Directory of Croatian Web sites - Homepage

In the initial version of the Directory, it became hard to find a particular link, especially if user didn't know exactly what he is looking for. In order to speed up the content delivery, especially in the Directory part of the system, the new design abandoned server-parsed html pages and is now based on static html files. New management utilities were written using Perl as the programming language. URL and category databases are kept in the separate files, so administrator has to periodically rebuild static directory pages to reflect the changes. Figure 4a shows the first page of the new Directory.

Most important add-on for the users is a new, improved GUI (Figure 4b), which makes it easier for Webmasters to add their URL in desired categories. According to users demands, it is permitted to add the same URL in up to 5 different categories. A new feature of the Directory is

the date of last change of the web homepage, which is displayed under the description of the URL, and the number of visits that were made from the Directory to the URL (Figure 4c).



a) Homepage of the Directory

b) New GUI for adding Web sites

c) Sample page

Figure 4. WWW.HR Directory

The process of administering the Directory has also been simplified. New tools are added, such as one for editing URL properties (site name and site description) that are already in the database, cross-linking in a Yahoo-like style, listing duplicate URLs and periodically checking their status. The later tool helped a lot in recent inventory of the Directory, when all "dead" URLs have been removed.

3. Future work and conclusions.

WWW.HR, in its six years of existence, grew to a significant national portal, and a No. 1 source for finding information about Croatian Web pages. Constant updating and improving, together with listening to users demands made WWW.HR popular and brought it a remarkable audience (in May 2000 there were about 3 mil. hits per site). WWW.HR team plans to continue providing useful information about Croatia. Our results so far made us believe that such Web-based information service is well accepted and worth developing further.

References

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Short biography:

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