

# Implementation of a Dedicated Site

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**Abstract** - The results of the design that we present had been gotten inside of the development of obligator curricular period of training for the undergraduate students of the Course of Data Processing Technology of the University Center Lusiada. The group of research and development during the period of training was compose by a senior researcher, one undergraduate student and one technician in computer science. The developed activities had been divided in three stages: In the first stage we develop the analysis and design of reconstruction and management of the Lusiada Foundation's Web Site. In the second stage the analysis was carried through, design, construction, documentation and implantation of the extract system of hours used in the access the Internet. In the third stage was the development of the design and the management of the Proxy System to provide Internet access for local networks with reability to keep all the Lusiada Foundation connected internal.

The main objective of the work fully was reached, or either, the period of training accomplishment technician and the formation of the professional future of computer science that passed for all the necessary stages so that this goal was reached successfully, as by-product got a significant improvement of the jobs offered for the site. The site can be located in the address <http://www.lusiada.br>.

## I. INTRODUCTION

Here we present the steps of the design, development and implementation of reconstruction and management of the one Web Site, extract system of hours and Proxy System as part of the university scientific project that obtained excellent performance.

## II. DESIGN AND PROJECT

The Figure 1 show the main page of Lusiada Foundation's Web Site.

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Figure 1. Main home page of Web Site



Figure 2 Home Page of the Juridical, Social and Human Sciences Department

The first step of our project was to develop the analysis and reconstruction project and amplifier the Lusiada Foundation's Web Site. By other side, it was included of this proposal to permit remote and local access by ours employers, professors, students and our community in general supplying with information how:

1. Lusiada Foundation's history;
2. Library features, localization and contacts;
3. Full reference about the Lusíada Secondary School, from playing activities until pedagogical methodology adopted by the school;
4. Complete departmental structure, with all disciplines inside their respective Departments;

5. All graduation and post graduation available courses given objectively and neatly the several aspects of it course;
6. Extension courses offered by UNILUS;
7. All events: institutional, teaching and students. already carried out and scheduled ones;
8. UNILUS Electronic Journal;
9. Specific official notices such as: the results of Selective Process 2000, 500 Years Brazil Project, and the Scholarships Contest of the Lusíada School, among many others;
10. Search Sites indicated by LusíadaNet provider;
11. Localization and contact ways of ours three Campi;
12. Services offered by our Internet Provider LusíadaNet.



Figure 3 Page of the LusíadaNet, this local belongs to the access supplier the Internet that houses the site of the Lusíada Foundation

We possess WWW server a PC - Servers 330, were acquired together IBM, with Monitor G52, 256 MB of Memory, 3 HD (Winchesters) in a total of 12 Gigabytes with technology hot swap, one normal disk drive and one CD-ROM. Where we house the Web site of the Lusíada Foundation. In this exactly serving we keep available the service of academic News group and material fruit of internal intellectual production of our students and professors, for download through our area of FTP (File Transfer Protocol).

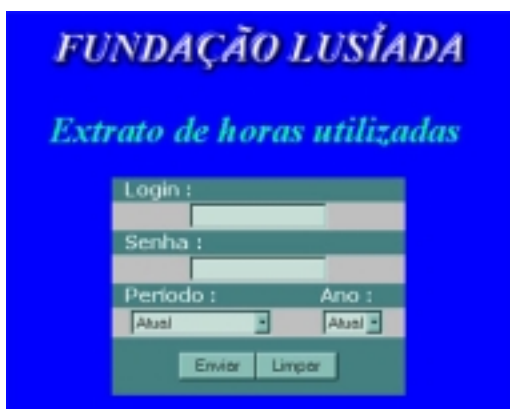


Figure 4 Page of login of the extract of hours of access of the LusíadaNet

In the second stage of the development of the Web site of the Lusíada Foundation, however, already in the pertinent part to the services offered for the internet provider (LusíadaNet), we develop the analysis, first draft, logical design, physical design, construction, documentation and implantation it extract system of hours used in the access the Internet. This in turn already is integrant part of our Web site, taking care of fully to the intention of personal control of our users.



Figure 5 Page of login of the extract of hours of access of the LusíadaNet

Still inside of the second stage, but in current development it is the Academic Market, which also follows the pacings of development of analysis, first draft, logical design, physical design, construction, documentation and implantation it system. The Academic Market comes to be a stock market of offered periods of training our students, while hand of available workmanship, and the companies of the community, while recruiting of this hand of workmanship.

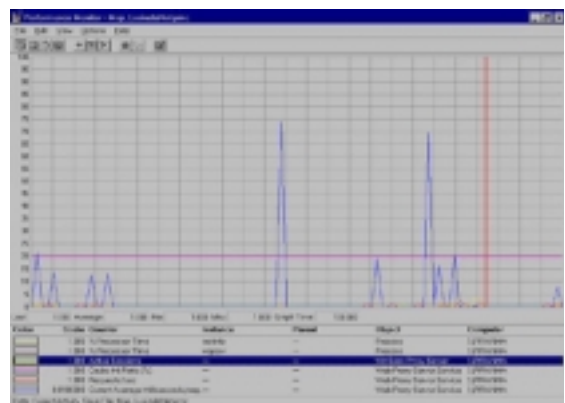


Figure 6 Graph of use of the features of the server proxy

Techniques had been used of analyze of systems as it analyzes structuralized, essential, engineering of software, engineering of information and orientation of objects, as well as, techniques of structuralized programming and orientation of objects in softwares developed by the team. As much analyzes functionary as analysis of data finishing of the

analysis of the systems had been used inside of the boarding of the modeling of data as. The system of data base chosen was the relationary system, in view of the security imposed to the storage of the data through its mechanism of imposition of referencial integrity to its relationships.

Already in the third stage of the development, I participated of the first draft, design, implementação/configuração and management of the Proxy system, that has as some of its features to provide access the Internet for local networks with security, improving the together time of reply of connections the network that keeps all the Lusíada Foundation connected internally the Internet.

For this stage we count on a server of similar physical features to the WWW server, to put destined to be used as backup and how proxy server, magnifying the resultant reliability of the system, besides the inherent concepts of redundancy of the designs and implemented by software, and the backup through dat covers. The system of proxy adopted was the Microsoft Proxy 2.0, that Windows NT 4,0 was installed in a server with the operational system. The Proxy Server was a cheap solution that made possible the access of our Intranets the Internet, through an only valid IP, since, allowed to the act of receiving of connections comings of the Internet of safe form. With use of Proxy Servers, we could carry through the interconnection of our Intranets the Internet of free form security and of attacks and invasions. Moreover it admits pattern to allow that our Intranet, had all the access features the Internet, beyond the locking diverse jobs, as much in the Intranet/Internet direction, as in the Internet/Intranet direction.

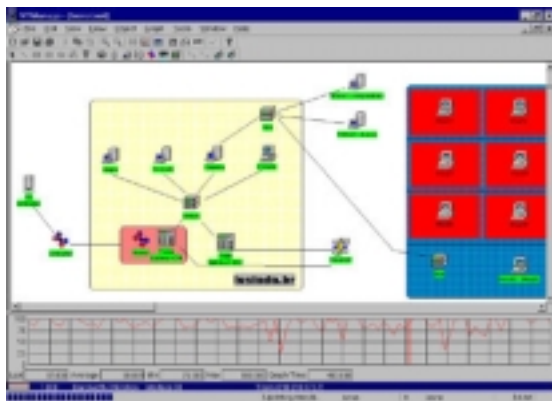


Figure 7 Management of the network proxy

The Proxy Server also was used to magnify the performance of our network, using advanced techniques of cache. He was configured to effect local copies of information comings of the Internet, or either, a generated time the local copy, will be had as asked for of the same information, it will not be necessary to reconnect the original source to get it such information. This process normally diminishes the access traffic the Internet network and if it earns in the reply time.

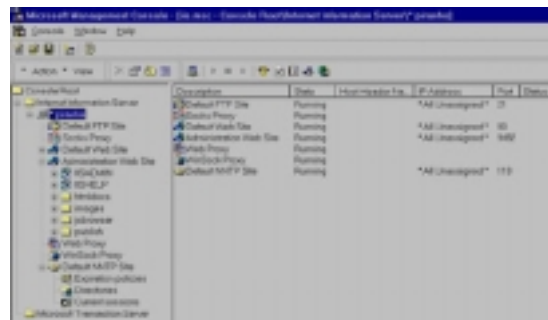


Figure 8 Setup of the system of proxy

### III. SOFTWARES AND OPERATIONAL SYSTEMS

The Operational Systems used were: Windows NT 4.0 SP6a, Windows 95 Original Service Release (OSR) 2.5 and Windows 98.

The languages used in the development of the software designs were: Borland Delphi 5.0 Enterprise, Borland Turbo C++ 3.0, Microsoft Activates Server Page 2.0, Microsoft Visual Basic for Scripts, SQL, HTML 4.0, DHTML and Java Script.

The used data bases were: Microsoft SQL 6.5 Server and Microsoft Access 97.

The general purpose Softwares were: Microsoft Office 97 Professional, Microsoft Front Page 98, Adobe Illustrator 8.0, Adobe Photoshop 5.5 and Adobe Page Maker Plus 6.5.

The system proxy used: Microsoft Proxy Server 2.0.

We used the NTManager v2.09 LANware software to test and monitor the system Proxy. The Figure 7 show the software running.

### IV. CONCLUSION

The main objective of the work fully was reached that was the formation of our future researchers.

They passed by all the stages of the initial proposal: the design, the development and the implementation of the system.

To participate of the all the stages of a development design and management of a Web site, as well as, of the development of systems in environment of Internet, using you vary known techniques of analyzes and programming in the current days. Installation and configuration of a system proxy and all the security politics the accesses, restrictions the protocols and services of network.

The system implemented are working and can be accessed in the address <http://www.lusiada.br>.

### REFERENCES

- [1] Ascend Communications - "MAX 4000 series ISP & telecommuting configuration guide". Ascend Communications, Inc., 1997.
- [2] Viescas, Jonh - "Running Microsoft Access 97" Makron Books, 1998.
- [3] Ramalho, José Antônio Alves - "Microsoft SQL Server 7.0". Makron Books, 1999.

- [4] Fancis, B., Kauffman, J., Llibre, R. T., Sussman, D. & Ullman, C. – “Beginning Active Server Page 2.0”. Wrox, 1998.
- [5] Fancis, B., Federov, A., Harrison, R., Homer, A., Murphy, S., Sussman, D., Smith, R. & Wood, S. – “Professional Active Server Page 2.0”. Wrox, 1998.
- [6] Hunt, Craig – “TCP/IP Network Administration”. O’Reilly & Associates, Inc., 1994.
- [7] Frisch, Aileen – “Essential Windows NT System Administration”. O’Reilly & Associates, Inc., 1995.
- [8] Schuler, Kevin – “Microsoft Proxy Server 2 - Planning, Deployment, Configuration. On Site”. Coriolis, 1998.
- [9] Microsoft Internet Information Server Training Kit. Microsoft Press, 1998.
- [10] Golding, Mordy & White, Dave – “Pantone Web Color Resource Kit”. Quark, 1997.
- [11] Waters, Cristal – “Web Conception & Design”. Quark, 1996.
- [12] Black, Roger – “Web Sites que Funcionam”. Quark, 1997.
- [13] Simpson, Alan – “Official Microsoft Internet Explorer 4 Site Builder Tool Kit”. Microsoft Press, 1998.
- [14] Cantú, Marco – “Mastering Delphi 4”. Sybex, 1998.
- [15] Anselmo, Fernando – “Delphi & Access – O Melhor de dois mundos”. VisualBooks, 1999.
- [16] Sonnino, Bruno – “365 Dicas de Delphi”. Makron Books, 1999.

Ittransition designed and implemented a custom SharePoint Online intranet that helped the customer foster document and project management, as well as enterprise and team collaboration.Â PayPal turns to Ittransition for the development of a learner-centric training portal that needs to be integrated into their corporate network. Featured story. Adidas MiCoach. Implementing can be defined as putting (a decision, plan, agreement, etc.) into effect. Systems implementation is the delivery of that system into production (that is, the day-to-day business or organization operation).. It is important you understand this topic isn't about BUILDING or PROGRAMMING a system, but rather making the system live. We use the word implementation differently here than we use it when we discuss the design process. Paid version of CSE(Google site Search), already eliminates several drawbacks that forced dedicated implementation. Cost may be one reason to not choose Google CSE, but what are other reasons ? Another thing I want to ask is my site is similar kind as StackOverflow, so when Google indexes its content every now & then, won't that overload my database servers with lots of queries may be when there is peak traffic time? I look forward to use Google Custom search API but I need to clarify whether the 1000 paid queries that I get for 5\$ are valid only for 1 day or they get adjusted to extr