

# PROVIDING LIFETIME SERVICES TO STUDENTS - THE CASE OF THE UNIVERSITY OF TRÁS-OS-MONTES E ALTO DOURO

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## 1. EXECUTIVE SUMMARY

The University of Trás-os-Montes e Alto Douro (UTAD) currently provides to their alumni and students, a suite of lifetime electronic services in order to support the educational, research and public service mission of the University. Also, the theme of lifelong learning is at present one of the concerns of the UTAD that, by facilitating privileged communication among students and alumni and between alumni and UTAD increases the activity of teaching, provide employment opportunities and also can increase the research at the University.

UTAD is providing some of these services through a contract with Microsoft. The students and alumni services are provided and covered under the Windows Live@edu program that presently includes: e-mail, instant messaging, mobile functions, alerts, and privacy and security tools. These Services are provided lifetime and at no cost to the UTAD alumni and students.

This paper, intends to provide some decision guidelines by presenting a comparison between the Windows Live@edu program and three major educational programs that can provide similar services to higher education institutions. Also this paper compares the selected program with a housed solution that could implement the same kind of services. This second comparison is focused on the investment around the IT technology and the administration efforts that must be done when going to an owned solution.

In the practical aspects, this paper reports on the implementation of the services provided by Windows Live@edu at the University of Trás-os-Montes e Alto Douro as a case study.

## 2. INTRODUCTION AND PROJECT SCOPE

The University of Trás-os-Montes e Alto Douro (UTAD), located in the in the Portuguese northeast territory was founded in 1986 and is one of the newest Portuguese Universities. Currently, it has around 7.000 enrolled students in the 1st and 2nd bologna cycles. The University also provides the 3rd bologna cycle and other PhD degree diplomas.

The University provides to their students, since 1997, electronic services in order to support and facilitate communication during their courses. Credentials that include email to students are provided at their first enrolment year and also, these credentials, among other services, are used to computer access in the libraries, access to computer labs, access to computer common rooms, wireless access, virtual private network (VPN) and to the student's information system (SIDE). These, were normally extinguished three to four years after the student's degree.

By eliminating these credentials, most of the electronic communications channels were lost, so if the University wanted to communicate with their alumni, it had to be by postal mail or by other means that didn't include the email that was normally used during their courses.

By the introduction of the bologna process, and by the wakening of UTAD to the theme of lifelong learning, that is at present one of the concerns of the UTAD, the University started to search a way to create and maintain, using electronic services, a privileged communication channel among students and alumni and between alumni and UTAD in way promote and increase the activity of teaching, to provide employment opportunities to their students and alumni and also to increase the research at the University in collaboration with their alumni.

## 3. THE UTAD STUDENT'S EMAIL PROJECT

As already mentioned, since 1997, that the University provides to their students email based in a set of open source software in housed servers that provided the entire solution.

The hardware solution was based on regular 32bit servers and local/SAN storage access combined solution.

The software solution combined:

- IMP as the webmail solution, powered by the Horde framework. IMP is the Internet Messaging Program. It is written in PHP and provides webmail access to IMAP and POP3 accounts. Is latest version requires PHP 4.3.0 and version 3.x of the Horde framework. It has features like crypting support, flexible charset handling, virtual folders for saved searches, a WYSIWYG editor for creating HTML messages, improved MIME message handling, and much more.
- Cyrus email, for access and storage of mailboxes. The Cyrus email software was developed at Carnegie-Mellon University. It manages access and storage of mail messages, according to accepted internet standards and allows users to access their mail with almost any standards-compliant mail program including Cubmail, Pine, Outlook, Thunderbird, or even Apple Mail.

Using IMP and Cyrus mail store, we've created an accessible and easy to use solution that gave access to the mailboxes using a standard email client, or access from any pc with a common browser with Internet connectivity.

Also, the use of the IMAP protocol was suggested because it stores mailboxes on the server, where you can access them from anywhere.

This solution was maintained and supported by the computer centre, but the growing demanding of mail quota enlargement by the student's community brought the continuous need of more storage space required by the servers.

During the past year, the computer centre at UTAD decided that the cost of having an owned solution was clearly unacceptable, when comparing the costs of having to maintain and constantly upgrade the email solution for the students. Also the issue of having to grant lifetime mail was considered when the decision of searching a hosted solution for the students email was taken.

### 3.1. UTAD IDENTIFIED HOSTED SOLUTIONS

The University computer centre identified 3 commercial hosted mail solutions, which could fulfil the required needs of the University. These are:

- Zimbra for Education
- Google Apps Education Edition
- Microsoft Live@edu

#### 3.1.1 Zimbra for Education

Zimbra for education (ZCS) provides a complete messaging and collaboration solution in a server with an AJAX Web Client. It features Email, Contacts, Calendar, Documents, Instant Messaging, tasks, plus synchronization to other desktops and devices.

The features provided by ZCS include:

- Rich browser-based AJAX interface with application-like features such as drag and drop, tagging and conversation views.
- Comprehensive search, including within attachments, and saved search folders
- Share and collaborate any application with peers: inboxes, contacts, calendars, documents and tasks
- Enterprise calendars with shared free-busy times; interoperable with Microsoft Exchange 2003.
- Author documents online as well as instant messaging with archiving.
- Integrate 3rd party applications as "mash-ups" such as maps, CRM, inventory and package tracking.
- Enables offline access to the Zimbra web experience on Mac, PC, and Linux desktops.
- Aggregates Yahoo! Mail, Gmail, AOL, Hotmail, and other POP / IMAP accounts.
- Sync Yahoo!, Gmail Address Book and Calendar Native MAPI synchronization to Outlook 2003/2007 with full delegate and offline access.
- Native synchronization to Apple desktop applications via Zimbra iSync Connector, plus CalDAV support.
- Support for all POP3 / IMAP4 Clients.
- Access Zimbra email, contacts, calendar on any device with an HTML capable mobile web browsers.

#### 3.1.2 Google Apps Education Edition

Google Apps Education Edition offers a hosted solution email, calendar, and chat through integrated communication and collaboration solution. The offer includes Gmail, Google Calendar, Google Talk, Google Sites, and Google Docs and Google Video, all using the schools domain.

Google Apps Education Edition includes:

- Gmail: Email storage and search tools that help students find information fast and instant messaging from right inside their accounts.
- Google Calendar: Students can organize their schedules and share events and calendars with others.
- Google Talk: Students can call or send instant messages to their contacts for free anytime, anywhere in the world.
- Google Docs: Share documents, spreadsheets, and presentations. Collaborate in real-time with your team or with your whole school. You can publish final documents to the entire world, too.
- Google Sites: Work together to keep related documents, web content and other information in one place, on one site.

- Google Video for education: A video hosting and sharing solution that enables schools and other organizations to use video as an effective medium for internal communication and collaboration.

### 3.1.3 Microsoft Live@edu

Microsoft Live@edu provides the students, with email and calendaring, online storage and a place to share and edit their Microsoft Office documents online using Office Live Workspace.

The set of features include:

- Outlook Live or Windows Live Hotmail: student a Windows Live Hotmail or Outlook Live inbox at a University email address of each school's. Students' inboxes are customized with their school's logo, and school website links are easily accessible from a dropdown menu.
- Office Live Workspace: Enables students to create their own site to store, access, and share documents and files. Specifically designed to work with Microsoft Office applications, Office Live Workspace enhances students' ability to keep their work on track and collaborate with colleagues on projects.
- Windows Live SkyDrive: Students can use Windows Live SkyDrive - a password-protected 25 GB online storage space - to share documents among devices and with friends. Students can set up personal and shared folders within their SkyDrive, and turn shared access on or off.
- Windows Live Messenger: Students can use real-time chat, full-screen video calling, and computer-to-computer calls with friends, faculty, and family using Windows Live Messenger.
- Windows Live Spaces: Enables students to create personal websites in minutes, including blogs, and forums. Students can also display SkyDrive content to easily share projects and files.
- Windows Live for Mobile Devices: Even when they can't get to a computer, students can access their University email accounts or Windows Live Messenger from web-enabled mobile devices.

## 4. THE UTAD SELECTED SOLUTION

After looking to the identified hosted solutions, the computer centre put apart a housed solution as one of the possible paths for providing the student's email, mainly for 2 reasons: upgrading costs, and long term management. With this decision, it became necessary to evaluate the 3 hosted solutions.

The Zimbra Collaboration Suite for Education, was at the time, also not considered because when compared with the two other solutions, it brought some reservations concerning to the lifetime mail provisioning, with deployment aspects, but mostly regarding with the student's acquaintance towards the solution and the manageability of the webmail client.

For the assessment of which to choose between Google Apps Education Edition and Microsoft Live@edu the computer centre used as basis of comparison the following set of questions:

1. Best Email user Interface?
2. Process of Composing and Sending email?
3. The facility to add attachments to emails?
4. Calendar usability?
5. The option of customising the look and feel of the email interface?
6. Address Book easy to use?
7. "Spell Check" facility easy to use?
8. Document collaboration?
9. General opinion of the email provider?
10. Trust of the email provider with confidential information?
11. Problem issues accessing to email?
12. Help online?
13. Email quotas and document space quotas?
14. Collaborative issues?

The computer centre evaluated the solution by conducting a survey, with these 14 questions, within a selected group of students reaching all areas of the teaching scope of the institution.

Microsoft Live@edu was preferred by more than 80% of the enquired students in all the questions.

When asked by the fact of selecting Microsoft the chosen reasons were mostly the same:

- “The simplicity of use”;
- “Integration with Outlook”;
- “ Mail quota”;
- “SkyDrive”.

But the majority of the students appointed that the existence of Live Messenger associated with their University mail account was beyond doubt the main reason for their selection of Microsoft Live@edu.

One other reason for the selection of Microsoft Live@edu was the fact of the student’s acquaintance of use of the Microsoft hotmail and Live Messenger as collaboration tools.

## 5. CONCLUSION

After deploying the Live@edu program at the University, and the internal promotion by the students information system (SIDE) of the fact that enrolled students could have lifetime mail granted by their University and with a European domain which we called “utad.eu”, the first 2 days the number of registered users reached 200 students, by the end of the first week this number increased to 1023. By the end of the first month this number of registered users (6274) reached almost of the students of the University.

UTAD took a great deal of time to review both Google and Microsoft services and in the end there was a good case to implement either for student email. Given the difficulty in deciding which was best for our users we took the simple step of asking them. A pilot group survey of UTAD students was conducted on both services and following the feedback from the pilot Microsoft was the clear winner with UTAD Students.

The University is increasingly using email to communicate with students about administrative matters.

These matters may include:

- information of enrolment problems which need attention;
- information of the outcome of an application, such as for a deferred examination;
- information about a new service;
- information a service difficulty and when the problem will be rectified;
- information about jobs and scholarship oportunities;
- other type of regular information (cultural, seminars, UTAD news,...).

Also, a number of other Universities have opted for the Microsoft solution, so there appears to be a trend in favour of the Microsoft service. For UTAD there are also strategic benefits that we hope to gain further value from the Microsoft solution for our students and staff by adding further integration and collaboration services in the future.

## 6. REFERENCES

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