

# UNIVERSITY OF TRÁS-OS-MONTES E ALTO DOURO DIGITAL IDENTITY MANAGEMENT – PROJECT REPORT

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In an higher education institution, the user electronic information is usually scattered among various places and systems that provide services according to their requirements. For example, at the University of Trás-os-Montes e Alto Douro (UTAD) a student that wants to gain access to the students information system (SIDE) needs to get from the Computer Centre (CIUTAD) a set of credentials (login/password) for that particular system, to gain access to the students on-line virtual office the same student has to pick another set of credentials from the office that manages the service. The systems and services are often affected in performance and in misuse, mainly because of the lack of actualization and synchronization of data between offices in the university. It became necessary the implementation of digital processes for management of users digital identities within all their life cycle (since creation to removal). This paper, reports on an ongoing project to create an identity management system for the UTAD.

## Architecture and project scope

The project aimed to solve two main objectives, the first one, was to permit UTAD to consolidate in a single and central repository all the digital identity their users in a way that all the applications and systems can get the precise credentials and information to work. Second, was to implement a provisioning solution that permits the management of the digital information of users in all their life cycle. As add-on the service created should permit the users to manage and maintain their personal information and to simplify all the workflow of the users in the institution keeping at all times the information available and actual. The project architecture has three main layers: authority's information layer, identity management and database layer, electronic services and client application layer. The authority's information layer has within all the identified systems that contained mandatory information of users and all the processes to collect and extract the information to the identity management and database layer. The identity management and database layer has all the processes for user's information consolidation and the services for managing the life cycle of the user's in LDAP databases. This layer also provides the authorization and authentication functionalities. The third layer has all the electronic services that need user identity information from the lower layers. The project was developed to fulfill the gap that was clearly delaying the evolution and quality of the electronic services in UTAD. The software platform chosen for deployment was *Sun Microsystems* Identity Manager Suite.

The focus on this report will take in consideration the problems found and the ways to solve those same questions (like database integration, synchronization issues, workflow, heterogeneous systems integration and process integration and simplification).