



HYPER TMIS TRAINING CENTER MANAGEMENT SYSTEM

HyperTMIS is an integrated solution for managing a training centre, optimizing the resources involved in the training process to provide the best course definition, execution and outcome.

Personnel training is a key factor in determining success of an organization. It is also one of the most expensive items. Considerable investment in equipment and infrastructure is required, together with the high recurring cost for equipment maintenance and the need for continuous personnel learning. An armed forces training centre has to deal with a wide range of activities, from traditional classroom-based teaching to simulator sessions, as well as Computer Based Training (CBT), training-on-the-job and training of trainers.

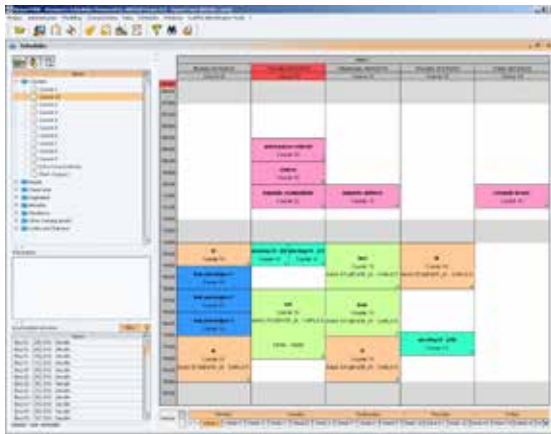
An efficient and effective management tool to support training activities, planning and monitoring can save on recurring costs and optimize use of resources. These encompass both human (instructors, administrators, students, supervisors, technicians) and physical (classrooms, computers, simulators, equipment, tools) resources.

PRODUCT DESCRIPTION

HyperTMIS is an Information System designed to support the main functionalities required for the learning process management, performed either inside or outside a training centre.

The tool supports the training activities planning and dynamic scheduling in accordance with resource availability: classrooms, training equipment, dynamic and static simulators.





It also provides the instructors with students' learning paths monitoring and evaluation functions, allowing the tracking of students' courses, the selection of the content to be provided, as well as the management of courseware developed from other vendors (e.g. CBT).

HyperTMIS is currently used at the Italian Air Force National Training Centre in Pisa to support C-130J and C-27J platforms and at the Integrated Training Centre near Lecce to support T-346 platform. Each installation has been customized to the specific needs of the base.

KEY FEATURES

The main features include:

- Access via web portal
- LDAP-based user authentication
- Training activities management (including also lectures, quizzes and surveys)
- Multi-media file format and collaborative tools management
- SCORM 2004 certified engine
- Cost and optimization-based resources allocation
- Automatic and manual course scheduling and rescheduling
- On-line reports
- System scalability allowing the management of training centers with different size and requirements

SYSTEM ARCHITECTURE AND TECHNICAL SPECIFICATIONS

HyperTMIS is a web-based system made up of three modules:

- CM – Course Management
- RS – Resource Scheduler
- TS – Training Support

Courseware can be developed by means of Windows Office package automation tools or specific SCORM-compliant development tools.

Course Management module manages syllabi and courses providing the tools to define a suitable learning path for the trainees. Course Management allow to link together activities, courseware and resources; it includes collaborative features (forum, chat, FAQ), which may be led by an instructor.

The Resource Scheduler module is in charge of scheduling and managing the training resources, such as classrooms, instructors, students, and simulators. It utilizes an algorithm that allocates activities taking into account known constraints and minimises user-defined cost functions.

A commercial off-the-shelf product has been chosen for the scheduling role: "Ade Expert" by Adesoft is designed to solve complex scheduling and resources planning tasks.

The Training Support module's objective is to manage personnel information (including currencies and qualifications), to manage training related documentation, to provide reporting functionalities, and to exchange information with external systems (option).

This three-tier architecture is made up of a Database Server, an Application Server and a Client component accessible from a standard browser (e.g. Explorer and Firefox). The DBMS used is MySQL. The Operating System is Windows 2003 Server (or later versions) on the server side, and Windows XP (or later versions) on the client one.

