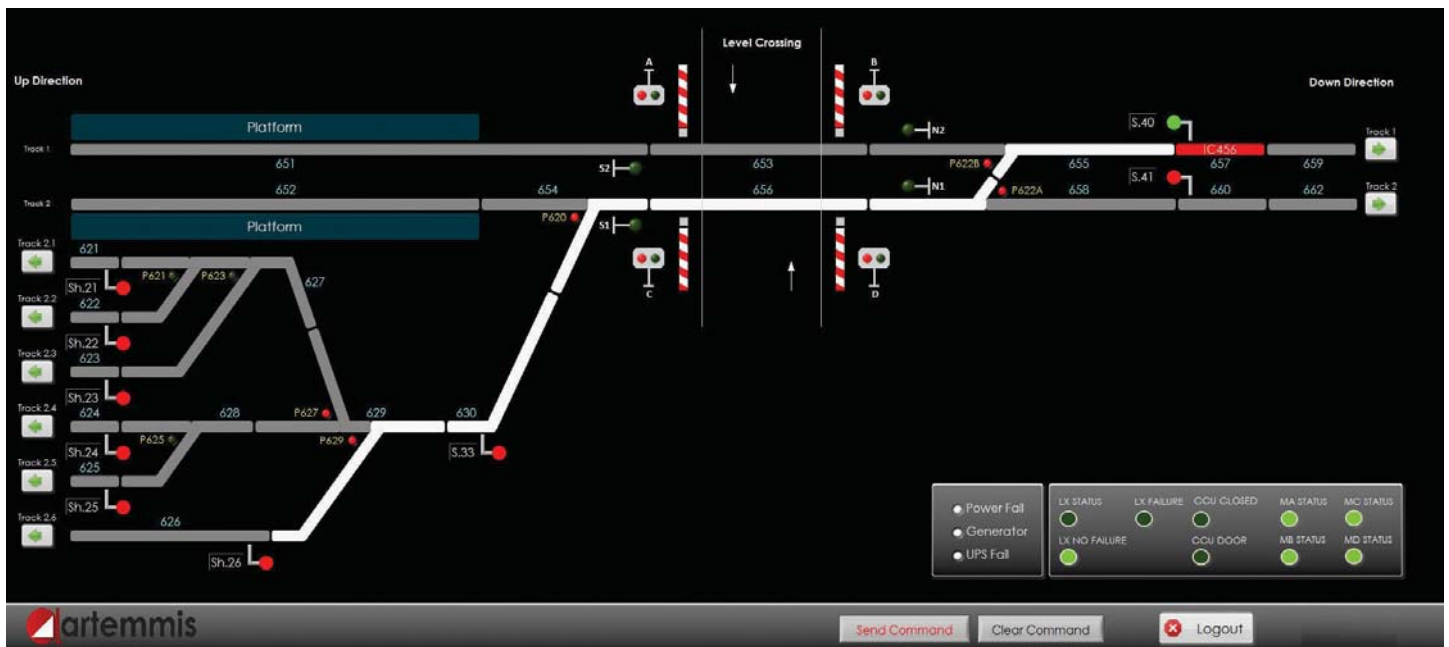


General Overview

Artemmis is a man-machine interface for Centralized and/or Local Traffic Control systems, which provides the following services to the railway exploitation:

- ✓ A global view of the circulation of the trains and of the track equipment status, through information acquired from the track equipment and displayed on dedicated images
- ✓ Remote commands of routes and maneuvers on the line and in the terminals, through dedicated images and commands
- ✓ Identification and tracking of trains through the train numbering function

Artemmis is based on a windows style interface with an advanced support, including pop-up menus, drop-down menus, help and copy/paste utilities.



General Features

- **Modularity:** the architecture of the system is built up in levels and gives the possibility of expansion at any life cycle stage
- **Availability:** redundant platform and network features emphasize on uninterruptible system's performance
- **Flexibility:** customization of the graphic environment according to specific requirements is provided
- **Easy adaption:** seamless connection with existing systems, processes and equipment allows any adaptation
- **Artistic editing:** customer oriented user interface images edited by modern graphic editors lead to elegant effect

System Architecture Outline

artemmis is a superstructure over interlocking. The following three features compose the main structure of the system.



Main Panel for all the controls and commands of each station.

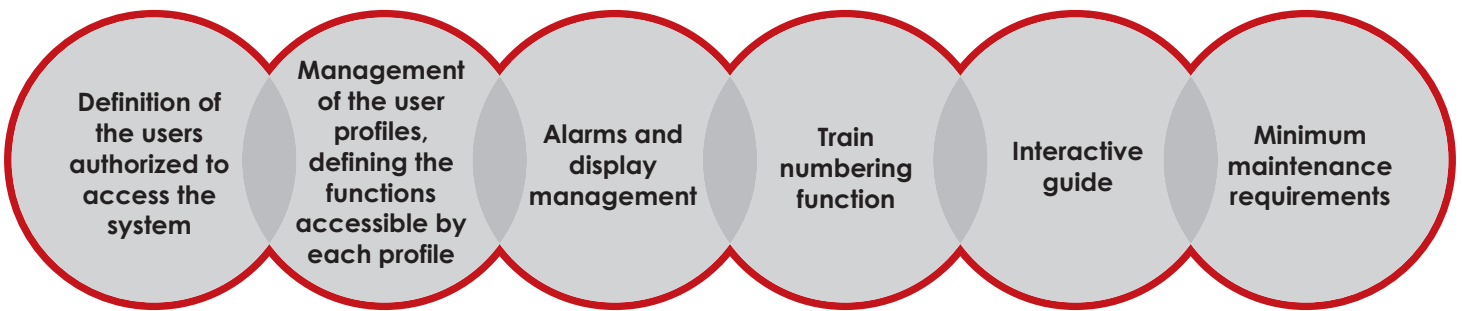


Train Numbering Function where the naming and position of each train are entered in the system. It can be used to monitor both history and real-time events, such as train movements and conflicts on the selected track section.



Event and Alarm Logging via the creation of a database for all the historical data in the system. Allows the user to view detailed log files from past events with every information a user may needs, such as event time, track, station, train number.

Specific Features



Connectivity – Communication

The established connectivity is very flexible and is implemented via Ethernet network technology. Ethernet is considered to be an ideal protocol for the particular needs of the centralized traffic control system, due to its cost effectiveness and the variety of bandwidth that encompasses. Ethernet promises inexpensive upgrade paths, as centralized traffic control technology evolves.

Case: Larissa Control Traffic Center

artemmis controls the traffic of the main rail corridor between Athens and Thessaloniki. For this line **Aktor signalling** has developed a specific application which enables the efficient and smooth traffic operation. The first phase of implementation includes 4 stations, which have been commissioned for trial run. The second phase includes 10 more stations in a total of 180 km line.

Project details:

- ✓ 180 km length, 14 stations
- ✓ Interface with neighboring traffic control systems
- ✓ Passenger and freight exploitation

