



TAT System

Features

Application

- search employee
- add employee
- assign badge to employee
- reports

TAT

- display messages
- two push buttons
- read badges
- print slips

Office TAT

- display messages
- two push buttons
- read badges

TAT System is a modern system to easily register the regular attendance, to record the working hours and to monitor the working time of all your employees. The TAT System is compatible to read common RFID badges. Are you already using badges? In that case you can keep working with your old badges: the TAT System is only reading from the badges and not writing on them. The TAT System helps you quite simple to monitor the presence of your staff

TAT System operates on devices called Time Attending Terminals (TATs). These devices are connected to a server. The entire TAT System functions chronologically synchronized, say that not only is the chronometry of all TAT devices and the server identical, but moreover it is synchronized again with several time servers on the web. One specific TAT device is assigned for an application called Office-TAT and functions like a standard TAT device but has no printer.

A TAT device has the shape of a box (see picture) and comprises a card reader, a display, two push buttons (for entry and exit) and a printer for receipts. Each department of your enterprise will be allocated one TAT device. Whenever employees enter or leave their departments, they press the appropriate button and confirm the action with their badge by simply touching the card reader. They identify their RFID and will get a simple slip as a receipt.

The slip contains several information: personal information of the employee, a stamp of the actual time, the action (in or out) and the location of the TAT. The system logs all TAT actions of each employee. Besides of the monitoring, the TAT system offers further an application including the adding of employees, the assignment of badges, the making of reports or the supervision of TAT actions.

Technical Specifications

System General Information

- based on open source technology
- remote support over SSH
- time synchronisation over NTP

Application

- web browser based
- Java based
- SQL Database (MySQL)
- JDBC connector
- runtime server Apache Tomcat
- written and designed with Apple WebObjects

Communication

- Axis WebServices

The TATs are communicating through WebServices over the local area network

TAT (Time Attending Terminal)

TAT Hardware

- ARM processor board
2 x RS-232, 2 x USB
2 Watt power consumption
RJ-45 network interface
512 MB Flash memory
- RFID Reader RS-232
- LCD display 4 lines
- thermo printer to print slips
RS-232

size and weight

- height:15.75 inches (40 cm)
- width:15.75 inches (40 cm)
- depth:9.25 inches (23.5 cm)
- weight:21 pounds (9.5 kg)
- heavy box with lock

size and weight (Office TAT)

- height:5.2 inches (13.3 cm)
- width:15.75 inches (40 cm)
- depth:7.9 inches (20 cm)
- weight:6.6 pounds (3 kg)
- light box

environmental requirements

- operating temperature:
50°to 140°F (10°to 60°C)
- relative humidity:
5% to 95% noncondensing
- maximum altitude:10,000 feet

electrical requirements and agency approvals

- line voltage:115V AC
(90V to 132V AC) or 230V AC
(180V to 264V AC)
- frequency:47 to 63 Hz,single phase
- maximum continuous power:20W

TAT Software

- Linux Debian operating system
- Java application
- NTP server
each TAT is an NTP time server to grant a perfect time synchronisation
- SSH server

Server

Hardware requirements

- AMD or Intel based computer
- 2 processors
- 2 GB RAM
- 80 GB harddisk
- network interface

We recommend a RAID system and a redundant power supply

Optimal Software

- Debian based Linux OS
- Java 1.5
- Apache Tomcat
- WebObjects runtime
- MySQL
- NTP server
- SSH server