Elock Hardware Revision

By:
Barry Grussling

Adviser:
Ralph Stirling

Overview

- Elock hardware revision
  - Server
    - Listener Daemon
    - Web-based management
    - Database modifications
  - Client
    - Hardware design
    - Embedded C programming
  - Interconnect
    - TCP Networking
    - POE

Server

- Completed
  - Installation of network card
  - 90% of daemon code written
  - Complete rewrite of web-based interface (mod_python->php)
- Needs work
  - Complete daemon code
  - Implement changes on server
  - DHCPD setup

Interconnection

- Completed
  - Power over Ethernet capabilities
- Needs work
  - Cabling to each door
  - Power over Ethernet injectors
  - VLAN capability with IS

Client

- Completed
  - Client board design
  - 98% client code
  - MSP -> Digiconnect serial setup
  - POE
- Needs work
  - Door strike module

Quality Control

- Completed
  - Individual testing of completed modules
- Needs work
  - Complete testing of system
  - Installation of trial client system
  - Creation of hot-swappable backup server

Stats

- 88 hours invested
- Code written
  - 1923 lines for Embedded C
  - 230 lines for server daemon
  - 1989 lines of php for web management

Summary

- Client board is done less strike capability
- Server daemon is done less OM timeout
- Need POE injectors
- Project ready for trial installation early next quarter

Special Thanks

- WWC School of Engineering
- Ralph Stirling
- David Anderson

Questions/Comments/Deep Thoughts?