Abba Logic
PLC Based Access Controls

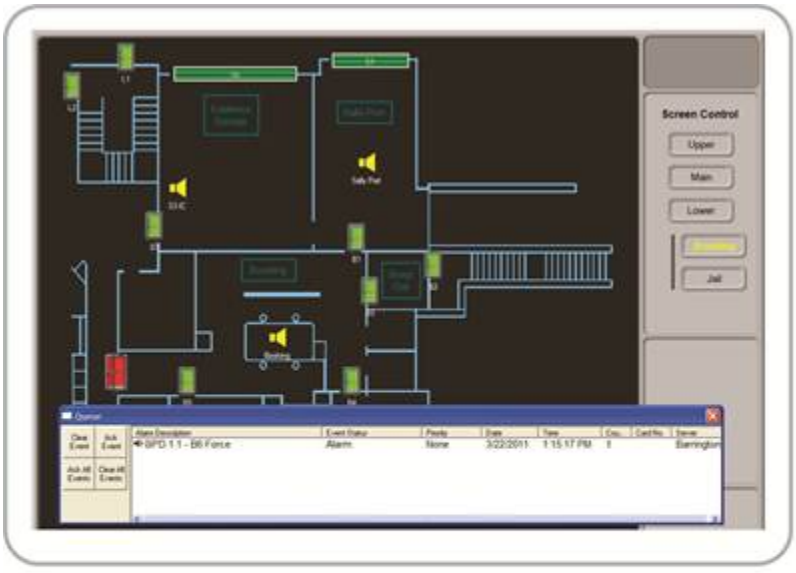
# MASC

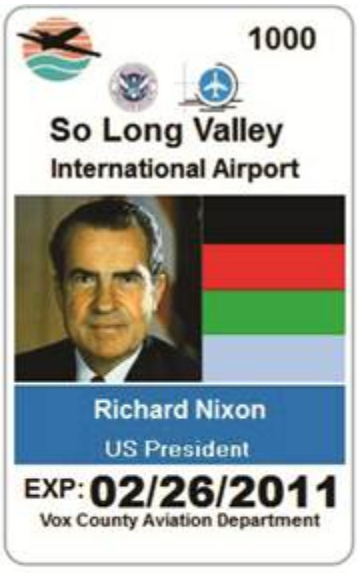
## *MANAGED AUTOMATED SECURITY CONTROLS*

***"FOR MULTI-LEVEL FACILITIES, CAMPUS' & CITY WIDE LOCATIONS"***

If you're working on a project that requires **Access Control**, **PLC Control**, **automatic CCTV switching**, and **Intercom Control**, you'll probably want to take a quick look at the **MASC** product from **Abba Logic**.

Finally, an HMI software interface that supports "all that" in one software platform. The MASC system is a standard off-the-shelf software that can be customized to bring any kind of look and feel the customer needs. You become the designer. Customize the look and feel of the software to match your facility. Maps, Icons, Sounds, and Text are all dragged to an empty screen to create a custom user interface. Graphic Maps can be imported from CAD programs and icons created for your standard drawing packages. Then again, use one of ours, as we provide hundreds of icons we've created over the years.

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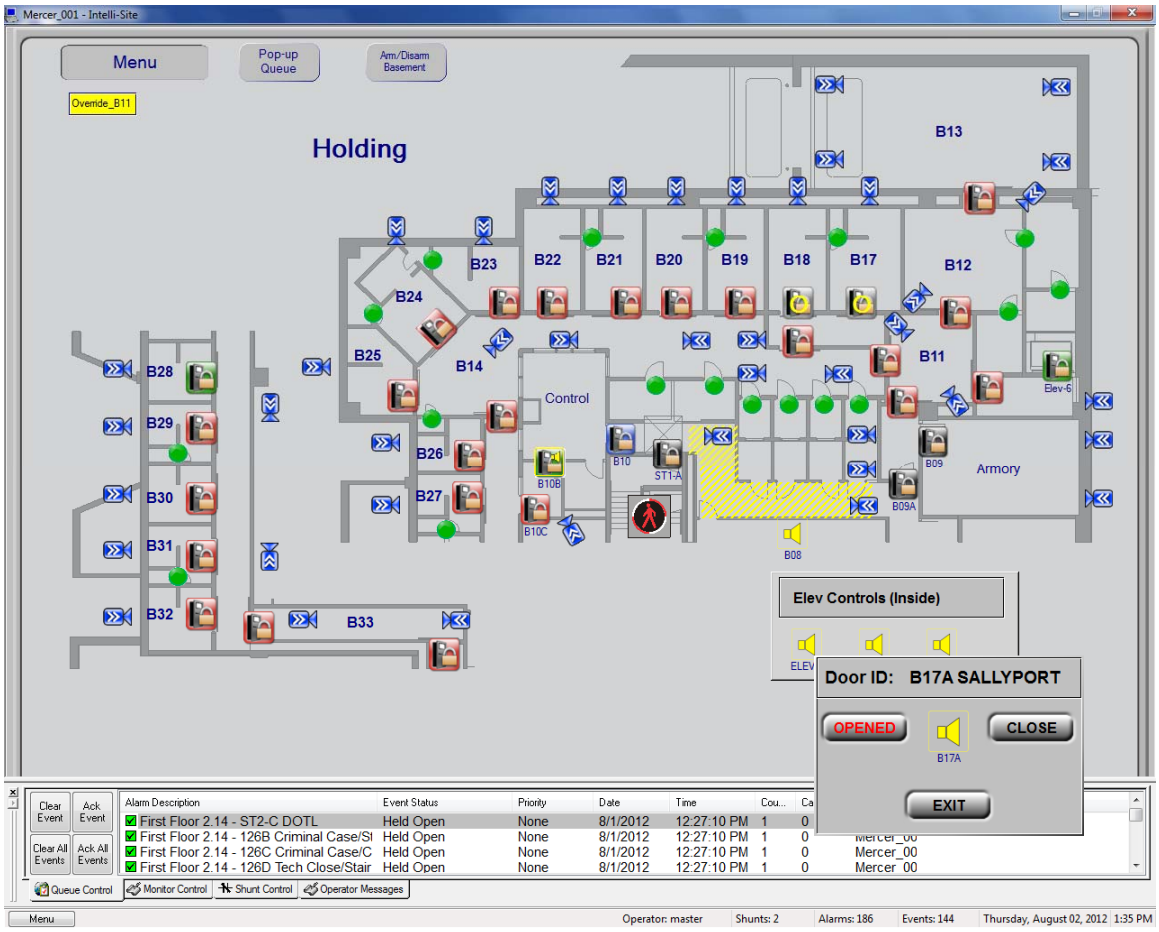
Multiple maps can be linked together with the same or different points on each map. User logon restrictions go right down to the icon level, so if there is functionality that's not given to everyone, you don't have to design a different screen, just assign that function to a different user level and it's done.

All the graphic maps show **real-time point status**, where a single icon can monitor multiple points using bullion logic to show the correct status. **Operator actions** can also be assigned to the icon and those actions can automatically change based on the status of the point. Operator actions can include turning points On, or Off, doing access control functions, bringing video to the screen, changing screens, pop-up screens, doing lookups, or running reports.




All these point status actions come from low-level drivers we've written to support any one of 58 different manufacturers. These are **standard off-the-shelf drivers** so the customer doesn't have to worry about custom code. Our drivers support 6 different flavors of Access Control, virtually any PLC system through OPC, 26 different camera systems and about 12 different intercom systems. We can also support any product using a standard Modbus interface.

We've even taken it one step further. Imagine being able to program your PLC through drag-n-drop ladder logic. **This includes Access Control functions as well**. Abba Logic created a simple to use ladder screen where the common technician can now program PLC ladder logic. To take advantage of this, you need to use the Echelon based PLC controllers from Abba Logic.

They come in a variety of Access Controllers, Input, Output, or Intercom controllers. Each controller has its own CPU and operates on an Echelon Communications Network.

**Standard Features include:**

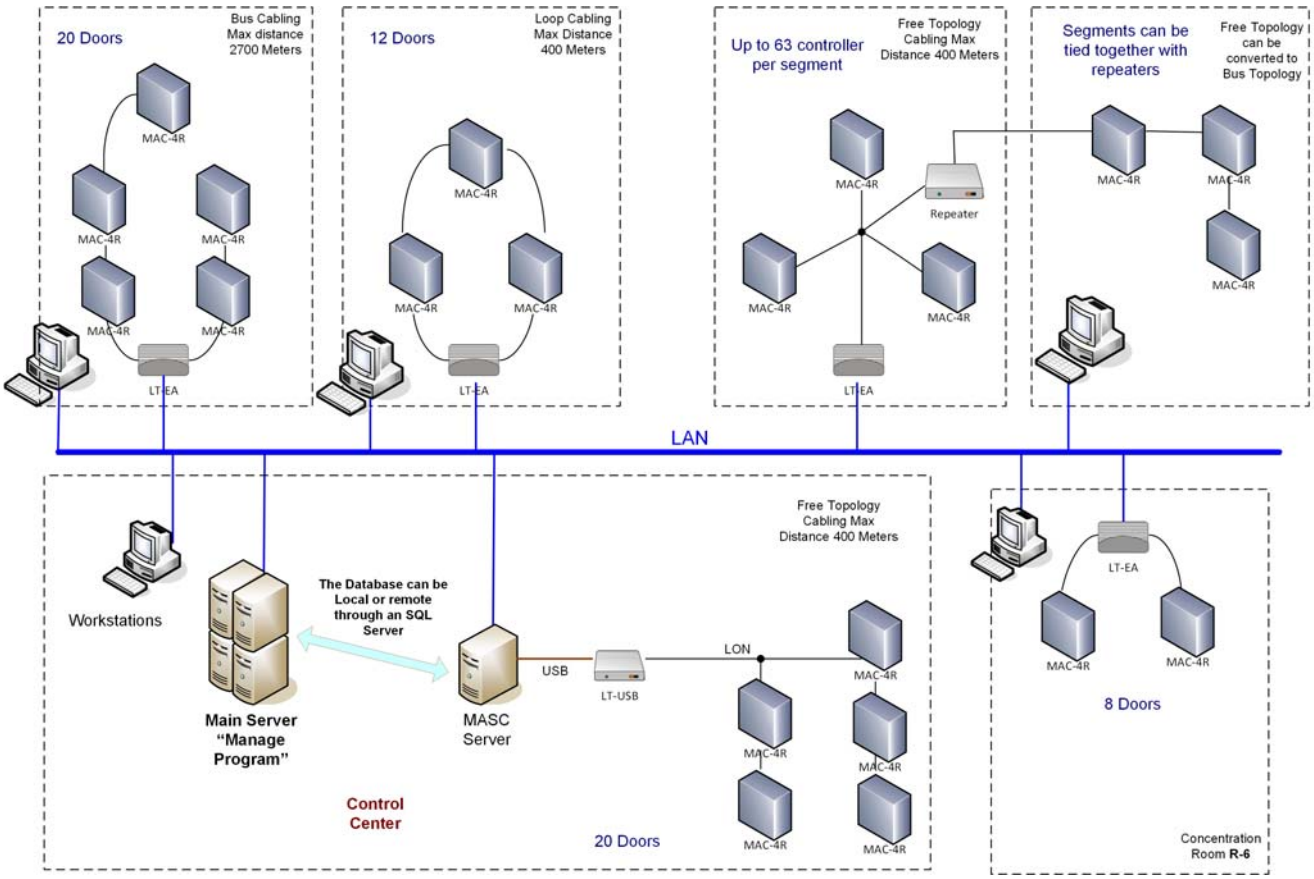
- IP addressability and Connectivity
- 78KB Transfer Rate on Free Topology Bus
- Stand Alone processor each controller
- Programmable Flash ROM
- Peer-to-Peer Communications
- Rack Mount Design
- 2, 3, or 4 State Supervision
- Real-Time Clock
- Unlimited Addressability

The IP and Echelon technology provide fast **peer-to-peer communications** between controllers; where one controller can control other controllers on the same network. The family of products include a variety of input and output controllers fully programmable and fully compatible with its sister product, the MAC-4R Access Controller.

## IP and Echelon Communications working together

- **Large Scale Addressability**
  - Each wiring closet only needs one IP address, from there, the Echelon scheme supports addressing for thousands of devices, all having a unique address.

- **Robust Communications, Open Technology**
  - Multiple manufacturers' hardware can operate on the same side of the Echelon communications line. Echelon operates just like the Ethernet system it's tied to. It's not polled; it uses asynchronous broadcast technology with collision detection and re-transmission of data. Events are buffered until data verification shows the event made it to the server. This communication scheme provides real-time alarm events without the need of a poll, thereby increasing your communications throughput.



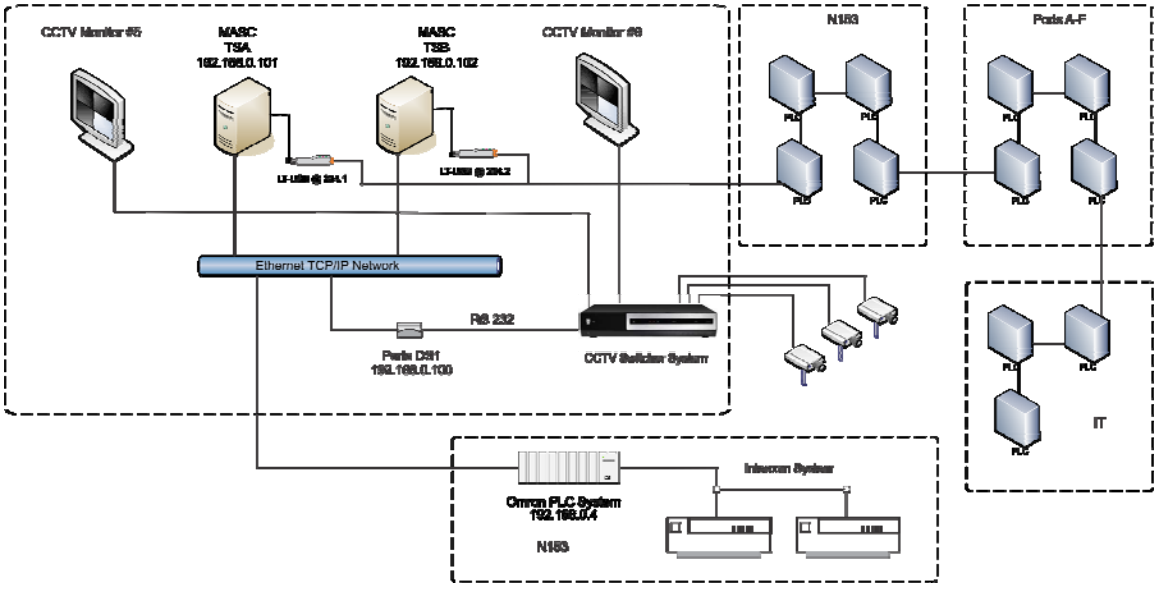

*These could be separate rooms or different buildings across the city*

Any time you have multiple workstations or multiple servers, **Event Routing** is a needed feature to route the right events to the right place. If the local operator logs off or doesn't answer the calls in a timely fashion, the events can be routed to another workstation.

You decide which events get routed to the **Event Log** or **Alarm Queues**. The advantages of routing events into an Alarm Queue are that they can be prioritized, color coded, and have different sounds depending on the type of event. Another advantage is the ability to create **Automatic System Actions** based upon queue selection so the right camera can be displayed at the right time.

Talk about a fast response time, based upon the status of inputs or outputs, **Automated Objects** can also be created to automatically perform control functions without the intervention of security personnel.

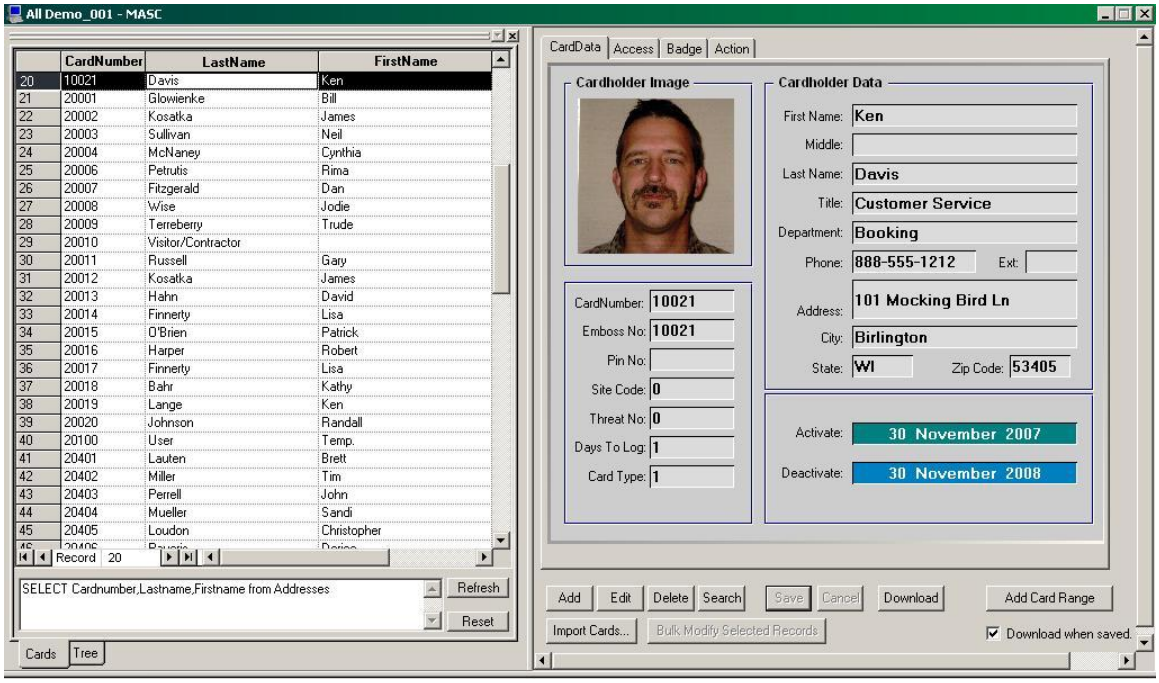
The best setup for correctional applications is to go with a **Multi-Server Configuration**. This allows every computer to operate in a stand-alone mode with it's own database. Any system failures are only going to effect a single work area. During that time Security Control can be transferred over to another Server. The best part of how we designed this is that all Servers basically have the same Database. The only thing different is which Intercom Master, or CCTV monitor becomes the default for that server. This saves a tremendous amount of time when it comes down to programming the system as you only need to program the system once, then transfer the data over to the other Servers.



# Access Control Functionality

Where would an Integrated HMI system be if it didn't have the ability to do Access Control? Answer, Most don't, Integrators normally put in two separate systems. By default none of the other HMI software platforms on the market today can support Access Control in the same software platform.

- **User-Definable Card Holder screen**
  - Here's the default Access Control Screen. If you need more information the system allows you to add Database fields and place them anywhere you wish or create new screens.
- **Database Partitioning**
  - The system supports enterprise level solutions, partitioning the data and routing events to the appropriate workstations. Operators can be restricted to appropriate areas of system control.




- **High-Secure**
  - Restricted areas can be protected with the use of high security features such as 2-man rule, multiple factor authentication, threat levels, Guard Tour card operation, and supervisor cards. Supervisors can be assigned visitor escort privileges.

- **Integrated Badging**
  - No need to find a separate badging system because the system comes with the ability to design your own badges. Database fields, text, and graphics can all be added to a badge design.