

Changes to security program

There are 90 files making up the security program plus an assortment of ocx and dll files. Of these files there have been changes to 16 files since Feb 2004. The main changes have been as follows:

Display of analogue voltages

These changes basically allow all the current levels of the voltages applied to analogue inputs on a door to be displayed on one screen. This makes it very simple to monitor the actual voltages when using tamper proof inputs which allows for the easy setting of alarm trip levels.

Incorporation of UDP transmission protocol

The original system used TCP packets for data transmission. This was updated to use the UDP protocol which provides a much smaller packet size and hence takes less system bandwidth and provides a faster response. This required changes to a number of files.

Modifications to the main screen

The original system displayed card accesses and operator events. The system was modified to replace the display of operator events with current alarms. The display of alarms was a feature requested by people using the system.

Removal of trailing spaces

There were a number of instances, particularly with regards to lifts, where users were adding trailing spaces to names which made the system unable to match names properly. The software was modified to cope with this sort of operator error and trailing spaces were automatically deleted.

Locking and unlocking doors

Operators were having trouble using the system the way it was designed so modifications were made to allow locking and unlocking doors which had time schedules attached to them simpler to use.

Changes to the points list display

Operators were having confusion with inputs which were not used. The system was modified to only display inputs which were used.

Alarms

There were issues where operators were not properly acknowledging alarms and changes were made to make it easier for operators to acknowledge alarms. Capability was added to allow the acknowledgment of all alarms. The ability to reset the alarm system was made harder to access. Changes were made to modify the way the alarm system alerted operators to make it easier for operators to use. Included the capability to play different alarm messages for different priority alarms was added. Modified the way the client handled alarms to make it easier to use.

Printing of screen dumps

Added error handling code to cope with situations where no printer was attached to the system. This was required by changes to the way the operating system worked. This was only required in forms which used screen dumps for printing. Added default printer font size to cope with newer printers which defined too large a default size.

Diagnostics

Changes to the various communication routines were to get better diagnostic information for problem identification. This included support for priority levels in the debug log to exclude unwanted information and keep the file to a manageable size.