



## CredoID Access Control Software Architectural and Engineering Specification Document

### Access Control System

- Use limit: Access rights automatically disabled when allowed number of uses is reached.
- Holiday: multi-day holiday and automatic rescheduling for next year. Up to 4000 holiday dates.
- Vehicle control: Store vehicle details, track movement, generate reports.
- Manual verification of permissions: In case of a lost card verify user permissions for any door by entering name or employee number.
- IP reader support: enjoy high speed uploads, PoE flexibility, fault tolerance, unlimited expansion, and other benefits of IP-based solutions.
- Effective use of hardware resources: Each controller or reader receives only the segment of data that concerns its operation.
- Fault tolerance: No external failures will impact an individual node, and a failure of any node will not impact the rest of the system.
- Hardware-independent system configuration.
- Anti-passback hard and soft.
- ID card design and printing (badging).
- Integrated management of biometric data.
- Child security sends email or SMS alerts to parents every time their child enters or leaves school territory.
- Visitor management: give temporary rights to visiting users and generate visitor reports.

### Expansion & Integration

- IP-based video management systems.
- Built-in reader cameras.
- IP-based burglar alarm systems.
- Data links to HR, accounting, ERP and other systems.
- Web service API.

- XML data import & export.
- Automatic import & update of users from CSV files or Active Directory.
- Vehicle License Plate Recognition systems. Application of all access control rules to vehicles, including: access levels, activation/expiration dates, use limit, operator confirmation, occupancy limits and others.
- LPR OCR error compensation. Handle optical license plate recognition errors by using flexible matching and wild-card characters.
- Digital scales support: user/vehicle weight as an additional verification factor.
- Programmable triggers: any event (or double/triple identical events) may be used to trigger automatic actions.
- Support for indoor/outdoor LED display boards: show building or parking occupancy data.
- Unlimited expansion in terms of users, PC workstations, readers, alarm inputs and outputs.
- Unlimited number of cards, finger templates, PIN's, vehicle license plates per user.
- Smooth growth. Purchase or upgrades of expensive master controllers or software licenses not required.
- Backwards and forwards compatibility: no need to replace old generation readers/controllers in order to add more controlled points.
- Support for major security hardware manufacturers. Ability to mix hardware of different manufacturers in the same system.
- System partitioning. Divide a system into "Locations" or "Sites" for convenient and secure administration by multiple operators.

## Easy To User

- Modern & attractive interface geared towards ease-of-use.
- Access levels assigned to a user not to a card. Issue new cards in a fast and easy manner, without reassigning access levels.
- Operator initiated SMS notifications directly from security management software. Perfect for notifying users about visitors, lost items, car parking problems and other issues.
- Automatic display of photos of users as they pass through selected doors.
- Real-time occupancy information clearly shows the location of each user.
- "FriendlyBits" automatic card format detection, raw card data & unlimited card format support.

- Support for USB card readers. Fast and error-free data entry for all major ID card technologies.
- Map zoom control using mouse wheel.
- Automatic face detection and photo cropping when capturing user photos via USB camera.
- Drag & drop map editing.
- Quick add feature for issuing new cards: increments card numbers automatically, without the need to retype.
- Custom map icons for each floor plan in order to help operators identify building zones quickly.
- Messenger-style pop-ups next to devices on maps.
- Filter live event list by text contained in user names, door names and message titles.
- Dynamic search in all software windows: search results shall be narrowed automatically.
- Copy function to reduce manual data entry. Ability to copy users, doors, floor plans, time schedules, access levels, card formats and holidays.
- Remote biometric enrolment: capture finger templates via any door reader.
- Restore function: recovers accidentally deleted users.

## Monitoring and Security

- Intuitive display of events: game-like animation adds clarity and understanding. An operator can see as a door opens or the reader changes mode of operation. Operator training requirements are reduced and response time is improved.
- Alarm acknowledgement: procedures to record detailed history and operator comments of important alarm events. No critical alarms shall be missed.
- Alarm transmission via SMS: (mobile phone text messages) and email.
- “Push” technology: for real-time alarm delivery and reduced network traffic.
- Graphic maps.
- Video integration: automatic display of video from an alarm location, ability to browse video history, storage of snapshots in security database.
- Audible alarm alerts: for operators.
- All popular access control cards supported.
- Authentication modes: Card only, Card & PIN, fingerprint.
- Programmable card removal actions: lock PC automatically, even when stepping away just for a few minutes.

- Emergency access: in case of a lost card.
- Physical access control rules applied in logical access.
- PC logon events: displayed and integrated into security management system.
- Instant deactivation of a user: in physical and logical access control systems.
- Active Directory support.

## Localization & Standards

- Multilingual interface: English, Spanish, Japanese, Arabic, Hebrew, Farsi (Persian), Finish, Norwegian, Dutch, Azerbaijani, Lithuanian, Latvian, Polish and Russian.
- Built-in translation tool: add new language in matter of hours.
- Extended regional options including Gregorian and Farsi calendars and ability to configure weekend days
- Mainstream DB engine: MS SQL Server 2008-2019 32/64-bit.
- Industry standard readers: all Wiegand and RS-485 formats supported.
- HID OPIN API
- Web service API
- Suprema v2 SDK
- Mercury Security SDK