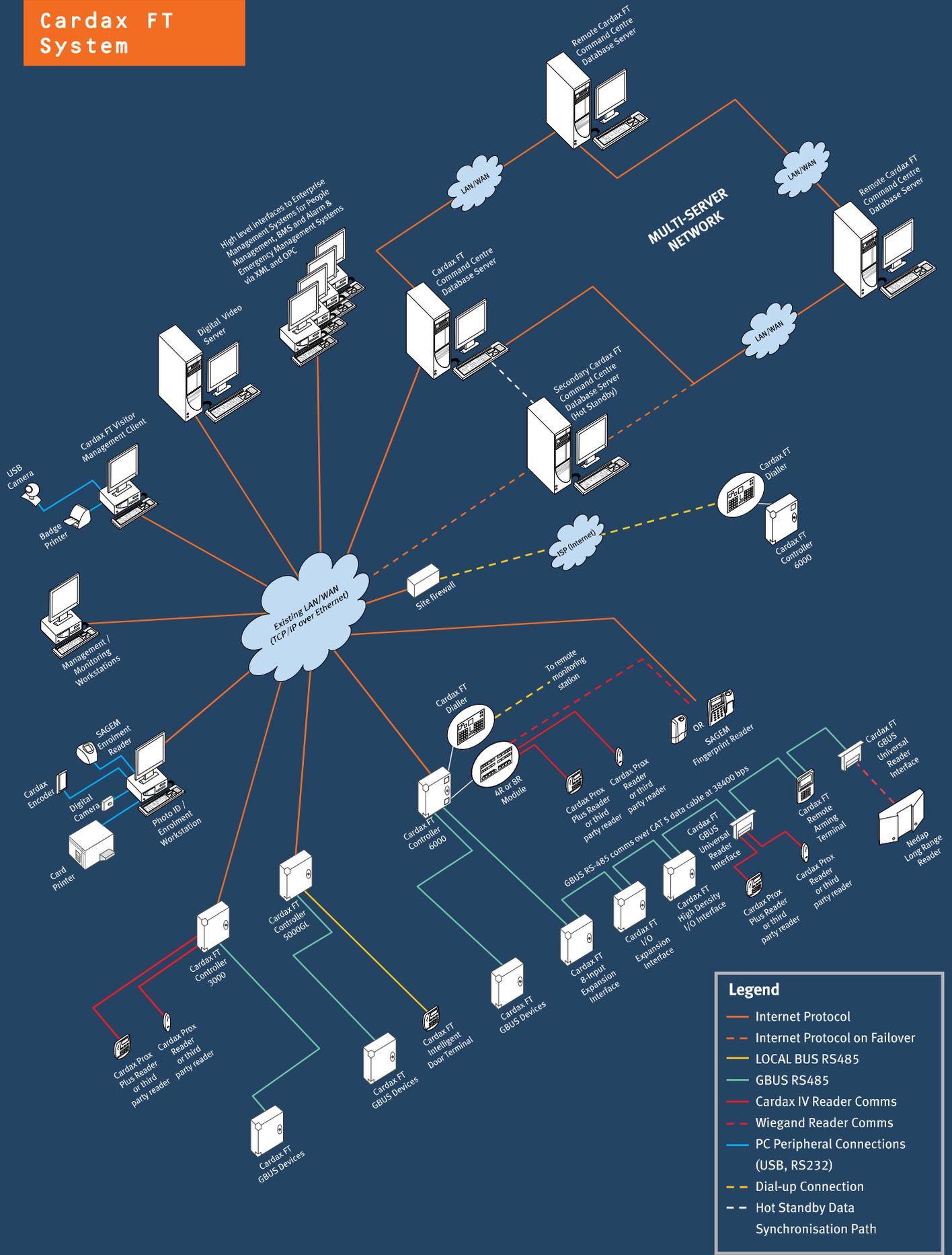


# Cardax FT Command Centre

Cardax FT Command Centre is the central management tool for the Cardax FT system. The software is powerful, and caters for a versatile feature set.



# Cardax FT System



**Legend**

- Internet Protocol
- - Internet Protocol on Failover
- LOCAL BUS RS485
- - GBUS RS485
- Cardax IV Reader Comms
- - Wiegand Reader Comms
- PC Peripheral Connections (USB, RS232)
- - Dial-up Connection
- - Hot Standby Data Synchronisation Path

## Cardax FT

# Command Centre

Cardax FT Command Centre is the central control server for the Cardax FT security system.

Cardax FT Command Centre leverages client server architecture, enabling system operators to:

- Configure the site and all system components
- Manage cardholders, including their access based on the competencies they possess
- Produce and print photo identification to cards
- Monitor alarms and interact with the system from site plans or other windows
- Retrieve and report on stored system information
- Communicate with people via Intercom enabled readers
- Interface to other third party systems.

The Cardax FT system is scalable, with Cardax FT Command Centre server options available based on the number of doors, from less than 16 doors to an unlimited number. It is a powerful, yet operator friendly security system. Installed on a server, Cardax FT Command Centre resides on Microsoft® Windows® operating platforms.

It can be incorporated into a company's existing Local Area Network or Wide Area Network, or reside on its own dedicated network.

Cardax FT Command Centre links to Cardax FT Controllers (6000, 3000 and 5000GL) and to operator workstations over Ethernet using TCP/IP, a world standard network and Internet transmission protocol.

Using this protocol means the system communications are Internet compatible.

### Operating Platforms

The Cardax FT Command Centre server and workstation software reside on the Microsoft® Windows® operating system.

The database options are Microsoft® SQL 2005 Standard or Express and SQL 2008 Standard or Express depending on the system requirements.

Renowned for its data integrity and performance, Microsoft® SQL is a commonly specified database used globally in a range of applications. It is easy to integrate and share selected data held in Cardax FT Command Centre with other systems using the SQL Server database.

Please contact Gallagher Security Management Systems or your Cardax office for information relating to current operating platforms supported.

### Distributed Processing

Distributed processing is a significant feature of the Cardax FT system architecture.

Cardax FT Command Centre supports peer to peer communications between multiple Servers, allowing Cardax FT to operate effectively in a distributed environment. This 'distributed environment' may include multiple

sites separated by large geographical distances and connected via low bandwidth and/or intermittently available networks.

The ability for an operator to view and manage information pertaining to a remote Cardax FT Server can be configured via standard Cardax FT Operator Privilege and Division view functionality.

### Cross-site Operational Cover

This architecture allows organisations to provide cross-site operational cover, where operators from one site can temporarily manage security on a remote site when a remote site Operator may be unavailable. This also allows a head office to maintain control of the security at any time on a remote site, should the need arise.

If the site experiences network communications problems, full operation of access control and alarms management is maintained.

Peer-to-peer communications can be configured to set up relationships between Controllers for flexible and efficient system configuration. Cardax FT Controllers (6000, 3000 and 5000GL) can also be configured for dial-up for the support of remote sites, and for off-site alarm monitoring. Gallagher has a range of industrial switches to provide a solution for redundant Ethernet network communications.

### Multi-Server Evacuation Reporting

Any server in a Cardax FT Multi-Server network can be configured to act as an 'Aggregation Server'. This allows the Server to keep an up-to-date status on the location of all Cardholders over a Multi-Server network.

In the event of a disaster at one Server's site, the Aggregation Server(s) can provide Evacuation Reports detailing the last known locations of Cardholders at the disaster affected site.

### Data Security

Data over the network between the Cardax FT Command Centre and Cardax FT Controllers uses up to 256-bit AES

### System Division

System Division (partitioning) enables a site to be divided into divisions and sub-divisions. It is especially suitable for:

- Multi-tenanted buildings where each tenant wishes to manage and monitor their own security
- Very large enterprise-wide systems where it is more practical to divide the site for ongoing management and monitoring, for example, dividing the site into geographic zones.

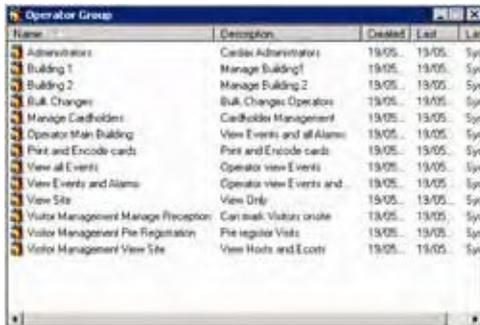
### Operators and Workstations

Cardax FT Command Centre places no limits on the number of workstations or operators that may be set up.

Cardax FT Command Centre supports standard Microsoft® Windows® and CAD package graphics files such as BMP, DXF (via conversion utility) and WMF/EMF.

Each site item is represented by an icon. The icons representing site items can be placed on these images. The icons placed on the map image show the real time status of the site item represented.

Site plans include configurable elements, which can be associated with Cardax FT items, for example fence lines and buildings can be displayed with appropriate alarms, semi-transparent alarm zone overlays, macro override buttons and site plan navigation arrows.



Name	Description	Created	Last	Lib
Administrators	Cardax Administrators	19/05	19/05	Sys
Building 1	Manage Building 1	19/05	19/05	Sys
Building 2	Manage Building 2	19/05	19/05	Sys
Bulk Changes	Bulk Changes Operator	19/05	19/05	Sys
Manage Cardholders	Cardholder Management	19/05	19/05	Sys
Operator Main Building	View Events and all Alarms	19/05	19/05	Sys
Print and Encode cards	Print and Encode cards	19/05	19/05	Sys
View all Events	Operator view Events	19/05	19/05	Sys
View Events and Alarms	Operator view Events and	19/05	19/05	Sys
View Site	View Only	19/05	19/05	Sys
Visitor Management Manage Reception	Control Visit, Visitors onsite	19/05	19/05	Sys
Visitor Management Pre Registration	Pre register Visits	19/05	19/05	Sys
Visitor Management View Site	View Hosts and Events	19/05	19/05	Sys

Operator Group



Site Plans

encryption, an industry leading level of data protection.

### Ease of Configuration

Cardax FT Command Centre features Configuration Wizards and Templates, tools to support the ease of new system installation. Configuration Wizards enable access controlled doors and new hardware to be quickly and easily configured in Cardax FT Command Centre while Database Template functionality allows a standard configuration to be applied to sites with common requirements.

Performance may be limited by the hardware used on the system.

As well as being subject to system division, operators are assigned privileges and can only perform authorised functions. Card logon to Cardax FT Command Centre is also available.

### Site Plans

Site plans show a graphical representation of the site and the real time status of remote field devices and logical entities. An unlimited number of site plans can be stored in the system. An operator can create site plans by importing map images of the site.

Site plans also feature touch screen support and 'free text' objects. Alarm priorities are represented by different background colours for each icon.

Clicking on an icon displays the properties for that item. It is critical that while operators are viewing site plans they are aware of alarms occurring elsewhere in the system. The Alarm Window can be configured to always be in the foreground of the operator workstation.

### Management of Alarms

An alarm is a special event that requires urgent operator intervention, for example, when a door is open longer

than it should be, a device has been tampered with, or an intruder alarm has been activated.

The alarm configuration routine in Cardax FT Command Centre enables system administrators to define those site events to be set up as alarms. There are three items to be configured for each alarm:

- The event priority – Up to 10 event priorities can be defined; 8 of these can be assigned to alarms. Alarms can be escalated to higher priorities until they are processed.
- Alarm action plans – To specify the actions that are triggered by the alarm condition.

Alarm zone state changes can be:

- Automated via schedules set up in Cardax FT Command Centre
- Initiated from workstations via operator overrides
- Initiated via Cardax FT Remote Arming Terminals
- Initiated via Cardax readers
- Initiated via Key-Switch control.

Authorised operators monitor alarms at Command Centre workstations. This can be complemented with:

- Cardax FT Remote Arming Terminals for alarms management in the field
- Offsite alarm monitoring utilising Contact ID transmitted via Cardax FT Controllers.

- The access groups to which the cardholder belongs
- Detailed information about the card(s) held by the cardholder, for example, card number, facility code, technology type, issue level, and expiry date and time
- Biometric template for fingerprint identification.

Cardax FT provides an easily accessible audit trail of changes made to a cardholder including, what change was made and when it was made, the operator who made the change and the workstation from which the change was made.



Cardholder Management



Personal Data Fields

- Alarm instructions – To provide information and instructions to the operator when the alarm occurs.

**Intruder Alarm Monitoring and Control**  
The Cardax FT system integrates full intruder alarm functionality eliminating the need for a separate intruder alarm system. Intruder detection zones can be configured to report four different states: arm (set), disarm (unset), and two further states with user definable names.

Entry and exit delays can be defined for each zone. This gives cardholders time to enter and leave the site when changing the state of the alarm zone.

**Site Lockdown**

Access zones can be configured to enter either partial or full site lockdown during threat or emergency situations. Site lockdown ensures that only selected cardholders (identified via their access group) can enter or exit a zone/s.

**Cardholder Management**

Cardax FT Command Centre provides an extensive cardholder database. Each cardholder record includes personal cardholder information and access information:

- Up to 64 personal data fields where personal data can be entered

Cardholders can use their same cards/ fingerprints/PINs across all sites within a Multi-Server network (e.g. a manager with appropriate access rights can travel between sites controlled by separate Cardax FT Servers, using the one card for entry).

Universal Card Formats enable multiple third party Wiegand formats of up to 360 bit to be supported concurrently in the Cardax FT system. Subject to System Division and operator privileges, an operator can create, delete and change cardholder records in the system. Any changes made are recorded as events.

The system automatically down-loads any changes made to the cardholder record to the relevant field devices. Cardholder data can be shared with third party applications via the XML Interface.

#### Personal Data Fields

Personal data fields hold the relevant personal data required for a cardholder, for example, the department in which they work and to whom they report.

Personal data fields are created as separate entities and are attached to access groups. Cardholders inherit the personal data fields from the access groups to which they belong.

Fields an operator can see and change through their operator privileges.

Cardholder bulk changes enable an operator to make changes to multiple cards simultaneously.

#### Card Encoding

Cardax Magstripe and Mifare cards can be encoded from within Cardax FT Command Centre. The Card Encoding Wizard is designed for card enrolment, printing, and encoding.

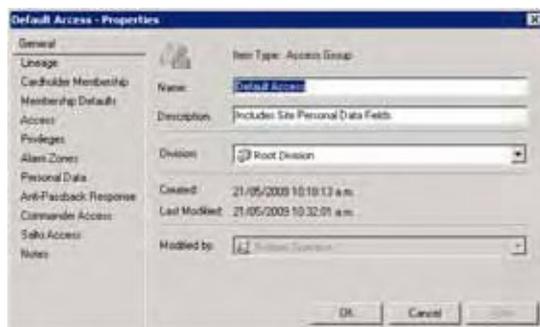
#### Access

##### *Access Groups*

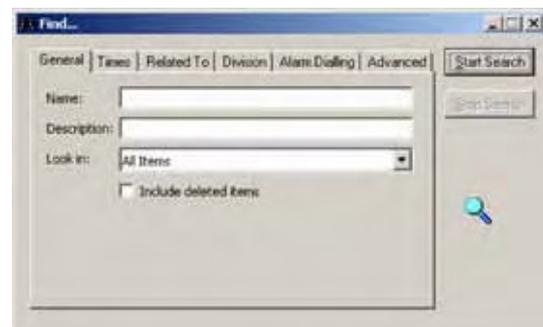
Access groups make it possible to define access for groups of cardholders

Access groups are displayed as a tree with branches having more specific access. A cardholder may belong to one or more access groups to get their full access privileges. For example, there may be an "All Cardholders" group to which all cardholders belong for commonly required access through the entrance and cafeteria. A cardholder acquires more specific access by joining other groups, for example, "Head Office Managers' Group".

Access is defined through access zones and time schedules. Access groups are an efficient cardholder management tool. Access groups also enable bulk changes to be easily applied to



Access Group



Find Window

When viewing a cardholder's record, it will contain all the personal data fields specified in the access group(s) the cardholder belongs to. Personal data fields can be configured to be unique, mandatory, numeric or alphanumeric.

A personal data field can also contain an image which can then be used for PhotoID and cardholder Challenge. Cardax FT Command Centre has a fully integrated access control photo identification system (Cardax FT PhotoID).

Each cardholder record can have up to 64 personal data field definitions. It is possible to restrict the Personal Data

who share the same requirements.

Each access group is named and includes the following information.

- Access – where and when members of the group have access
- Members – a list of cardholders who belong to the access group
- Personal Data Fields – a collection of personal data field definitions attached to individual members
- Escort – whether the members are allowed to act as escorts for visitors
- Arm/Disarm alarm zones (areas) – member authorisation to arm and disarm certain alarms
- Whether members can change the state of the access zones.

members for the group. Any changes to Access or Personal Data Field properties will automatically apply to all members of the group.

#### *Competency Based Access*

Access can be based on an individual's competencies, e.g.:

- Safety (induction, training, licences)
- Security (clearances)
- Regulatory Compliance (OH&S policy)

Validity periods and competency expiry can also be factored into the access decision.

Competency based access management delivers:

- Automatic enforcement of business OH&S rules and policies
- Reduction of production stoppages due to non-compliant staff being in the wrong areas
- Tangible evidence of 'duty of care' to staff and customers
- Automatic compliance with government regulations

Controller based decisions based on an individual's competency are delivered via screen feedback on the door reader or display monitor. Once configured, all of this is achieved independent of Server and IT Network connectivity.

- Creating a list of cards which have been created, activated or expired before, during and after a defined period
- Identifying cardholders who have access to a particular access zone at a particular time.

#### Reports

A comprehensive range of report templates is available to view and print information held in the system including:

- Activity Report
- Cardholder Report
- Time and Attendance Report
- Access and Access Group Reports
- Exception Report

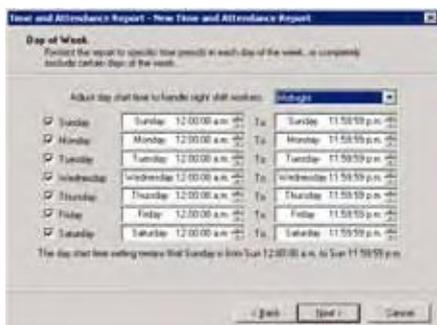
#### Elevator Interface

Access to floors from elevator cars can be configured and controlled by Cardax FT Command Centre via a High Level Elevator Interface.

#### OLE for Process Control (OPC) Interface

Cardax FT Command Centre is OPC enabled, allowing alarms and event data to be bi-directionally interfaced to other OPC enabled applications.

An OPC enabled system can also control the state of selected Cardax FT items directly from the third party system by invoking overrides and can report the state of selected Cardax FT items directly in the third party system.



Time and Attendance Report



Elevator Interface

#### Digital Intercom

When a person at the Cardax FT Intelligent Door Terminal presses the F3 button on the reader, the operator can use the Integrated Digital Intercom functionality to speak / listen to the person.

#### The Find Window

The Find Window is an efficient, powerful tool that makes it easy to search for information. It can be used to find any device, logical entity or cardholder in the system.

Examples of typical searches include:

- Identifying the cardholder of a lost card that has been handed in

- Evacuation Report
- Site Configuration Report
- Wiring Report
- Contact ID Assignment Report
- PowerFence™ Voltage Report

#### Interfacing Systems

Cardax FT has been designed to readily interface to third party applications.

Because this is an ever-changing environment, contact Cardax Technical Support for the latest information.

#### TCP/IP Intercom Interface

Using Cardax FT Command Centre, the operator can control call connectivity for the TCP/IP Intercom system. Events are logged into the Cardax FT database.

OPC eliminates the need for costly custom software integration, giving customers the freedom to choose a solution based on an open industry standard. OPC is used globally and is fully backed by Microsoft®. Further information can be found at [www.opcfoundation.org](http://www.opcfoundation.org).

Cardax FT OPC interfaces have been developed for CCTV, Remote Alarms Management, (Contact ID), third party graphical user interfaces and log printing.

### XML Interface

Cardax FT Cardholder Import and Export provides the ability for cardholder data to be imported from external sources to Cardax FT Command Centre using standard software functionality known as XML Interface. Typical sources of data include a student enrolment database, or a company's HR database from a system such as SAP.

Third party Schedules can also be imported in to Cardax FT Command Centre using XML Interface to be reflected in security schedules.

Software Licence and Maintenance Agreements  
Gallagher Security Management Systems has a programme of continuing development and will make upgrade versions available through periodic version releases.

The Cardax Software Licence and Maintenance Agreement programme provides a cost effective means of obtaining future upgrades and ensures sites keep pace with developments.



Controller Logic



Management of Alarms Supported with DVR Integration

### Biometric System Integration

Integration between Cardax FT and SAGEM biometric fingerprint readers enables seamless fingerprint enrolment and template management within Cardax FT Command Centre.



# Cardax FT Command Centre Optional Features

Extend the Cardax FT system with the following optional features to meet specific site requirements:

**Cardax FT PhotoID and Encoding**  
Cardax FT PhotoID and Encoding is an optional licensed feature available for Cardax FT Command Centre. Cardax FT PhotoID and Encoding provides the ability to design, produce and encode photo identification cards for cardholders.

**Cardax FT SAGEM Fingerprint Reader Integration**  
Cardax FT SAGEM Fingerprint reader integration is an optional integration

**PowerFence™ Trophy FT Integration**  
PowerFence Trophy FT Integration is an optional, fully integrated application available for Cardax FT Command Centre. It enables the full configuration, control and monitoring of the PowerFence™ system through Cardax FT Command Centre.

**Salto Integration (CommCard Solution)**  
Cardax FT Salto wire free reader integration is an optional integration available for Cardax FT Command

the standard access control capabilities of Cardax FT to online, unwired Aperio doors, delivering functionality not achievable with mechanical keys.

**Enterprise Data Import Interface**  
Cardax FT Enterprise Data Import interface is an optional application available for Cardax FT Command Centre. It enables Cardholder data within external enterprise systems to be automatically reflected in the Cardax FT database, in order to maintain data



PowerFence™ Trophy FT  
Fence Controller Properties



Biometric Fingerprint Enrolment

application available for Cardax FT Command Centre. Integration between Cardax FT and SAGEM biometric fingerprint readers enables seamless fingerprint enrolment and template management within Cardax FT Command Centre.

Identification (finger only) and verification (fingerprint template stored on a smartcard) are available.

Centre. It allows Cardax sites to further leverage their investment in Mifare SmartCard technology for doors which do not require real-time, monitored access control.

**Aperio Integration**  
Cardax FT Aperio wire free reader integration is an optional integration available for Cardax FT Command Centre. The Aperio integration extends

integrity and reflect business approved changes to Cardholder information and access rights.

For more information about each of these features please refer to the Cardax FT Optional Feature datasheets available from [www.cardax.com](http://www.cardax.com).

May 2010		
TECHNICAL SPECIFICATIONS	Cardax FT Command Centre	
Recommended Computer Specifications	A number of variables e.g. event rate, will affect the recommended computer hardware specifications. Please discuss your requirements with Cardax Technical Support.	
Operating System	Server	Windows 7 Professional/Ultimate Microsoft® Windows® 2003 SP2 or 2008 SP2, 2008 Server, 2008 Server R2, XP Professional SP3 or Vista Business/Enterprise Editions SP2,
	Workstation	Windows 7 Professional/Ultimate Microsoft® Windows® XP Professional SP3 Vista Business/Enterprise SP2 Edition
Database Platform	Microsoft® SQL Server 2005 SP2 or SQL 2005 Express SP2, 2008 SP1 or 2008 Express SP1	
Configured workstations	Maximum Number	Unlimited
Operator Authorisation Level	Fully configurable for each operator	
Configured Operators	Max. number of configured operators	Unlimited
Simultaneous Logons	Max. number of operators simultaneously logged on	Unlimited
Cardax FT Hardware	Cardax FT Controllers (6000, 3000 & 5000GL)	Unlimited
	Field Devices	See Controller datasheets
Number of Cardholders	Command Centre	Unlimited*
Event Database	Command Centre	Unlimited*
Card Issue Levels		15
Maximum Access Controlled Doors		Unlimited
Access Control Zones	Max. number of access controlled zones	Unlimited
Controlled Outputs	Max. number of relays	Unlimited
Alarm Inputs	Max. number of inputs	Unlimited
Elevator Control - low level	Maximum of 2 elevator cars (each with up to 75 levels) per Cardax FT Controller Cardax Technical Support recommends using the Cardax FT Controller 6000 architecture for low level elevator control.	
Elevator Control - high level	Refer to Cardax Technical Support to determine the number of Cardax FT Controllers required for the system.	
System configuration, network capacities and the volume of system activity affect performance. Please contact Gallagher Security Management Systems for advice. * Maximum number dependant on relevant database limits		

## Further Information

Cardax FT is a sophisticated security system. This data sheet summarises some of the key features provided through the system software. For more information about the Cardax FT security system, please contact your Gallagher Security Management Systems Office or channel partner, or refer to:

- [www.cardax.com](http://www.cardax.com)
- The complete set of data sheets for the Cardax FT system
- Your Cardax dealer for a demonstration of the system and to discuss site specific requirements.

We welcome your enquiries.



*Where quality and reliability is our guarantee!!*



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