Elevator High Level Interfaces

The Gallagher Elevator High Level Interface (HLI) feature provides the ability for the Gallagher security system to control access to floors from elevator cars. The Destination Based Dispatching HLI enables elevator systems to group passengers travelling to similar destinations for more efficient access control.

Gallagher Elevator High Level Interfaces

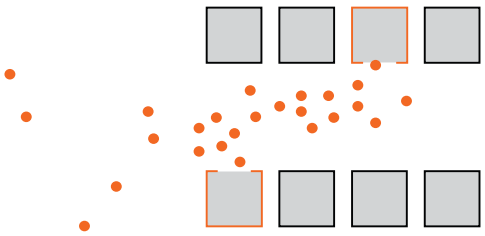
With a range of High Level Interfaces, the Gallagher system can be integrated with your new or existing elevator system to provide access control to each individual floor. A Gallagher reader (Prox or Prox Plus PIN) installed within or adjacent to an elevator car and connected to a Gallagher Controller will alleviate the need for the extensive I/O usage typical of low level elevator interfaces.

An access zone can be assigned to each floor that an elevator car travels to. Floor access can be freely enabled for all passengers if the corresponding access zone is in free access, or controlled if the corresponding access zone is secure.

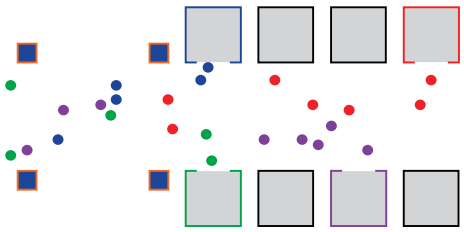
When a cardholder requires access to a secure floor via an elevator, the Gallagher system will send a message to the elevator control system to enable floor access corresponding to those access zones assigned to the cardholder. Gallagher Command Centre will record cardholder floor selections in the Gallagher event database.

Security is further enhanced by monitoring of the communications data between the Gallagher system and the elevator system. An alarm can be raised at the Gallagher Command Centre workstation if the Gallagher Controller or server fails to receive a response from the elevator system.

The Gallagher access system also supports the latest technology in elevator control systems known as destination based dispatching. Elevator systems supporting destination-based dispatching feature keypads and screens located in elevator lobbies that replace traditional elevator call buttons. Passengers enter their desired floor before entering an elevator car; passengers traveling to nearby floors are grouped together in the system and directed to a specific elevator car by destination-based dispatching system screens. This minimises the number of stops, and decreases congestion and travel time - especially during peak traffic periods.



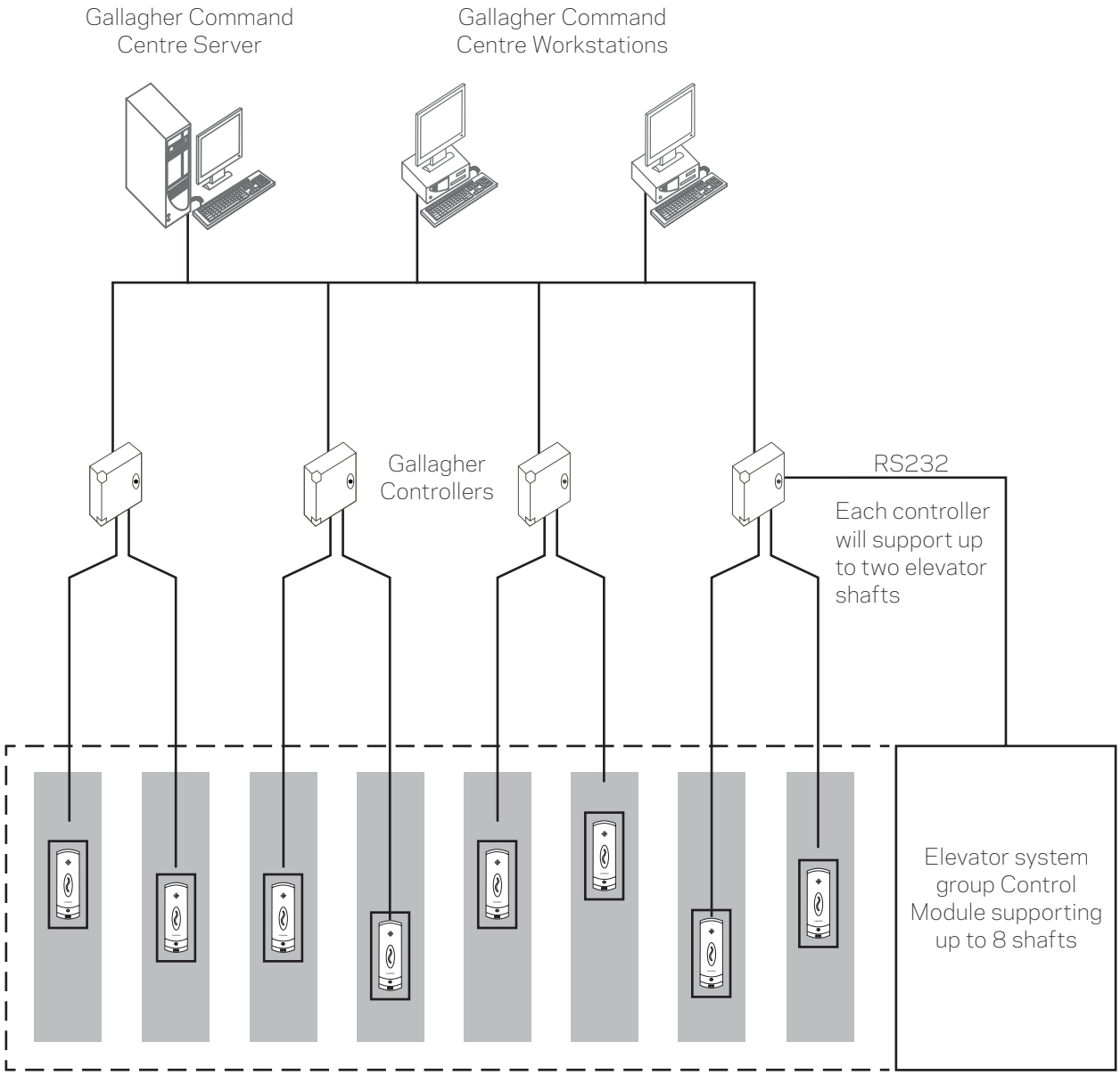
Conventional Up/Down Dispatching



Destination Based Dispatching

Standard Kone and Otis Elevator HLIs

The standard Kone and Otis Elevator HLIs allow full access control integration with your elevator system. Individual floors can be set to secure or free status; free floors can be selected at any stage without presenting a valid access card, and the selection of secure floors at elevator control panels is enabled for cardholders with appropriate access privileges following the presentation of their access card. The elevator system is connected to the Gallagher Controller by a high level (RS232 communications link, and elevator control requires one reader (Prox or Prox Plus PIN) within each elevator car. The elevator car readers can be connected to any Gallagher Controller within the system.

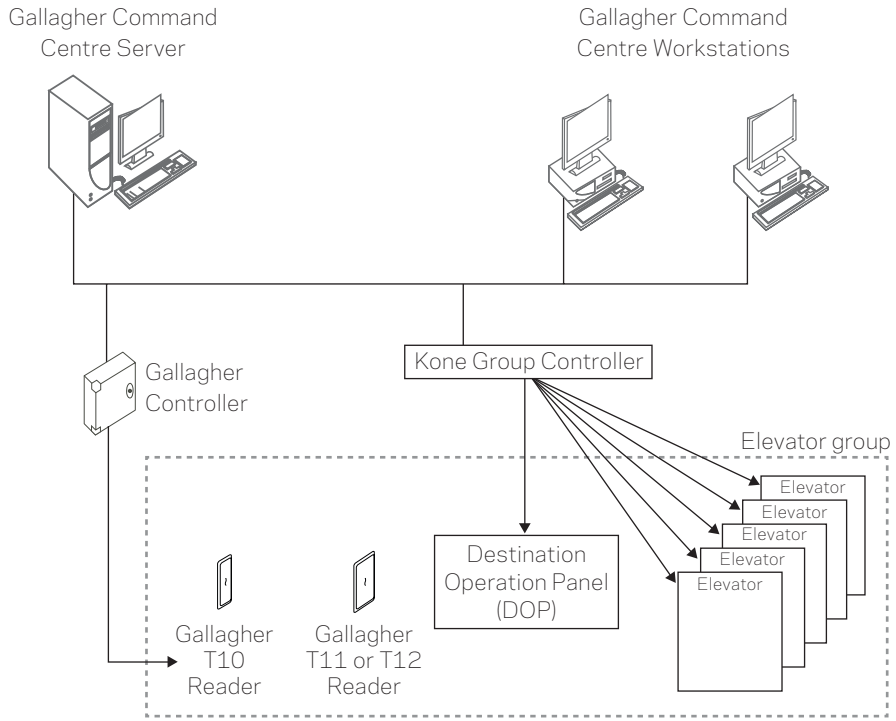


Destination Based Dispatching HLIs

Each Gallagher Destination Based Dispatching HLI allows full access control functionality to be achieved; by allowing the elevator system to group passengers travelling to similar destinations the benefits of destination based dispatching elevator systems can be realised.

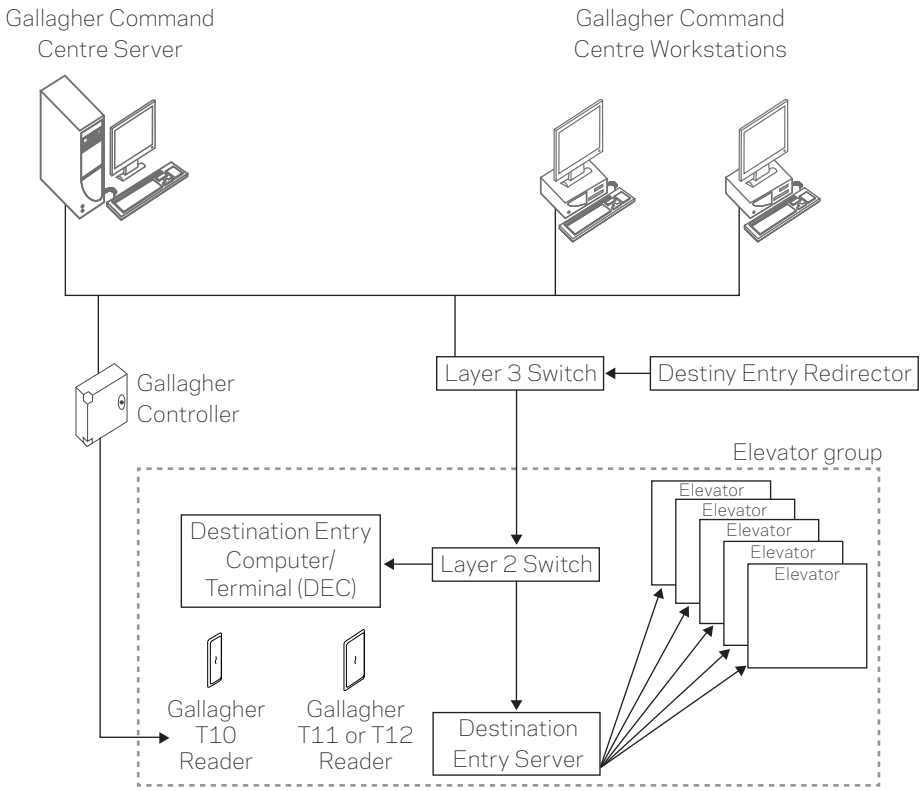
Kone Polaris HLI - Optional Feature

When a cardholder presents their card at a Gallagher reader adjacent to a Kone Destination Operation Panel (DOP) in order to select a secure floor, a TCP/IP communications link between a Gallagher Controller and a Kone Elevator Group Controller allows access privileges allocated in Gallagher Command Centre to be communicated instantaneously to the Kone Elevator system. A user selecting a valid floor will be directed to the appropriate elevator by the Kone DOP.



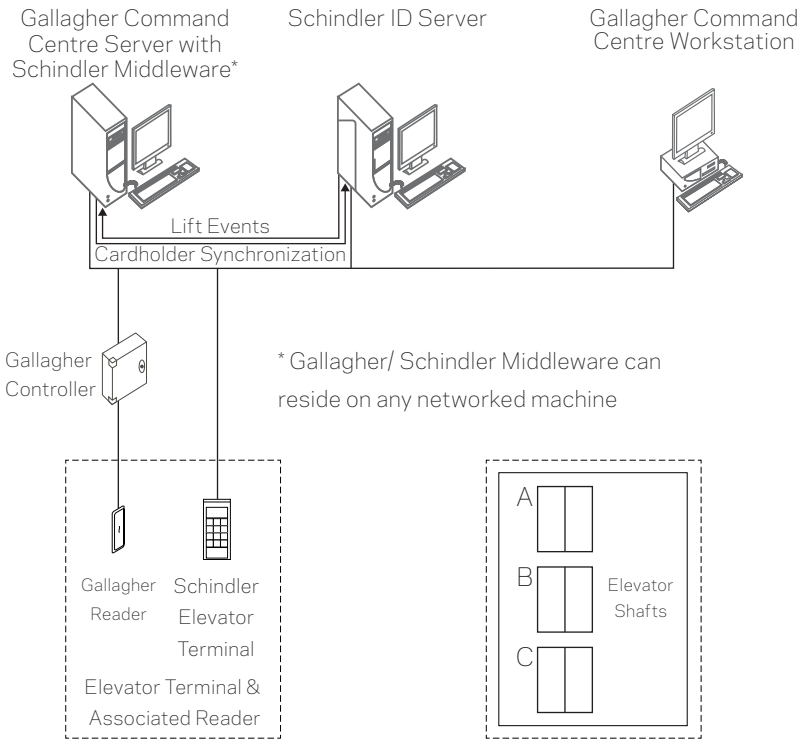
Otis Compass Destination Control System HLI - Optional Feature

When a cardholder presents their card at a Gallagher reader adjacent to an Otis Destination Entry Computer (DEC) in order to select a secure floor, a TCP/IP communications link between a Gallagher server or workstation and an Otis Destination Entry Redirector allows access privileges allocated in Gallagher Command Centre to be communicated instantaneously to the Otis Elevator system. A user selecting a valid floor will be directed to the appropriate elevator by the Otis DEC.



Schindler Miconics HLI - Optional Feature

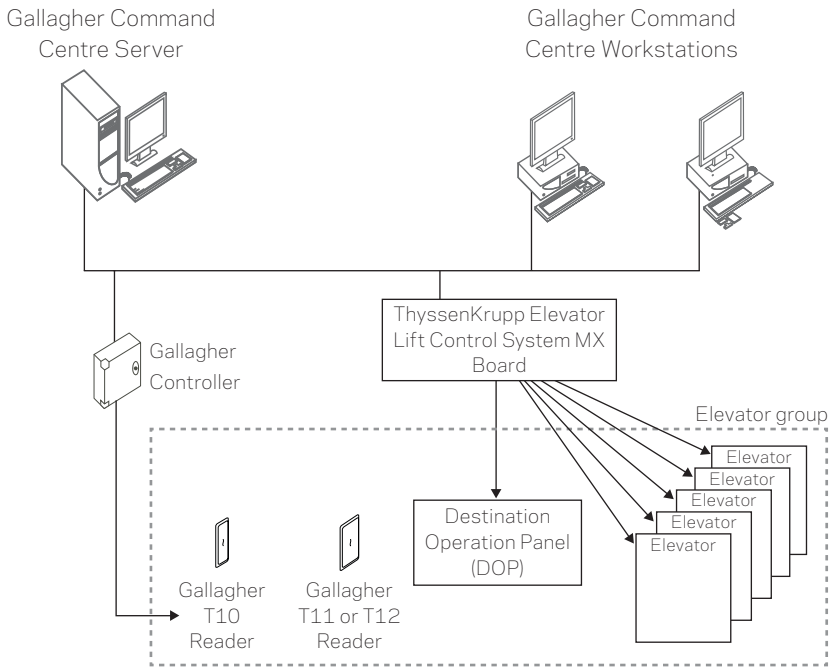
When the Schindler Miconics HLI is deployed, access to secure floors is controlled with a user template held in a personal data field (PDF) in Gallagher and syncronised between the Gallagher Command Centre server and Schindler Miconics server via a middleware PC that may be located within any server on the TCP/IP network. The Schindler system converts each user template to a set of floors and time periods in which the cardholder has access. Multiple elevator systems can be interfaced with Gallagher each with unique user templates. Actions in Gallagher that change cardholder information related to elevator access automatically generate update messages to the Schindler system in real time.



A user badging their card at the reader associated with an elevator terminal triggers the Cardax FT Controller to communicate the user's identity to the Schindler system, via the middleware PC. The Schindler system handles the elevator request, directing the user to the appropriate elevator, based on the access permission held in the user template.

ThyssenKrupp HLI - Optional Feature

When a cardholder presents their card at a Gallagher reader adjacent to a ThyssenKrupp Destination Selection Control (DSC) in order to select a secure floor, a RS232 serial communications link between a Gallagher Controller and a ThyssenKrupp Elevator Group Controller allows access privileges allocated in Gallagher Command Centre to be communicated instantaneously to the ThyssenKrupp Elevator system. A user selecting a valid floor will be directed to the appropriate elevator by the ThyssenKrupp DSC.



Elevator HLI Feature Comparison

Functionality	Standard HLIS		Destination based dispatching HLIS			
	Kone	Otis	Kone Polaris	Otis Compass DCS	Schindler Micronics	ThyssenKrupp
User specific destination control	✓	✓	✓	✓	✓	✓
Event Logging/Audit Trail	✓	✓	✓	✓	✓	✓
Secure/Free Floor Control	✓	✓	✓	✓	✓*	✓
Tamper/System monitoring	✓	✓	✓	✓	✓	✓
Car Operation Panel Card Reader	✓	✓	✓	✓		✓
Destination Control Panel Card Reader			✓	✓	✓	✓

*Requires specific configuration. Schindler cannot be used for floor access mode management when operating in this mode.

Technical specifications

Kone HLI (standard)	
Number of Gallagher controllers	1
Number of floors	64
Number of elevator shafts (per group control module)	8
Communications protocol	RS232
Protocol support	EPL HLI Security Protocol v2.3. An enhancement was made to this using version 2.5 of the protocol.
OTIS HLI (standard)	
Number of Gallagher controllers	1
Number of floors	64
Number of elevator shafts (per group control module)	8
Communications protocol	RS232
Protocol support	Specification for EMS - Security/BMS Protocol Otis Ref. no: 51646B
Kone Polaris	
Gallagher Command Centre Support	v5.20.xxx
Communications Protocol	TCP/IP
Protocol Support	Group Controller Access Control Interface Specification - Document # 829394
Otis Compass DCS	
Gallagher Command Centre Support	v5.20.xxx
Communications Protocol	TCP/IP
Protocol Support	Compass Security Intergration Software Requirements Specification - Document # D125_SRS_CSIGeneric
Schindler Miconics	
Gallagher Command Centre Support	v5.20.xxx
Communications Protocol	TCP/IP
Protocol Support	Schindler v1.1.296
THYSSENKRUPP	
Gallagher Command Centre Support	v6.02.xxx
Communications Protocol	RS232
Protocol Support	Simple serial adaption of card reader systems to lift control system from TKAW version 1.0

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