



INTEGRITI LIFT INTERFACING



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Integriti Lift Interfacing

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Lift Interfacing – Overview & Requirements

Interfacing between the Integriti controller and the lift interface is achieved using one of three methods:

Low Level

Low level interfacing requires the use of expander modules (and lift interface boards for button feedback) to interconnect with the lift system. Relays and inputs are used to control lift buttons and receive feedback.

RS232 (High level)

A UniBus UART module can be attached to the Integriti controller or module. One of the two RS232 ports of the UART is used to connect with the lift system.

IP (High level)

The network that the Integriti controller is attached to must be configured according to the lift manufacturer's specifications to allow access to the lift interface. Usually this involves granting access to one or two TCP ports (primary and secondary lift controllers).

Integriti controller lift interfacing allows for one type of lift interface per controller. Only one lift interface communications task can exist per controller.

Supported lift interfaces:

- Kone RS232. *(Kone HLI Access Control Protocol V 2.6)*
- Kone IP. *(Kone Access Control Protocol Rev 1.5)*
- Otis RS232.
- ThyssenKrupp RS232. *(ThyssenKrupp Destination Selection Control (DSC) version 1.0)*
- Low level lift interface.

The following requirements must be met for all lift interfaces:

- Integriti controller.
- Integriti controller smart card.
- Integriti controller EMS communications task license.
- Integriti UniBus UART module (RS232 only).
- Integriti management software.
- Reader module(s).
- Expander module(s) (Low level only).
- Integriti Button Feedback UniBus module(s) (low level only).

Integriti controller lift specific hardware limitations:

- Up to 594 readers (using 99 reader modules and 99 intelligent reader modules).
- 10000 Floor lists.
- 2000 Lift List.
- 250 Floors.
- 250 Lifts.
- 250 Lift Types.
- 250 Qualified Lift Types.
- 128 Lift Groups.

Controller configuration

The Integrity controller should be configured in order. The following is a summary of the procedure. It is assumed that all programming is carried out using the Integrity software management suite.

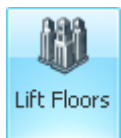
1. Add modules, UniBus UART module and License smart card to the Integrity controller.
2. Connect to Integrity management software.
3. Program Lift Floors.
4. Program Lift Groups.
5. Program Lift Cars.
6. Program Communications Tasks.
7. Program modules.
8. Program users.
9. Test.

Lift Floor Programming

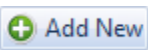
Lift floors entities can be associated with more than one lift car. For example you can create a “Ground Floor” lift record that corresponds to the actual lift floors on all of the lift cars that go to the ground floor of the building.

If the lift cars have front and rear doors, a lift floor needs to be created for the front and rear doors for each floor.

To create new or configure existing Floors, click on the  Access Control tab followed by



Creating a Lift Floor...

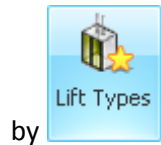
1. Click . The Editor Window for a new Lift Floor will appear.
2. Give the Lift Floor a name.
3. Save and close the editor window for the Lift Floor.

If your lift cars have rear doors, you will need to create a duplicate floor for each floor. See Figure 2.

Lift Type Programming

A lift type is required to define the operation of the reader modules used for lift control.

To create new or configure existing Lift Types, click on the  Access Control tab followed



by

Creating a Lift Type...

1. Expand out properties followed by entry.
2. Drop down the Credential Mode and select the desired credential entry method.

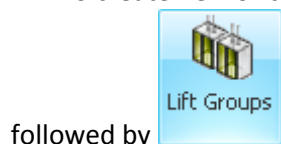
Credential Mode	None
Dual User	None
Anti-Passback Mode	CardOnly
Entry Button Mode	PinOnly
Disarm Door Entry Area	CardOrPin
	CardAndPin

3. If required, configure the Dual User, Anti-Passback and Entry Button options.
4. The additional options under the Exit group are reserved for future use.
5. Save and close the editor window for the Lift Type.

Lift Group Programming

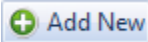
Lift Groups contain Lift Floors. They are used to map the Logical Floor entities in Integrity to the physical floors that the lift cars can access. Lift Groups are only required if you are using a high-level interface.

To create new or configure existing Lift Groups, click on the  Access Control tab



followed by

Creating a Lift Group...

1. Click . The Editor Window for a new Lift Group will appear.
2. Give the Lift Group a name.

EMS Floor Mappings

You will need to map each floor of the EMS to the Lift Floor records on the Integrati Controller.

3. Click  to create a new EMS Floor Mapping.
6. Select the floors to map to the lift in this group and click OK.
7. In the EMS Floor column, enter the floor number (according to the EMS) to map to the Lift floor.
8. If the Lift floor record is for the rear door of the lift car, tick the Is Rear Door checkbox.

EMS Floor Number	Lift Floor	Is Rear Door
1	 Lift Floor 1	☐
1	 Lift Floor 1 - Rear	☒
2	 Lift Floor 2	☐
3	 Lift Floor 3	☐

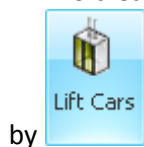
Figure 1

Properties

9. Enter a number in the EMS Group. This field must be equal to or greater than 1.
10. Enter the number of floors.
 - a. This indicates the number of floors in your EMS system. If left at 0, Integrati will automatically detect the number of floors in your system based on the floor mapping.
11. Save and close the editor window for the Lift Group.

Lift Car Programming

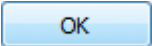
To create new or configure existing Lift Cars, click on the  Access Control tab followed



Creating a Lift Car...

Restricted Floors

You have the option to restrict what floors the lift car can access by adding floors to the restricted floors list.

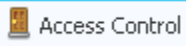
To add floor to the restricted floor list, click , select one or many floors then click .

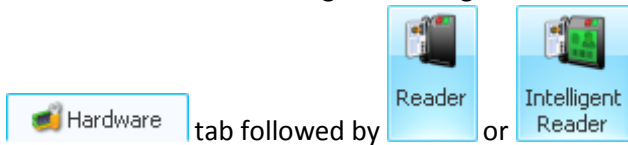
Properties

1. Expand out Lift Configuration
2. Drop down the Lift Mode list box and select lift configuration you will be using.
 - Low Level (No Button Feedback)
 - Low Level (Button Feedback)
 - High Level / EMS
3. Click on the Lift Type ellipsis and select the lift type you created earlier.
4. Click on the Lift Floors ellipsis and select the floors that this car can reach.
5. Specify a Button On Time for the lift car. This will determine the total time the user has to make a floor selection after presenting a valid credential.
6. Specify a Handicapped Button On Time for the lift car.
7. Optionally a Valid auxiliary can be configured to activate after presentation a valid credential.
 For high level lifts, valid aux is fired for the duration specified in 'Valid Aux Time'. If this time is not specified, then the lift button time is used.
8. If you are using a high level protocol, expand out High Level.
 - a. Specify the EMS Type the entity is to be matched with.
 - b. Select a Lift Group to define the EMS parameters to define the floor mapping for this Lift Car.
 - c. Program an EMS Lift ID to identify this Lift Car to the EMS.
 - d. Program an EMS Floor Number to identify the Floor to the EMS. This option is used for DOPs and Home Floor Callers.
9. If you are using a low level protocol, expand out Low Level.
 - a. Select the Module used for the Low Level interface to this Lift Car. The hardware control point can be an auxiliary or a module that has a UniBus lift card attached.
 - b. Optionally select an auxiliary to use as an error output. Error Aux will turn on when the button timer is not running and you press a floor button or the button selected is not allowed. Error Aux will turn off after a successful button press.
 - c. Add Floors - Set to Yes if you require additional Floor buttons to immediately be enabled when another User presents their Card to the Reader while the previous User's buttons are still enabled.
 - d. If set No – When a second user presents, will override the previous call.
 - e. Use 2nd Enables - Refer EN50131. This option is reserved for future use.
 - f. Button Enable Hold Time will override the button on time. The timer will not cancel when the user makes a selection allowing multiple floor selections.
10. Save and close the editor window for the Lift Car.

Reader Module Programming

It is assumed that you have already configured users and card access for the controller you intend on using for lift control.

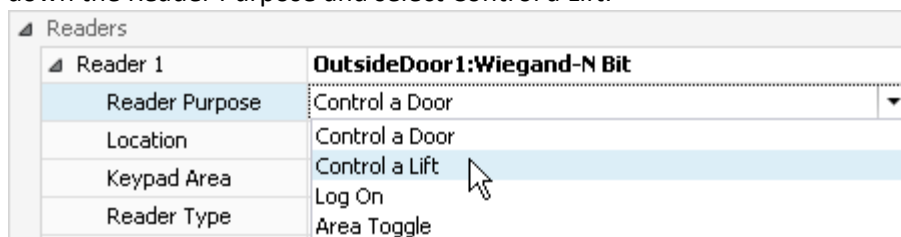
To create new or configure existing Reader Modules, click on the  or



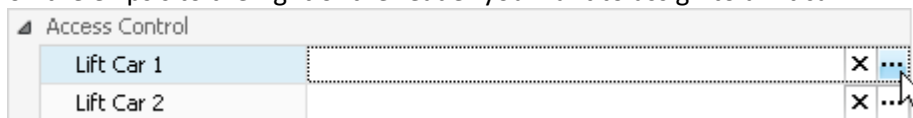
There are two properties that need to be changed to use the reader for lift control.

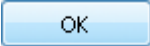
Configuring a Reader Module...

1. Expand out the Readers group under Properties followed by the desired reader number(s).
2. Drop down the Reader Purpose and select Control a Lift.



3. Expand out the Access control group.
4. Click on the ellipsis to the right of the reader you want to assign to a lift car.

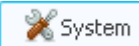


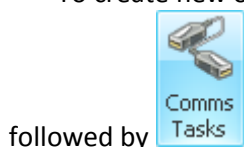
5. Select the lift car from the list that appears and click .
6. Save and close the editor window for the Reader Module.

Communications Task Programming

If you are using a high level lift interface you will need to create the EMS communications task.

There should only be one EMS communications task per controller. Only one EMS communications task can be running at any given time.

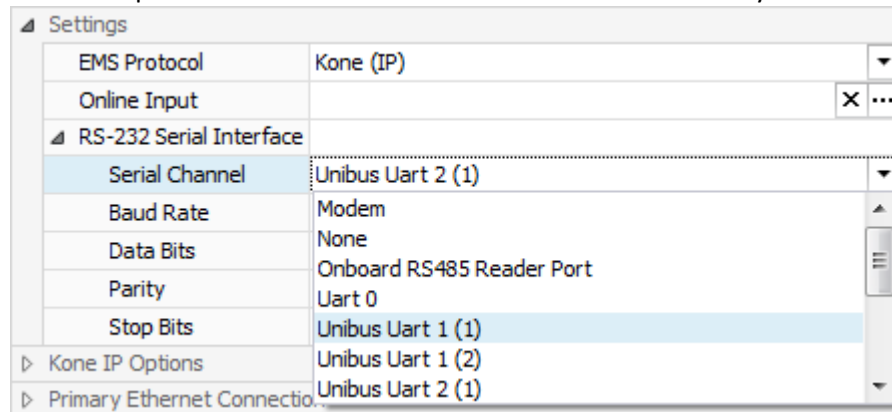
To create new or configure existing communications tasks, click on the  tab



Creating the EMS communication task...

1. Click  to create a new communications task.

2. Give the communications task a name and enter any necessary notes in the notes field.
3. Change the communications task type to EMS
4. Leave Mode and Backup Task blank.
5. Drop down the `EMS Protocol` list box and select the protocol used to communicate with the lift system.
6. Optionally the state of the communications task can control an input on the Integrati controller. Click on the ellipsis to the right of Online Input and select an input.
7. Expand out RS-232 Serial Interface (If you're using RS232)
 - a. Select the port that will be used to communicate with the lift system.



- b. Change the Baud, Data bits, Stop bits and parity accordingly.
8. Expand out the Primary Ethernet Connection group (for IP connections only)
 - a. In cases where a DNS server is not present, enter the IP address of the primary lift interface in the Primary Server IP Address field.
 - b. Enter the TCP port used to connect to the lift interface.
 - c. In cases where a DNS server is present, enter the host name of the primary lift interface in the Primary Server host name field.
 - d. The remaining fields should be left blank.
 - e. Follow steps (8a – 8d) for the Secondary Ethernet connection where a Kone backup controller is available.
9. Expand out the Tertiary Ethernet Connection group (for RCGIF only)
 - a. In cases where a DNS server is not present, enter the IP address of the primary remote call giving interface in the Tertiary Server IP Address field.
 - b. Enter the TCP port used to connect to the remote call giving interface.
 - c. In cases where a DNS server is present, enter the host name of the primary remote call giving interface in the Tertiary Server host name field.
 - d. The remaining fields should be left blank.
 - e. Follow steps (9a – 9d) for the Quaternary Ethernet connection where a Kone backup remote call giving interface is available.
10. Expand out the Kone IP Options (for Kone interface only)
 - a. Floors in the list given to `Car Panel Offline Mask` will be de-secured when communications is lost with the Kone IP system. This mask affects Car Panels only (corresponds to COP Global Offline mask).
 - b. Floors in the list given to `Destination Panel Offline Mask` will be de-secured when communications is lost with the Kone IP system. This mask affects Destination Panels only (corresponds to DOP Global Offline mask).
 - c. Offline Lift Group – This lift group is used for the mapping of the above two offline masks.

Low level lift interfacing

Legacy lift interface boards can be used with legacy universal expanders. However, button feedback is not supported.

A UniBus lift interface board is required if you require low-level button feedback.