



INTEGRITI GUARD RFID RTLS INTEGRATION MANUAL



INNER RANGE recommends that all Inner Range systems be installed & maintained by FACTORY CERTIFIED TECHNICIANS.

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<http://www.innerrange.com>

Integrati Guard RFID RTLS Integration

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RTLS Capabilities

Core RTLS Capabilities

Feature	Feature Description	Ver	Y/N
<i>Retrieve Details of Configured RTLS Tags</i>	Details of all configured Tags (such as Tag Name) can be retrieved from the RTLS System when Refreshing the Device.	23	✓
<i>Associate Assets with Entities</i>	Tags loaded from the RTLS system can be associated with Integriti Entities to allow direct control of one from the other.	23	✓
<i>Show Associated CCTV Footage</i>	Associated CCTV Footage can be directly accessed and viewed from any event occurring in Integriti that has an associated RTLS asset. Footage can also be viewed from the asset entity list by executing the 'Show Associated CCTV Footage' command.	23	✓
<i>Show the RTLS Asset on the Schematic Map</i>	Automatically show and update RTLS asset's position on a Schematic Map. Assets can also be shown on the Map from asset entity list and from review events by executing the 'Show on Map' command.	23	✓
<i>Generate Alerts from RTLS Events/Alarms</i>	Automatically generate and restore Alerts tied to a specific Asset in Integriti whenever specific events/alarms are received from the RTLS system.	23	✓
<i>Update Asset's Area/Location</i>	Automatically update the Integriti Area/Location the RTLS asset is in.	23	✓
<i>Trigger Actions in the RTLS System</i>	Trigger actions or commands in the RTLS system directly from Integriti.	23	✓
<i>Display Connection Status to RTLS System</i>	Display whether Integriti is currently connected to the RTLS system.	23	✓
<i>Receive Events/Alarms from the RTLS System</i>	Log events/alarms occurring on the RTLS system to Integriti's Review.	23	✓
<i>Trigger Integriti Actions on RTLS Events/Alarms</i>	Trigger actions to automatically occur in Integriti whenever specific events/alarms are received from the RTLS system.	23	✓

Advanced RTLS Capabilities

Feature	Feature Description	Ver	Y/N
<i>Populate Configured Assets</i>	Refreshing Child Devices will automatically populate all RTLS assets configured in the RTLS System into Integriti when run.	23	✘
<i>Populate new Assets</i>	Automatically populate newly configured tags in the RTLS system into Integriti	23	✓
<i>64-bit Integration Server Support</i>	The integration supports being run on the 64-bit integration server.	23	✓
<i>Show Asset Status</i>	The current online/offline status of configured RTLS assets will be visible directly through Integriti.	23	✓
<i>Categorised Review Records</i>	Review generated by the integration will have a different category for different event types, allowing for easy filtering of specific Integration events.	23	✓
<i>Update Asset Position</i>	Automatically update the position of the RTLS asset in Integriti based on the data retrieved from the RTLS system.	23	✓

Integriti Guard RFID RTLS Integration Compatibility

Licensing Requirements

The Integriti Guard RFID RTLS Integration requires an Integriti/Infiniti v23 license or higher to be present on the product key running the integration.

Integriti RTLS integrations require a Real Time Location System (RTLS) Integration license (996928) to be present to run.

Minimum Installed Integriti Version

The Integriti Guard RFID RTLS integration is only compatible with an installation of Integriti Pro or Infiniti that is v22.0 or higher.

Tested Against

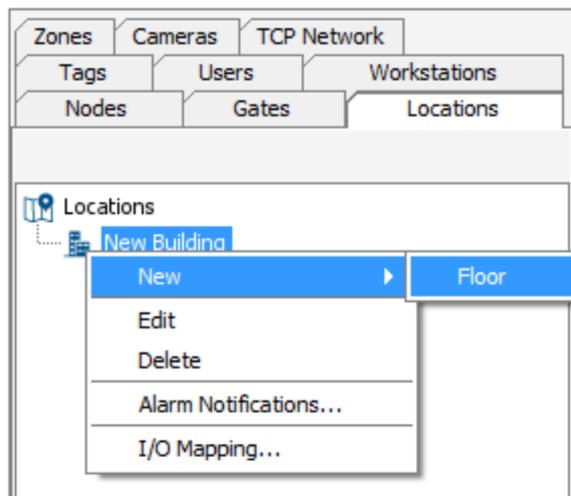
The Integriti Guard RFID RTLS plugin was built and tested against the following versions of software:

- AllGuard Server version 8.0.0.0

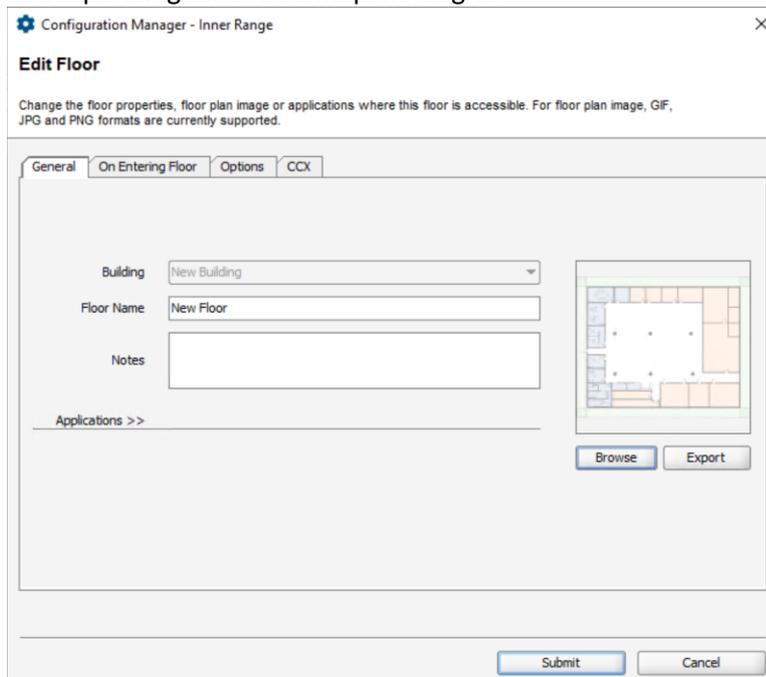
AllGuard Configuration

This integration connects to the AllGuard server software for monitoring RTLS assets and events. Before using this integration, the following steps should be performed in the AllGuard Configuration Manager.

1. In the left pane, select the Locations tab.
2. If no building has been added already, right click the 'Locations' category, then select New > Building.
3. Enter a name for the new building, then click Submit.
4. If no floor has been added already, right click the newly-added building, then select New > Floor.

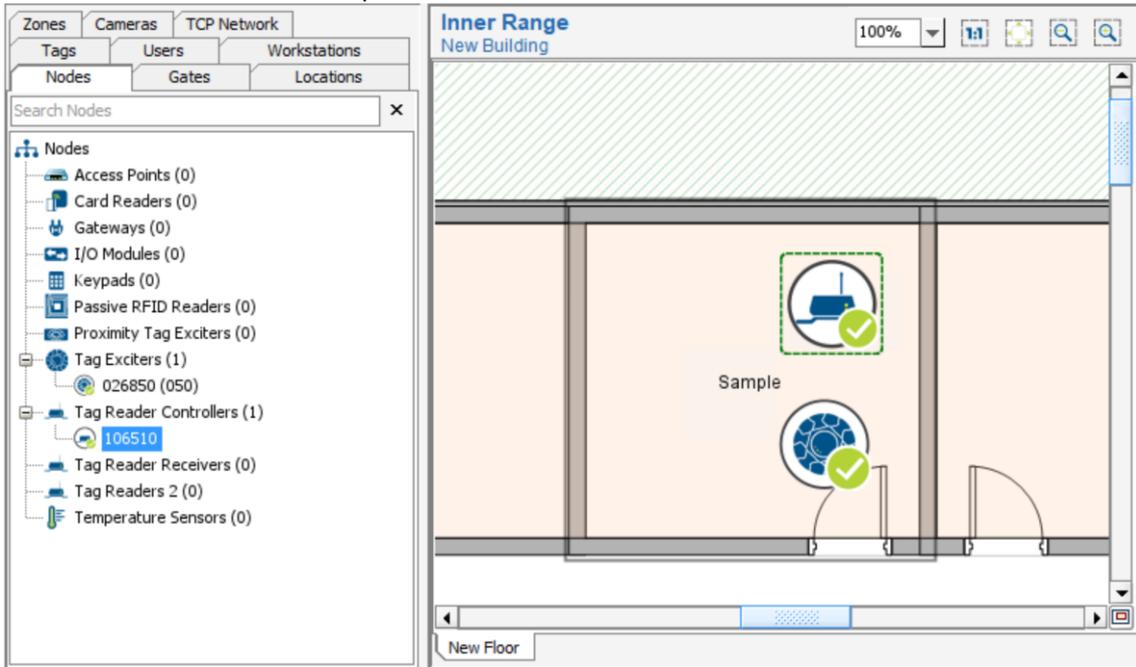


5. Enter a name for the new floor.
6. Click Browse, then navigate to an image file to be used as the background for the floor map. The same image should also be used as the background for the corresponding schematic map in Integriti.



7. Click Submit.
8. In the left pane, select the Nodes tab.

9. Add all nodes that should be on this floor, such as tag readers and exciters, to the map by dragging them from the list onto the map. To move a node already on a map, right-click it in the list, select Remove From Floor Plan, then drag it onto a map again. The tabs at the bottom of the map pane may be used to select different floor maps.



Integriti Configuration

This section specifies the Guard RFID RTLS Integration specific configuration details. Please refer to the 'Integriti Integrations - RTLS' manual for a detailed description on how to fully configure and use RTLS integrations in Integriti/Infiniti.

Note: When configuring a Guard RFID integrated system, it is necessary to Refresh Device prior to using the integration. This will populate the Map Configurations list and allow the schematic maps to be specified, which is required in order to process position updates for RTLS assets.

Ports Used

The following ports are used for communication between the Integriti Guard RFID integration and the Guard RFID server. These ports should be configured in the Integriti Integration Server and any Integriti Client Machine's firewalls to allow the integration to be used.

- TCP port 8888 (or an alternative port specified in Connection Configuration)

Connection Configuration

Configuration	
Integration Configuration	WorkstationAccount@127.0.0.1
Connection	
Address	127.0.0.1
Login Name	WorkstationAccount
Password	*****
Port	8888
Use HTTPS	<input checked="" type="checkbox"/>
Certificate Validation Mode	Default ▾
Logging	
Log Verbosity	Warning ▾
Monitoring	
Tag in Motion Time	00 mins 30 secs ⬆️⬆️
Coordinates	
Map Configurations	1 Items +
[0]	Floor 'New Floor': Integriti Map 'Map 1' ×
AllGuard Floor	New Floor
Coordinates Map	Map 1 × ...
Position Change to Log	1
Asset Clean-up	<input checked="" type="checkbox"/>
Automatic Asset Creation	<input checked="" type="checkbox"/>

Connection

Address – The IP address of the server to connect to.

Login Name – The username of the Guard RFID account to connect to the server with. This must be a **workstation account**, and must be granted access from Third-Party Applications in AllGuard Configuration Manager, along with other permissions configured to allow all of the features of the plugin to be used.

Password - The Password of the workstation account to connect to the Server with.

Port – TCP port to connect on. This is 8888 by default.

Use HTTPS – Whether to use HTTP over TLS to connect to the device.

Certificate Validation Mode – When using HTTPS, specifies whether the connection should continue when the device does not have a valid certificate.

Certificate Thumbprint – When ‘Certificate Validation Mode’ is set to ‘Specified Thumbprint’, the SHA-1 certificate thumbprint that should be accepted. It should be specified as 40 hexadecimal digits, case insensitive, with no separators.

Logging

Log Verbosity – Only logs of the specified level or higher will be logged. If Warning is selected, only Warning, Error and Fatal messages will be written to the log.

Monitoring

Tag in Motion Time – The duration for which a tag will be shown as moving after a Tag in Motion event or position update is received.

Coordinates

Map Configurations – Configure the associations between each Floor in the AllGuard server and an Integrati schematic map. This is used to convert the location of the asset received from AllGuard to one that can be used in Integrati. List items should not be added manually; if a Floor in AllGuard is missing from the list, invoke Refresh Device to populate it.

Position Change to Log – The minimum change in asset location that should result in a position update within 2 minutes of a prior position update. This is expressed as a percentage of the map size. A position update will always be logged if an asset moves between floors.

Asset Clean-up – Whether to automatically delete RTLS Assets in Integrati that have been removed from the AllGuard system upon Refresh Device.

Automatic Asset Creation – Whether to automatically create RTLS Assets in Integrati corresponding to newly-added tags in AllGuard.

Commands

RTLS Server Commands

The following commands can be performed on a RTLS Server:

Page Tag	Sends a page to the ST-3 tag with a specified tag number. This will flash the LEDs and/or beep the speaker on the tag. The pattern of flashes and beeps can be customised.
Stop Paging Tag	Cancels a paging request for the ST-3 tag with a specified tag number.

Troubleshooting

<p>Plugin doesn't appear in 'New Integrated Device' List</p>	<ul style="list-style-type: none"> Restart the Integriti Integration Server and any instances of Integriti System Designer or Integriti GateKeeper open on the computer experiencing the problem.
<p>Error starting a persisted connection</p>	<ul style="list-style-type: none"> The specified login name must belong to a workstation account in AllGuard with permission to connect from third-party applications. Check the number of connections allowed by the AllGuard license.
<p>Position updates and events are not shown in Integriti</p>	<ul style="list-style-type: none"> Enable Automatic Asset Creation in the integrated system attributes and restart the persisted connection, or add the tags to Integriti manually as RTLS Assets. The full tag serial number must be specified. Ensure that Map Configurations are set for the floor involved in the integrated system attributes. Check the Position Change to Log threshold in the integrated system attributes. Normally, Tag Beacon events are hidden, and only any resulting position updates are shown. To change this, the obsolete 'Valid Events' property in the integrated system attributes may be accessed by filtering the property grid.
<p>RTLS assets do not appear on Schematic Maps</p>	<ul style="list-style-type: none"> RTLS assets are displayed only when associated with an active alert in Integriti. Refer to the 'Integriti Integrations - RTLS' manual for details on setting up the alert definition. Ensure the schematic map has an alert element presenter set. Ensure that Map Configurations are set for the floor involved in the integrated system attributes. If there are multiple floors, ensure that the schematic maps are placed correctly, and any overlapping maps within a building have different minimum Z coordinates. When using Integriti 23.0.0, it is necessary to associate a User with the RTLS Asset.