OSDP Readers

Overview

This technical note details how to configure 3rd party OSDP readers with the Inner Range Inception controller, including the various requirements for the OSDP reader. This feature was included with the 5.0 release of Inception.

Introduction

Inception controllers support the usage of Inner Range SIFER readers and 3rd party OSDP readers, allowing for various configuration options for door and area feedback. While SIFER readers are OSDP readers, they connect and address automatically with Inner Range controllers. This guide focuses on the configuration of 3rd party OSDP readers.

Connecting OSDP readers with the proper requirements (listed under 'OSDP Reader Requirements' in this guide) will allow them to be visible to the system (such as in the peripherals list found in **[State/Control > View Peripherals]**), however they must be configured through the hardware wizard to be used.

Once configured in the hardware wizard, the OSDP reader can be used when assigned to programmed doors, lifts, storage units, automated actions, and other configuration options in the Inception system (further information on configuring the readers and what to access to properly configure these options can be found in 'Setting up OSDP Readers' in this guide).

OSDP Reader Requirements

Each reader connected to the same OSDP bus must have a unique address, otherwise readers with the same address will not be able to connect properly and will not be visible when attempting to view or configure peripherals. If connected readers have the same address, this can be resolved by having only one reader with a conflicting address connected at a time and using the 'Set OSDP address' button in the hardware configuration found at **[Configuration > Hardware]** (see the 'Changing Addresses' section).

The baud rate of each reader must also be set to 115200 (the baud rate of the Inception controller and expansion modules).

OSDP readers directly connected to the Inception Controller module must have an address between and including 0 to 15. Standard LAN Access Modules (SLAMs) can support OSDP addresses between and including 0 to 3.

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Setting Up OSDP Readers

OSDP readers connected to a module that meet all requirements will be detected automatically as a peripheral. Any successfully connected peripherals including OSDP readers will appear under **[State/Control > View Peripherals]**, and this can be viewed before any reader configuration happens to confirm that everything is connected properly.

	Peripheral Name	Status	Linked Module
⊘	3rd Party OSDP Reader 0 (S/N XXXXXXXX)	Online	Inception Controller

Readers can be configured by using the hardware wizard for the connected module at **[Configuration > Hardware]**. On the hardware configuration page, the module with the readers you wish to configure can be edited by double-clicking the module or pressing the Edit button in the toolbar while selecting that module. Any detected readers will be automatically shown on the Readers step of configuration in the hardware wizard. The reader will have the Reader Type automatically assigned to the appropriate type (Generic OSDP) and the OSDP address will also be set to the current address of the connected reader.

After confirming the additional options available under the reader configuration, the reader must be saved by pressing 'Save and Continue' (or 'Save and Previous').

Reader 1

Reader Type
> Generic OSDP

Name
> 3rd Party OSDP Reader 1 (S/N XXXXXX)

OSDP Address
> 0

Status LED to Follow
> None

LED Colour
> Blue

Keypad Area To Control
> None

Once saved, these readers can be used in other items in the Inception system, assigning them to doors (which can also be configured in the hardware wizard) or using them with other features such as lift cars, storage units, or automated actions.
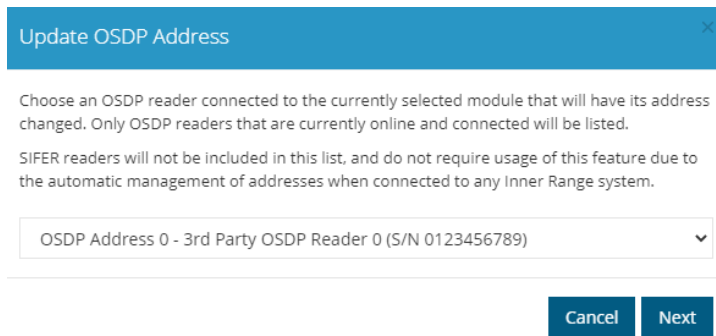
After configuring the readers through the hardware wizard, they can be found at **[Configuration > Access Control > Readers]** with some advanced configuration options. Reader Type, Reader Address and the Door it is linked to are not changeable under the reader configuration itself and must be changed by accessing the hardware wizard again.
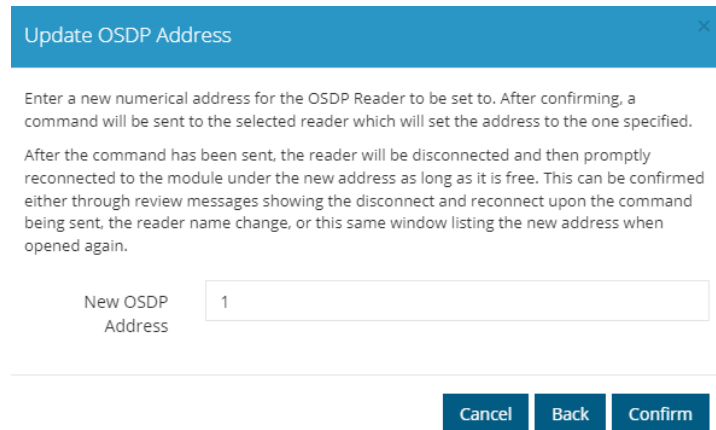
Changing Addresses

When there are conflicting OSDP reader addresses, you may wish to change the address of some of them to resolve these conflicts. In **[Configuration > Hardware]**, the toolbar has a 'Set OSDP Address' option that can allow you to re-address readers connected to the selected module.
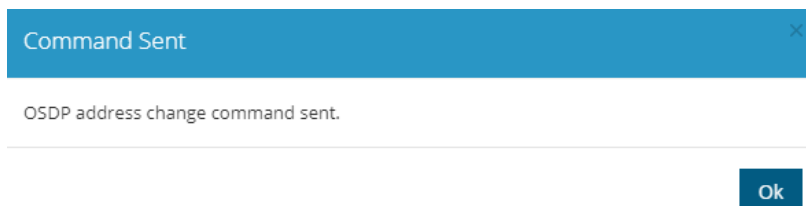

Once the module has been selected and you have opened the prompt, you will be able to select a connected reader to re-address. Note that if there are conflicting addresses of connected readers, you should disconnect all other conflicting readers before re-addressing them one at a time.

Then, after selecting a reader, you may choose a new address that also does not conflict with another reader. This will prompt that reader to re-connect, and the old reader address will still show up as a peripheral that you may manage in the hardware wizard.

If the command for updating the address was successfully sent, a confirmation message will appear after hitting confirm. Note that if there were any errors in entering address, following the prompts will help resolve issues related to conflicting reader addresses.

Troubleshooting

My reader isn't appearing in the peripherals or hardware wizard

There could be several reasons why an OSDP reader is not detected by the Inception system.

Inception Controller Version

Ensure the Inception controller is running firmware version 5.0 or above.

Reader Wiring

Check that the wiring is correct between the reader and the controller / expansion module.

Reader Configuration

Ensure that the reader support and is configured for OSDP communications. Ensure that the baud rate for the reader is configured for 115200.

Clashing Reader Addresses

OSDP readers require unique addresses to communicate when on the same reader bus. If more than one reader is connected to the same bus, disconnect all except one reader and see if that connects. If multiple readers are configured with the same address, they will need to be changed. This can be done either be done by using the 'Set OSDP address' functionality (see the 'Changing Addresses section), or by manually changing the OSDP reader's address.

See the reader manufacturer's installation manual for instructions on changing the reader OSDP address manually, ensuring they are set to values that the host device supports (mentioned in the 'OSDP Reader Requirements' section).

Reader Address is Too High

If a reader's OSDP address is too high for the host device, it won't be able to connect. Confirm that the reader's address is within the range that the host device supports (mentioned in the 'OSDP Reader Requirements' section). See the reader manufacturer's installation manual for instructions on changing the reader OSDP address.

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