

|                         |                  |  |
|-------------------------|------------------|--|
|                         | <b>TITLE:</b>    | <b>Configuring the OTIS Compass DDS Elevator Integration</b>   |
| <b>AN-179</b>           | <b>PRODUCTS:</b> | <b>SMS version 6.2.2 with eMAX-EP4502 or<br/>SMS version 6.3.3 or later with eMAX-EP4502/eMAX-LP4502<br/>Plugable USB Ethernet adapter<br/>OTIS Compass Destination Dispatching System (DDS)</b> |
| <b>December 9, 2019</b> | <b>SUMMARY</b>   | <b>This document provides instructions on configuring the OTIS Compass DDS Elevator integration with the SMS.</b>  |

## Table of Contents

|   |    |
|---|----|
| Introduction .....  | 2  |
| Requirements.....   | 2  |
| Limitations.....  | 2  |
| Definitions and Abbreviations.....  | 3  |
| OTIS Compass Operating Modes .....  | 4  |
| Configuration Preparation .....   | 5  |
| Configuration of the Panel Check Frequency Setting for the MultiRAMM in the SMS ..... | 5  |
| Configuration of Hardware .....   | 6  |
| Installation of the eMAX-EP4502 or eMAX-LP4502 board .....                            | 10 |
| Configuration of Elevator Levels.....   | 10 |
| Configuration of Access Levels.....   | 10 |
| Configuration of Override Elevator Levels.....  | 12 |
| Enable OTIS Cardholder Template for Administrator Level Accounts.....                 | 13 |
| Enable OTIS Cardholder Template for Operator Level Accounts.....                      | 13 |
| Cardholders (OTIS) Template Unique Features .....                                     | 14 |
| Cardholder Theory of Operation at the OTIS DEC .....                                  | 15 |
| Over-Watch Service Configuration .....  | 15 |
| Troubleshooting Tips/Q&A .....  | 18 |
| Appendix A.....   | 20 |
| Appendix B.....   | 20 |
| Appendix C.....   | 21 |
| Appendix D.....   | 22 |

## Introduction

This document is to provide the instructions to configure the **OTIS Elevator Compass Destination Dispatching System (DDS)** integration in the **Security Management System (SMS)**.

Please thoroughly review this document before proceeding.

## Requirements

The OTIS integration requires the following:

1. **eFusion software** version **6.3.3.19338** or later.
2. **eMAX-EP4502/eMAX-LP4502 firmware** version **1.27.6.0619** or later.  
**Workstation file: Scpd\_net.dll 4.7.1.2 driver or later.**
3. Minimum one **eMAX-EP4502/eMAX-LP4502** per OTIS Compass DDS.
4. One Plugable brand **USB Ethernet adapter** to add the eMAX-EP4502/eMAX-LP4502 to the OTIS DDS network:

For **eMAX-EP4502**:

Plugable USB 2.0 10/100 Ethernet Adapter (USB2-E100)

<http://plugable.com/products/usb2-e100/>

For **eMAX-LP4502**:

Plugable USB 2.0 OTG Micro-B 10/100 Ethernet Adapter (USB2-OTGE100)

<https://plugable.com/products/usb2-otge100>

**Note: By default, the USB Ethernet adapter will be programmed in the controller with IP Address 192.168.50.250. This is the default IP address defined by OTIS.**

## Limitations

1. Each OTIS Elevator DDS will only support one 4502.
2. The 4502 will support up to 128 discrete floor definitions on an OTIS DDS.
3. When OTIS elevators have front doors only, the elevator floor numbers are identified in sequential order in the SMS.
4. When OTIS elevators have both front and rear doors, the Front doors are identified as Even number floors in the SMS. The Rear doors are identified as the Odd number floors one number less than the front door on the same floor in the SMS.
5. Elevator floor numbering start at 1 but has the ability to offset the floor mapping to support floor 0 and negative floor numbers.

## Definitions and Abbreviations

- **Security Management System (SMS)**—The eFusion PC or equivalent and all other access control devices.
- **Elevator System (ES)**—Destination Dispatch PC or equivalent and all other elevator system devices. Aka: **OTIS Compass (OTIS)** and **Destination Dispatching System (DDS)**
- **Destination Entry Computer (DEC)**—OTIS Destination Entry Computer. Each OTIS DEC will be added as an “**Type: OTIS DEC Panel**” under the Panels Configuration in the SMS.
- **Controller (4502)**—An eMAX-EP4502 or eMAX-LP4502 area controller.
- **Master Controller (MC)**—The 4502 that is connected to the ES network.
- **Over watch Controller (OC)**—Any additional 4502 controller that is controlling DEC readers but not connected to the ES through the USB ethernet adapter.
- **OTIS Elevator Enable: Area Controller Configuration**—Check to enable the OTIS elevator Compass security integration in the SMS.
- **OTIS Lowest DDS Floor Offset : Area Controller Configuration**  
This setting is used to identify the number of floors in the OTIS server below floor 1. Include floor 0 even if not listed in the OTIS server. Valid Range is 0 through 127.
- **OTIS or TKE Front and Rear Enable: Area Controller Configuration**—The front and rear setting in SMS is used to configure the Controller so that it is aware that the OTIS DDS is configured to have both front and rear doors on the elevator cabs.
- **OTIS or TKE Over-watch Controller: Area Controller Configuration**—Used to configure which controller is the master controller in cases where over-watch is used.
- **OTIS or TKE Over-watch Mode: Area Controller Configuration**—Used to configure whether overwatch is used and which role each controller will take in the system.
- **OTIS or TKE Over-watch Password: Area Controller Configuration**—Used to configure the password to be used between over-watch controllers when communicating with each other.
- **OTIS DEC IP Address IPv4 : Panels Configuration**—Used to configure the IP address for each OTIS Compass DEC in the SMS.
- **OTIS DEC Panel: Elevator Reader Configuration**—Used to select the OTIS DEC Panel for this reader. This should match the panel selected on the Elevators Configuration page.
- **OTIS Floor Count: Elevator Reader Configuration**—Used to configure the total number of floor counts or openings (floors times doors) supported by all cabs dispatched by the DEC.  
**Note: When the OTIS elevators have both front and rear doors, the total floor count to be configured must be doubled in the SMS. Valid Range is 0 through 128.**
- **OTIS Lowest Floor Offset: Elevator Reader Configuration**—Used to configure the offset between the lowest floor number supported by the DDS and the lowest floor number supported by all cabs dispatched by the OTIS DEC. Valid Range is 0 through 127.
- **Override level: Elevator Reader Configuration**—The **Override level** setting is used to configure scheduled free access to specific floors from the elevator reader that the override level is assigned.

## OTIS Compass Operating Modes

**OTIS Operating Modes: Elevator Reader Configuration** –The **OTIS Operating Mode** setting is used to configure the eMAX-EP4502/eMAX-LP4502 elevator reader to operate in one of the four available OTIS Compass system operating modes.

- **Mode 1 Default Floors** – User presents cardholder credentials to the DDS Reader. The default floor assigned to the cardholder is checked for authorization. This mode will ONLY authorize the cardholder’s default floor. The DEC will inform the user if the cardholder is authorized to access the default floor and which cab will take the cardholder to their floor.  
**Note: The Cardholder’s configuration can only be assigned one default floor at a time in the SMS.**  
**Note: With this mode, the Override Level (when configured) for Elevator Floors that require free access is applicable. The override access event is not reported to the SMS.**
- **Mode 2 Access to Authorized Floors (Default SMS Setting)** – User must first present his/her cardholder credentials to the DDS Reader. If the cardholder is assigned to active access levels, the DEC will allow the user to select a floor destination. The DEC will inform the user if the selected floor is accessible and which cab will take the cardholder to their floor destination.  
**Note: With this mode, the Override Level (when configured) for Elevator Floors that require free access is applicable with the associated cardholder credential. The override access event is reported to the SMS.**
- **Mode 3 User Entry of Destination** – The user will select a floor on the DEC. Next, the user presents cardholder credentials to the DDS reader. The DEC will inform the user if the selected floor is authorized and which cab will take the cardholder to their floor.  
**Note: With this mode, the Override Level (when configured) for Elevator Floors that require free access is applicable. The override access event is not reported to the SMS.**
- **Mode 4 Default Floor / Entry of Destination** – User presents cardholder credentials to the DDS Reader. Within a timeout period set on the DEC, the user may select a floor. If a floor is not selected, the DEC will inform the user if the cardholder is authorized to access the default floor. If a floor is selected, the DEC will inform the user if the cardholder is authorized to access the selected floor. If authorized, the DEC will indicate which cab will take the cardholder to their floor.  
**Note: The Cardholder’s configuration can only be assigned one default floor at a time in the SMS.**  
**Note: With this mode, the Override Level (when configured) for Elevator Floors that require free access is applicable with the associated cardholder credential. The override access event is reported to the SMS.**

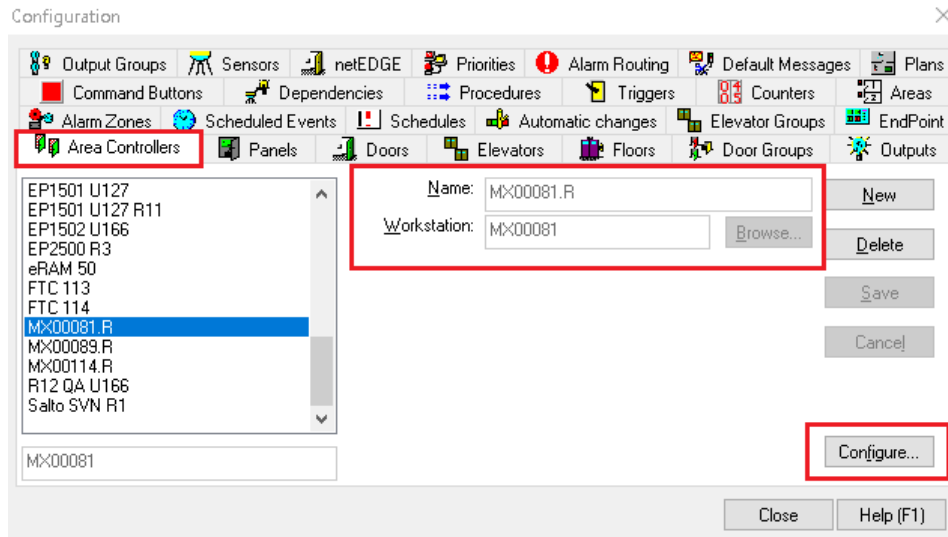
## Configuration Preparation

Use **Appendix A, B, C and D** for forms that aid in collecting the information regarding the OTIS DDS and DECs.

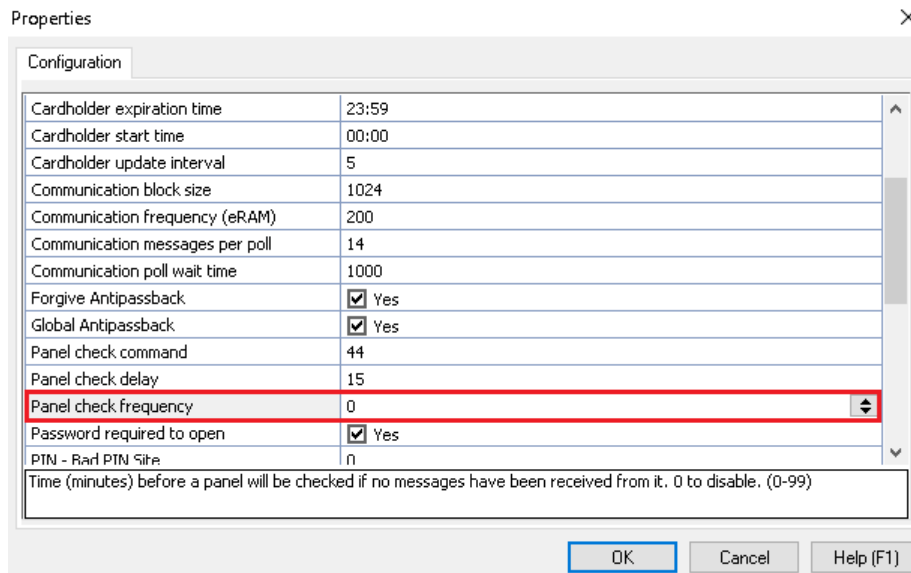
## Configuration of the Panel Check Frequency Setting for the MultiRAMM in the SMS

1. Use the Area Controllers configuration screen in the SMS Desktop to open the MultiRAMM configuration screen.

**Note: This would be the (.R) in the option list with only the Name and Workstation.**



2. In the **MultiRAMM** configuration screen, enter the following information:
  - a. Set the Panel check frequency value to 0.
  - b. Save the configuration of the MultiRAMM in the SMS.



## Configuration of Hardware

1. Use the **Area Controllers** configuration screen in the SMS Desktop to add an eMAX-EP4502/eMAX-LP4502 area controller.
2. In the configuration of the 4502, enter the following information:

| Setting Name                              | Value   |
|---|---|
| <b>Card format</b>                        | The format file that supports the card technology used for the site.                |
| <b>Communication IP address/host name</b> | The IPv4 address that will be used by MultiPort to communicate with the controller. |
| <b>OTIS Elevator Enable</b>               | Yes   |
| <b>OTIS Lowest DDS Floor Offset</b>       | Enter the number of floors below floor 1. Valid Range 0 through 127.                |
| <b>OTIS or TKE Front and Rear enable</b>  | Checked to enable front and rear elevator cab doors in the SMS.                     |
| <b>OTIS or TKE Over-watch Controller</b>  | As required   |
| <b>OTIS or TKE Over-watch Mode</b>        | As required   |
| <b>OTIS or TKE Over-watch Password</b>    | As required   |

3. Save the configuration for the Area Controller.

Properties ×

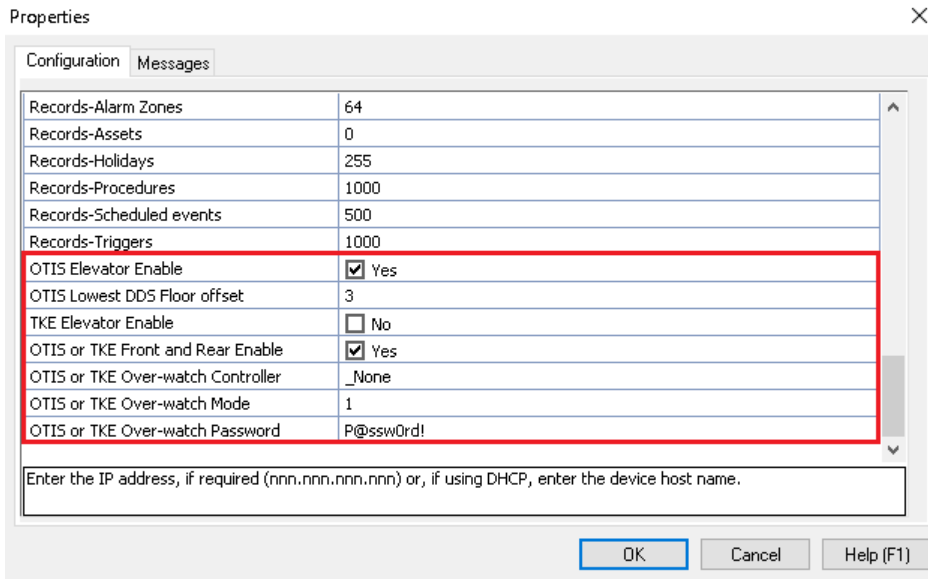
Configuration Messages

**EP4502**

|  |   |
|--|---|
| Calendar                               | _Default                                |
| Card formats                           | _Default                                |
| Enable                                 | <input checked="" type="checkbox"/> Yes |
| Enable FIPS decode                     | <input type="checkbox"/> No             |
| Communication Poll Delay               | 1000                                    |
| Communication IP address/Host name     |   |
| Communication IP port                  | 3001                                    |
| Alt Communication IP address/Host name |   |
| Alt Communication IP port              |   |
| Duress mode                            | 0                                       |
| Duress digit                           | 9                                       |
| Enable encryption                      | <input type="checkbox"/> No             |

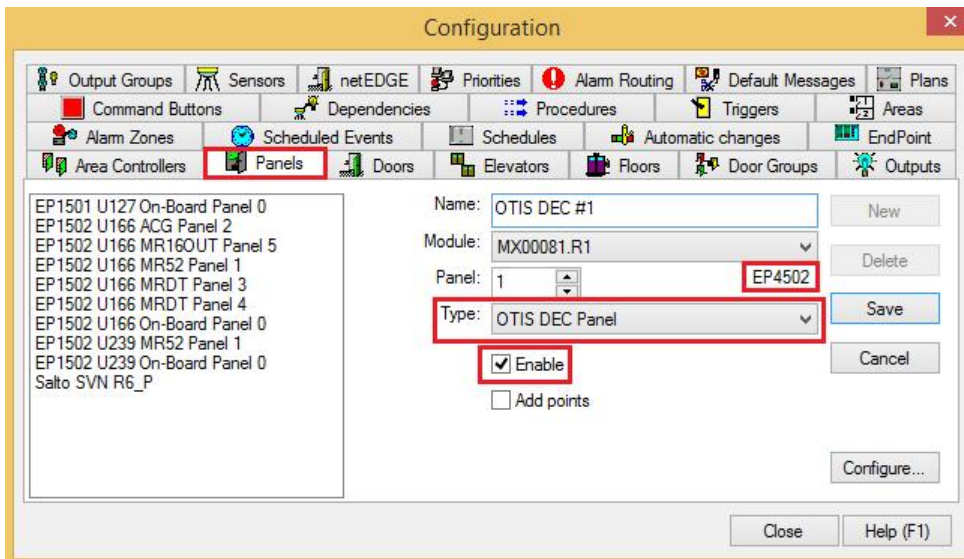
Enter the IP address, if required (nnn.nnn.nnn.nnn) or, if using DHCP, enter the device host name.

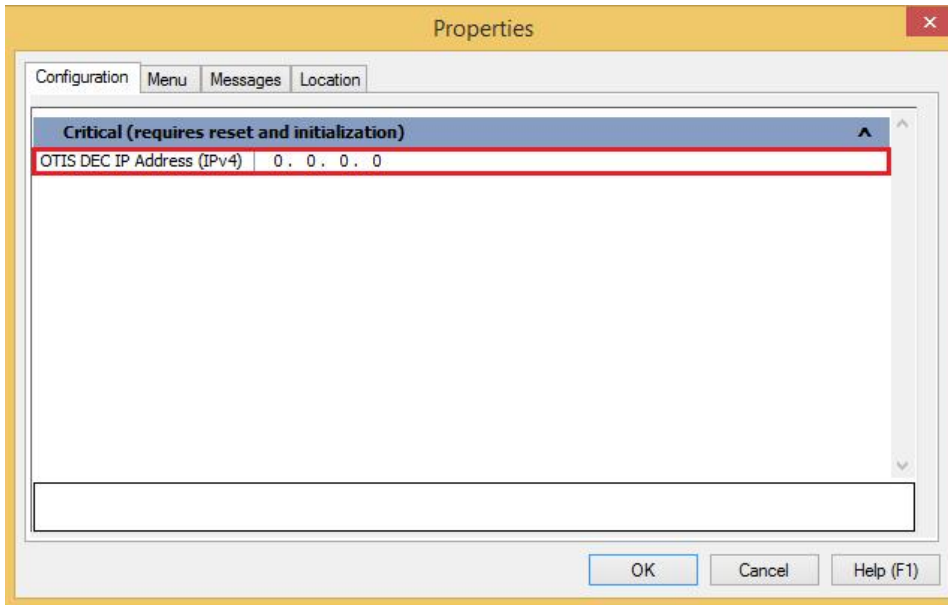
OK Cancel Help (F1)



4. Use the **Panels** configuration screen to add one **OTIS DEC Panel** for each OTIS DEC.
  - a. **Important Note: Be sure to uncheck the Add Points check box to avoid having to delete the doors that would be added automatically with the Add Point option checked.**
  - b. Set the **Type: OTIS DEC Panel**.
5. In the configuration of the OTIS DEC panel, enter the following information:
  - a. Communication (IPv4) IP address for the OTIS DEC.
6. Save the Panel configuration for the DEC.

**Note: The eMAX-EP Area controller must be reset and initialized.**



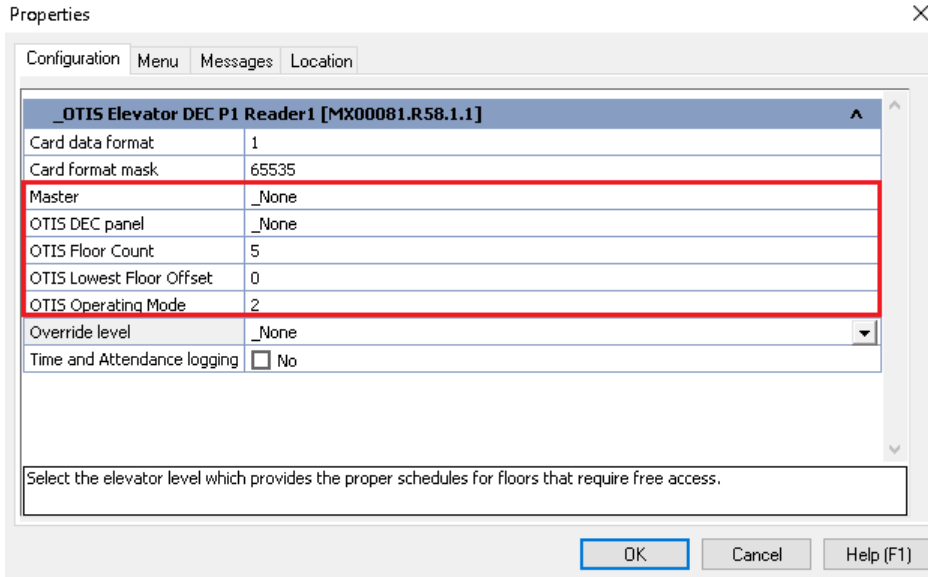


7. Use the **Elevators** configuration screen to add one elevator reader to the OTIS DEC Panel.
8. In the configuration of the elevator reader, enter the following information:
  - a. Set the Card data format. Default: 1.
  - b. Set the Card format mask. Default: 65535.
  - c. Set the Master for the DEC. **Default: None**. This setting will use the same floor schedules and override level configuration from the Master DEC.  
**Hint Use this setting on any DEC elevator reader configurations to simplify elevator level configurations in the SMS.**  
**Note: This feature is limited to DEC's on the same 4502 controller.**
  - d. Select the **OTIS DEC Panel** that the elevator reader is being added to.
  - e. Enter the **OTIS Floor Count** for the DEC. **Default: 5**. Valid range is 0-128.  
**Note: If using Front and Rear, this would be the sum of front and rear floors.**
  - f. Enter the **OTIS Lowest Floor Offset Number** for the DEC. **Default: 1**. Valid range is 0-127.
  - g. Enter the **OTIS Operating Mode** that is desired for this DEC. **Default: 2**. Valid options are 1-4.

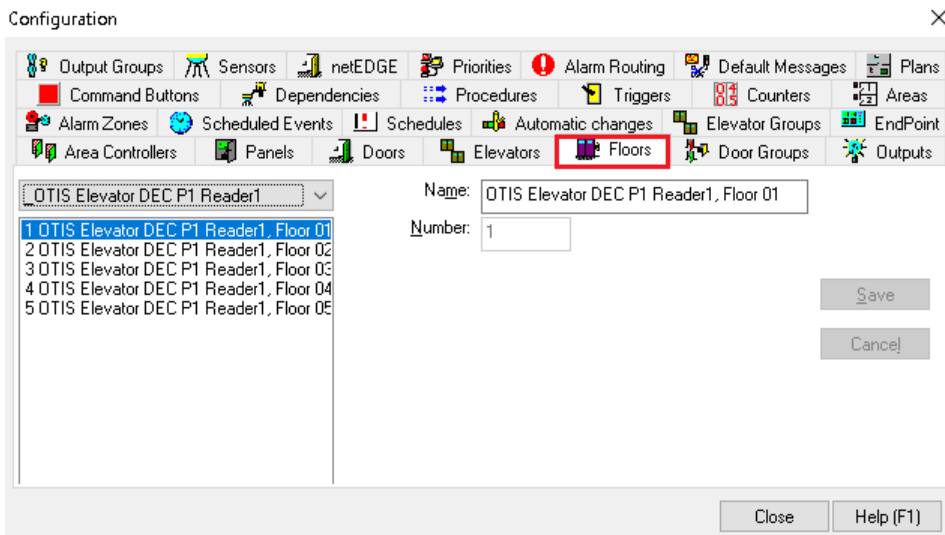
| OTIS Operating Modes |                                       |
|----------------------|---------------------------------------|
| Mode: 1              | Default Floor only                    |
| Mode: 2              | Authorized Floors                     |
| Mode: 3              | Entry of Destination                  |
| Mode: 4              | Default Floor or Entry of Destination |



- Save the Elevator Reader configuration for the DEC.



- During the save process, the Desktop will create the Elevator Floors based on the **OTIS Floor Count** entered in the Elevator reader configuration.
- The elevator floors may be renamed at any time in the **Floors** configuration tab. **Note: When OTIS elevators have both front and rear doors, the Front doors are identified as Even number floors (i.e. 2, 4, 6, 8, ...) in the SMS. The Rear doors are identified as Odd number floors (i.e. 1, 3, 5, 7, ...) in the SMS.**



- Repeat the steps outlined above as needed to configure all **OTIS DEC** devices in the SMS.

**NOTE: If this is the first elevator configured in the SMS, before continuing, close the Desktop and reopen it to load the complete Elevator configuration options.**

## Installation of the eMAX-EP4502 or eMAX-LP4502 board

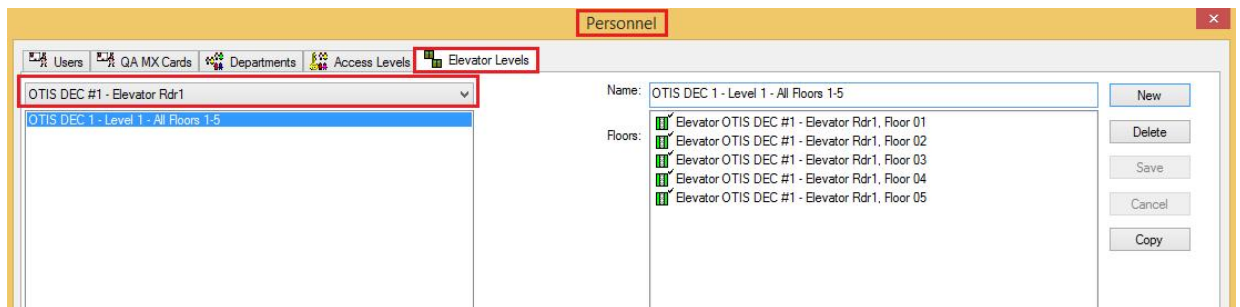
1. Perform the physical installation of the eMAX-EP4502 or eMAX-LP4502 as per the hardware installation manual.
2. Connect the **Plugable USB Ethernet adapter** to the on-board USB port of the **eMAX-EP4502 or eMAX-LP4502**.
3. Connect a network cable between the Plugable USB Ethernet adapter and a port on the **OTIS DDS controller's** network switch.

## Configuration of Elevator Levels

1. In the Personnel menu, select the **Elevator Access Levels** item, and select the elevator reader that needs elevator levels assigned.

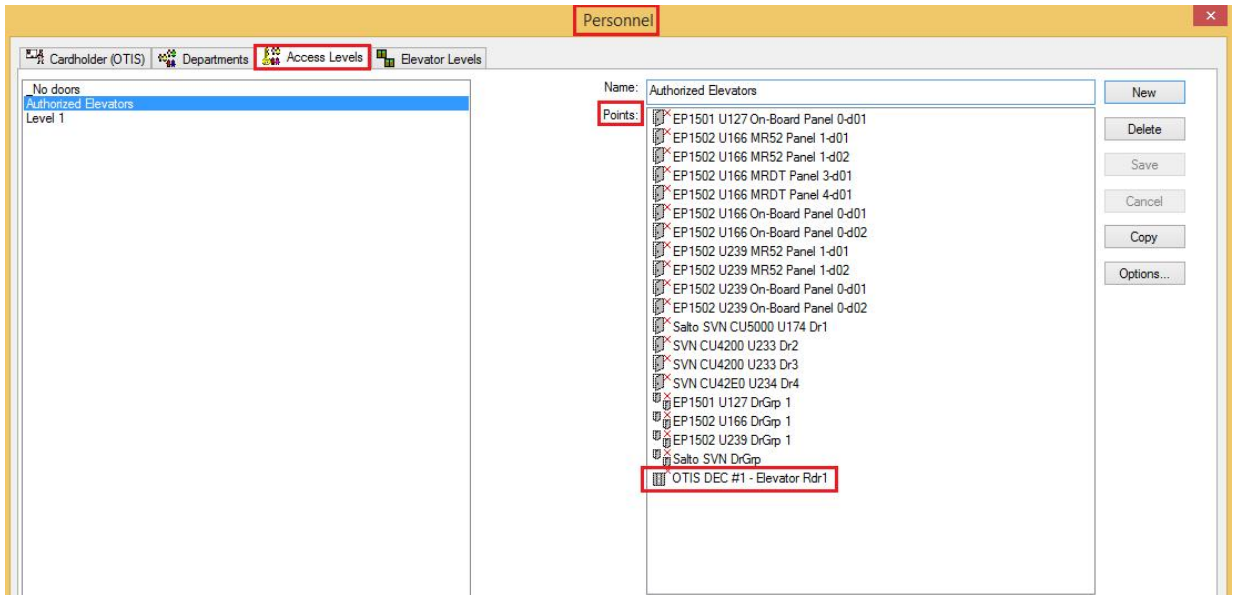
**NOTE: All elevator levels must have a unique name in the system. It is recommended that the elevator level names begin with the elevator name that ensures the level names are unique.**

2. Click New to create a new elevator level and enter the name for the elevator level.
3. Select the Floors that should be assigned to the elevator level and assign schedules to each floor as desired.
4. Save the Elevator Level.
5. Repeat these steps for all elevator readers, and elevator floor combinations that are necessary.

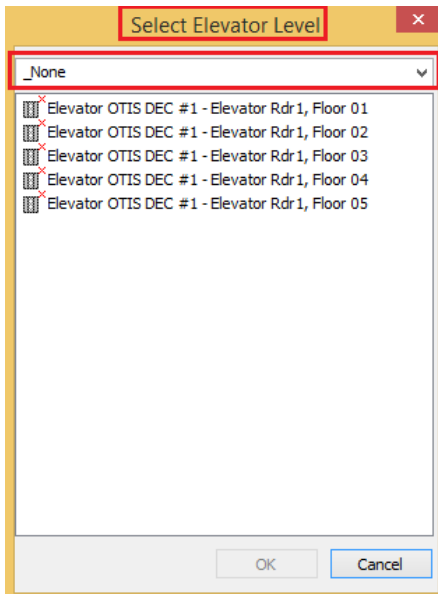


## Configuration of Access Levels

1. In the Personnel menu, select the **Access Levels** item.
2. Select an existing access level or create a new access level for granting elevator access.
3. In the **Points** window, scroll to the bottom of the list and select one of the elevator readers.



- Click the **Select** button, and in the **Select Elevator Level** screen use the drop-down box at the top to select the **Elevator Level** that should be assigned to the elevator reader in the access level.



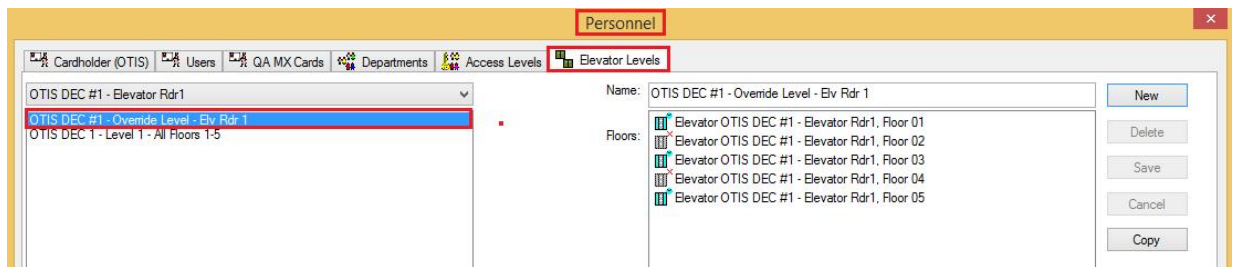
- Click the Ok button to confirm the Elevator Level selection for the elevator reader in the access level.
- Save the Access Level.
- Repeat these steps for any access level and elevator level combinations that are required.

## Configuration of Override Elevator Levels

1. In the Personnel menu, select the **Elevator Access Levels** item, and select the elevator reader that needs override elevator levels.

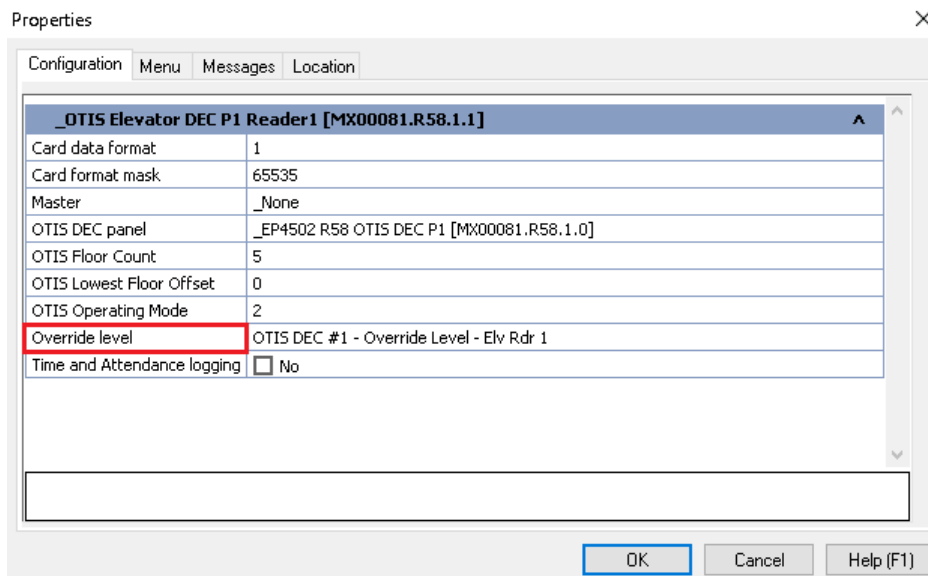
**NOTE: All elevator levels must have a unique name in the system. It is recommended that the elevator level names begin with the elevator name that ensures the level names are unique.**

2. Click New to create a new elevator level and enter the name for the elevator level.  
**Note: Names should be identified with the “Override” word for easy identification when it is to be used for the Override Level setting at the elevator reader.**
3. Select the Floors that should be assigned to the elevator level so that they will have free access based on a schedule and assign schedules to each floor as desired.
4. Save the Elevator Level.



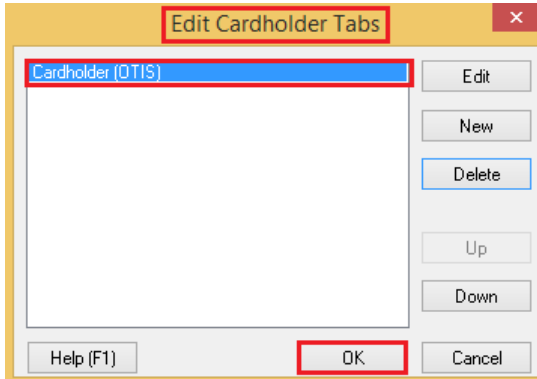
**NOTE: Each elevator reader can only have one override elevator level.**

5. In the configuration of the **Elevator reader**, select the **Override level** option, and select the correct override elevator level to assign to this elevator reader.
6. Repeat these steps for all elevator readers that need free access elevator floors.



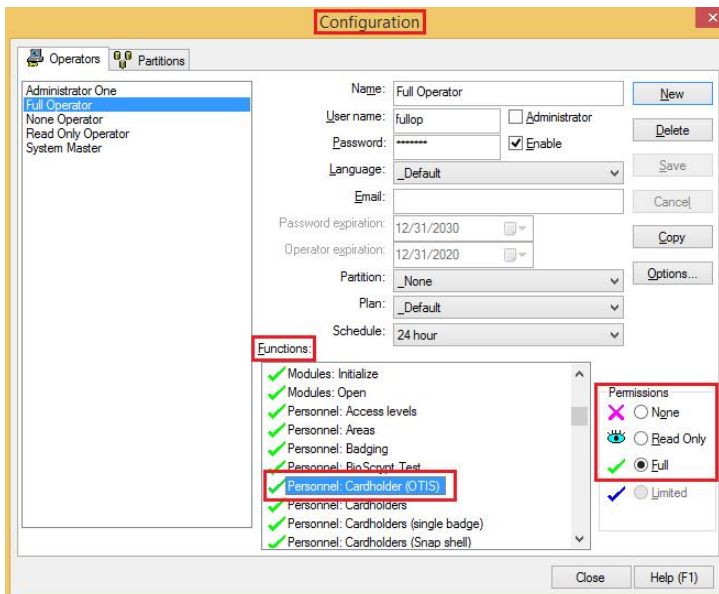
## Enable OTIS Cardholder Template for Administrator Level Accounts

1. In the **Configuration** menu, select the **Template Design** item in the **Templates** sub menu.
2. In the left-hand list box, select the Cardholders (OTIS) template.
3. Click the **Screens** button, and in the **Edit Cardholder Tabs** window, add a new tab for the Cardholder (OTIS) template.
4. Click on the OK button to confirm and close the Edit Cardholder Tab.



## Enable OTIS Cardholder Template for Operator Level Accounts

1. In the **Configuration** menu, select the **Operator Privileges** item.
2. Select the operator to be allowed access to the Cardholders (OTIS) template.
3. Locate the Cardholder (OTIS) item in the list of **Functions** and assign the required permissions.
4. Repeat these steps for all operators that need access to this template.



## Cardholders (OTIS) Template Unique Features

1. The Cardholders (OTIS) template provides six cardholder options that are unique to an OTIS integration.
  - a. **OTIS Default Floor:** This is used to configure the default floor in the DDS that will be assigned to the cardholder. This will be used in OTIS operating mode 1 and mode 4 following the “waiting for selection of destination floor” timeout.
  - b. **OTIS Vertigo:** This is used to indicate that the cardholder is subject to vertigo, and request that the OTIS DDS follow its Vertigo settings.
  - c. **OTIS Vertigo2:** This is used to indicate that the cardholder is subject to vertigo, and request that the OTIS DDS follow its Vertigo2 settings.
  - d. **OTIS Service Card:** This is used to indicate that the cardholder carries a service credential, and requests that the OTIS DDS follow its Service Card settings.
  - e. **OTIS Split Group:** This is used to indicate that the cardholder should follow the OTIS DDS Split Group settings.
  - f. **OTIS CIM Override:** This is used to indicate that the cardholder can override the OTIS DDS CIM settings.
2. There are also two setting in the template that are used by all hardware, but also impact the OTIS in a unique way.
  - a. **Extended unlock (ADA):** This is used to indicate that a cardholder may require more time to reach and pass through the elevator doors. By setting this, the OTIS DDS is configured to keep the doors open for a longer period.
  - b. **Antipassback exempt (eMAX) OTIS VIP:** This is used to indicate that a cardholder is a VIP to OTIS and is to be given express service in the OTIS system.

The screenshot displays the configuration interface for an OTIS cardholder. Key elements include:

- Personal Information:** Last Name, First Name, Middle Name.
- Card Status:**  Enable Cardholder.
- Validity:** Start (1/18/2018 12:00:00 AM), Expiration (12/31/2030 12:00:00 AM).
- Department:** \_None.
- Identification:** ID Number, PIN (NONE).
- Badges:** A table for managing assigned badges.
- OTIS Specific Settings:**
  - Extended unlock (ADA)
  - Antipassback exempt (eMAX) OTIS VIP
  - OTIS Vertigo
  - OTIS Vertigo 2
  - OTIS Service Card
  - OTIS Split Group
  - OTIS CIM Override
- OTIS Default Floor:** A dropdown menu currently set to \_None.
- Access Levels:**
  - No doors
  - Authorized Elevators
  - Level 1
- Preview:** A MAXESS badge with the text "MAXESS Access System, Inc. Yorba Linda, CA 92887 714-772-1000 FAX 714-221-2028".
- Image Placeholder:** A silhouette with the text "No Image Available".
- Actions:** A sidebar on the right with buttons: Delete, Save, Cancel, Copy, Report, Batch, Badge, Capture.
- Additional Fields:** Last Use, Location.

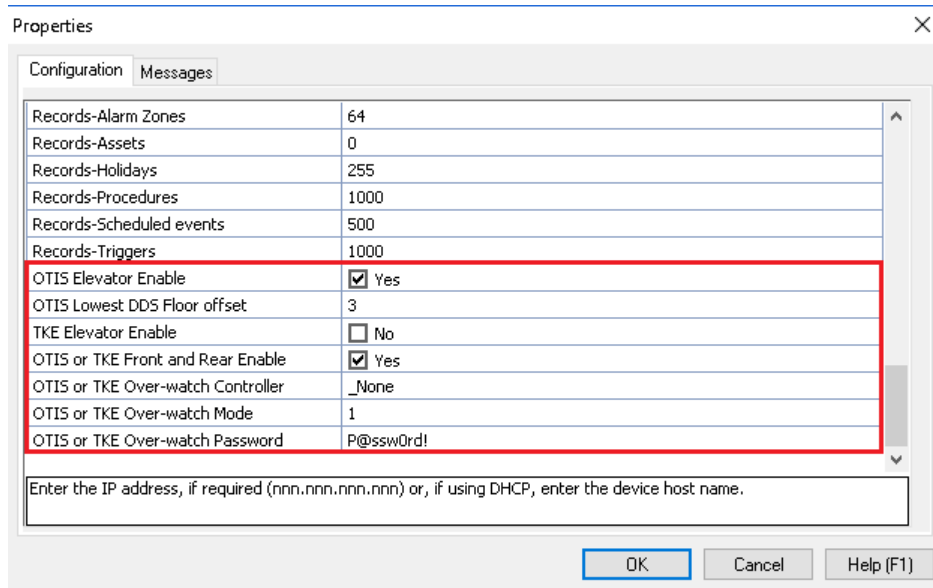
## Cardholder Theory of Operation at the OTIS DEC

1. The Cardholder will use one of the 4 modes described in this document at the DEC to make their intentions known.
2. The DEC will pass the credential number along to the eMAX-EP4502 or eMAX-LP4502 through the Plugable USB Ethernet device.
3. The eMAX-EP4502/eMAX-LP4502 will process that credential through the Elevator control logic.
4. The eMAX-EP4502/eMAX-LP4502 will return to the DEC, the floor that the credential is allowed to access at the moment the credential was presented.
5. The SMS will receive the appropriate access granted or access denied message from the eMAX-EP4502 or eMAX-LP4502.
6. Depending on the operating mode of the DEC, the cardholder will be directed to their elevator cab after presenting their cardholder credentials. Or the User must select a floor destination followed by presenting their cardholder credentials, then be informed that they are allowed or not allowed to the floor they have selected. This is all OTIS DDS logic.

## Over-Watch Service Configuration

1. The Over-watch service should only be applied if it is required. The Over-Watch service configuration is required when the number of readers (DECs) on the eMAX-EP4502/eMAX-LP4502 has exceeded more than 64 DECs that are allowed per 4502 unit. This will also require additional eMAX-EP4502/eMAX-LP4502 to accommodate any additional DECs. Each 4502 unit can support 64 readers (DECs).
2. Make sure the eMAX-EP4502/eMAX-LP4502 is online.
3. Download the Over-watch Firmware to the 4502 unit that will be the Master Controller.
  - a. Run the **Download firmware (EP)** command through the SMS Service Manager application.  
**Note: It can take up to 5 minutes to complete the firmware download.**
  - b. Select the eMAX-EP4502/eMAX-LP4502 controller that will be the designated Master controller.
  - c. Select the **Over-Watch\_Pkg\_01\_00\_00\_#40.crc** from the Command drop-down menu.  
**Note: To remove the over-watch firmware from the 4502, select to send the Over-Watch-Removal\_Pkg firmware file.**
  - d. Finish running the command.
  - e. Follow with a Status of Area Controller command to confirm the addition of the firmware.
4. **Configuration of the eMAX-EP4502/LP-4502 controller that will be designated as the Master controller.**
  - a. The OTIS Elevator Enable setting must be set to Yes.
  - b. The Otis or TKE Over-watch Controller setting must be set to **\_None** for the Master controller.

- c. The OTIS or TKE Over-watch Mode setting must be set to value 1 for the Master controller.
- d. The OTIS or TKE Over-watch Password setting must be set and match the password value configured for the Over-watch user at the Master 4502 Controller. **See instructions below.**
- e. Save the configuration settings changes.



| Setting Name                      | Value     |
|-----------------------------------|-----------|
| OTIS Elevator Enable              | Yes       |
| OTIS or TKE Over-watch Controller | _None     |
| OTIS or TKE Over-watch Mode       | 1         |
| OTIS or TKE Over-watch Password   | P@ssw0rd! |

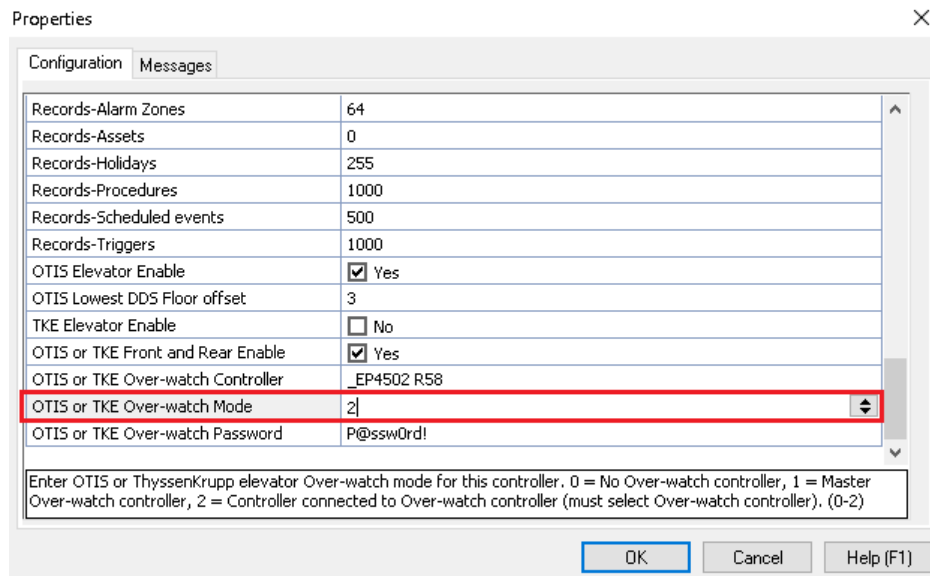
- 5. **Web Page Configuration for the eMAX-EP4502/eMAX-LP4502 that is the Master Controller.**
  - a. Add a **new Over-watch user**.
    - i. Username: **maxxess**
    - ii. Password: **P@ssw0rd!**  
**Note: This value must match the password configured in the SMS software configuration for the Master controller.**
    - iii. Set the Listening Port (1-65535). **Default : 1883.**



- b. On the **Host Communication** page for the Master Controller, the Data Security (Encryption) must be configured.  
The **Data Security** must be set to **TLS if Available**.  
**Default: None.**
- c. Information only. Check the Device Info for the Master Controller for product information.
  - i. Confirm the Time zone & Firmware info are correct and update-to-date.
  - ii. Confirm the IPv4 Address info are correct.
  - iii. Confirm the Dip Switch setting info are in the normal (all off) position.
- d. Select to **Apply Settings**. The Master Controller will reboot.
- e. Wait for communication to return on the Master Controller.

6. **Configuration for the eMAX-EP4502/eMAX-LP4502 that is the non-Master Controller(s).**

- a. The **OTIS Elevator Enable** setting must be set to Yes.
- b. The **Otis or TKE Over-watch Controller** must be set to **Name of the Master controller**.
- c. The **OTIS or TKE Over-watch Mode** must be set to value 2.
- d. The **OTIS or TKE Over-watch Password** must set and match the password value configured for the Over-watch user configured at the Master 4502 Controller.  
**Note: There is no over-watch user configuration in the non-Master controller.**
- e. Save the configuration settings changes to the non-Master Controller.



| Setting Name                      | Value                                     |
|-----------------------------------|---|
| OTIS Elevator Enable              | Yes                                       |
| OTIS or TKE Over-watch Controller | {Name of the OTIS Master 4502 Controller} |
| OTIS or TKE Over-watch Mode       | 2   |
| OTIS or TKE Over-watch Password   | P@ssw0rd!                                 |

7. **Web Page Configuration for the eMAX-EP4502/eMAX-LP4502 that is the non-Master Controller.**
  - a. **Note: There is NO Over-watch User to be configured for the non-Master Controller.**
  - b. On the **Host Communication** page for the non-Master Controller, the Data Security (Encryption) must be configured.  
The **Data Security** must be set to **TLS if Available**.  
**Default: None.**
  - c. Information only. Check the Device Info for the non-Master Controller for product information.
    - i. Confirm the Time zone & Firmware info are correct and update-to-date.
    - ii. Confirm the IPv4 Address info are correct.
    - iii. Confirm the Dip Switch setting info are in the normal (all off) position.
  - d. Select to **Apply Settings**. The non-Master Controller will reboot.
  - e. Wait for communication to return on the non-Master Controller.
  
8. **Important Note: After the Over-Watch Service and Encryption modes have been configured for all 4502 controllers, be sure to Reset and Initialize each 4502 Area Controller using the SMS Service Manager application.**

### Troubleshooting Tips/Q&A

1. What piece of hardware is the panel in the SMS mean to reflect?

**Answer: The eMAX-EP4502 OTIS Panel is the OTIS DEC, which is the computer that directs people to the elevator cabs on each floor.**

2. What IP address should be assigned to the Panel?

**Answer: The IP Address programmed into the OTIS Panel needs to be the OTIS DEC IP Address for the DEC that the panel will be linked to.**

3. The USB/Ethernet dongle is detailed as having a static address of 192.168.50.250. As USB/Ethernet dongles don't use static IP addresses as standard, will they need to take an address from the hardware they are connected to (eMAX-EP4502)?

***Answer: The statement regarding the static IP Address for the dongle is for information purposes only. The eMAX-EP4502 will assign that address to the Plugable USB Ethernet Adapter once initialized as an OTIS eMAX-EP4502.***

4. Are there any firewalls/ports that need to be opened on the SMS Server or any specific network configuration?

***Answer: There is nothing specifically required by the OTIS implementation. The standard rules apply, port 1705 for MultiPort must be open for other workstations to connect to MultiPort. SQL Server ports must be open for other workstations to connect to SQL.***

5. Why do you need an eMAX-EP4502 Area Controller for the OTIS implementation?

***Answer: The OTIS Compass Destination Dispatch integration requires an eMAX-EP4502 for the simple reason that only the eMAX-EP4502 supports an application written by the hardware manufacturer that communicates with the OTIS Destination Dispatch Server (DDS) to receive read events from the OTIS Destination Entry Computer (DEC) terminal and return the allowed floors to the DDS. All of this OTIS communication is passed through the USB connected network port on the eMAX-EP4502.***

6. If the cardholder credential is presented at the DEC without selecting a floor destination, does it still report to the SMS?

***Answer: Yes, the card event will be reported to the SMS with the "Authorization Timeout" transaction event.***

7. At the DEC, when a User select the special hyphen (-) character followed by presenting a cardholder credential, what happens?

***Answer: The SMS will treat this scenario as an invalid DEC event which the User will be denied access. However, the "Valid Access (Learn MR)" event is reported in the SMS.***



## Appendix C

Use the following table to collect the information required to configure the OTIS readers in the SMS. Create copies of this page to define more OTIS readers.

| DEC (reader) configuration | Value in OTIS Compass DDS   |
|----------------------------|---|
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |
| DEC Name                   |   |
| OTIS Operating Mode        | Modes 1: <input type="checkbox"/> 2: <input type="checkbox"/> 3: <input type="checkbox"/> 4: <input type="checkbox"/> |
| OTIS Lowest Floor Number   |   |
| OTIS Floor Count           |   |

