OTIS Elevator Integration Guide for victor v5.2

User Guide

March 2021

8200-1147-1128 C0

5.2

www.americandynamics.net

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Introduction

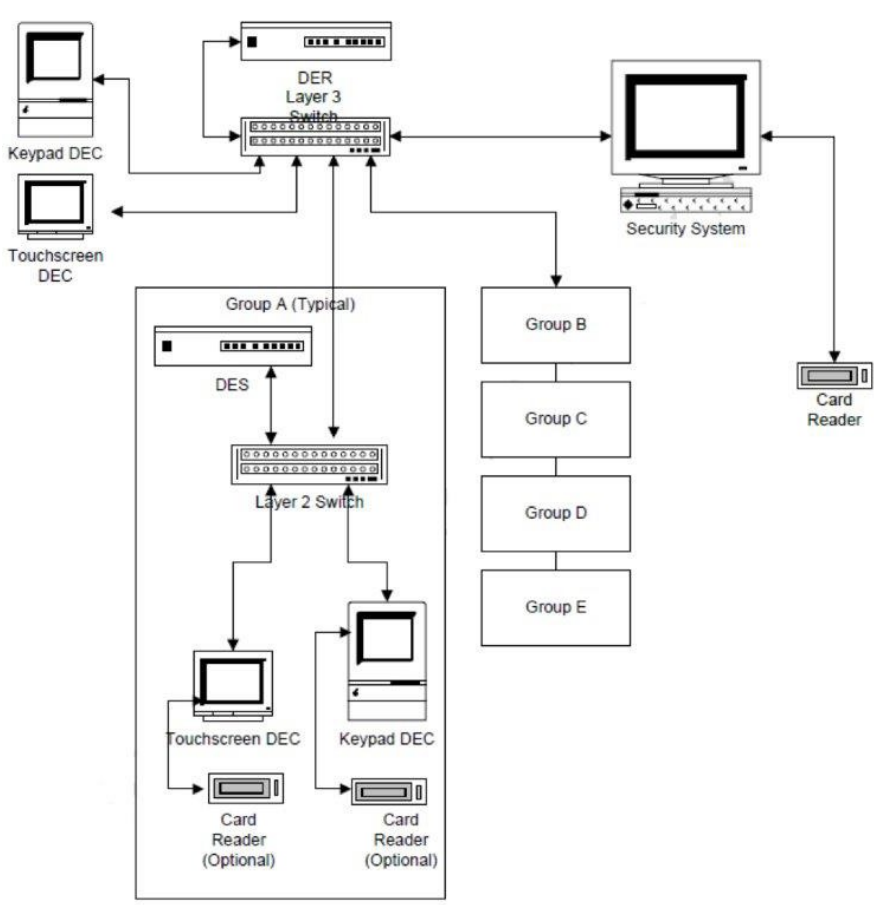
OTIS Elevator System integration provides advanced, seamless integration between victor unified systems and OTIS Elevator System. The OTIS Compass Elevator System integration provides security to particular landings (floors) in a multi-level building by ensuring that only those authorized may go to a particular landing, or exit on that landing. Access to particular landings is determined through a swipe of a card to a card reader called a Destination Entry Computer (DEC) outside of the elevator. The card reader accesses the personnel privilege assigned to a specific OTIS Elevator access configuration.

This document describes the OTIS Elevator System integration from within the victor environment. All the features/functionality explained are with respect to the victor platform.

Product Components

- OTIS Elevator System Client: Used to specify connection details to OTIS Elevator System.
- OTIS Elevator System Objects: Physical or logical OTIS entities within the victor environment.
- OTIS Elevator System Server Component: The heart of the integration, facilitates and maintains communication with the OTIS objects.

Figure 1: System Overview



All relevant OTIS Elevator System editors are available from OTIS ribbon bar after driver installation.

How OTIS Compass Integration Works

In a typical Destination Dispatching System (DDS) deployment, a reader/keypad combination is deployed in proximity to each OTIS Destination Entry Computer (DEC) – a touchscreen or keypad device. An OTIS DEC communicates with an OTIS Destination Entry Server(DES) that manages a group of elevators. The victor Unified system contains objects that represent the DER, DES, and DECs, including their relationships to Personnel, Clearances, and Floors.

Operation Modes

OTIS Compass Integration supports the four Operational Modes available with the OTIS Compass Destination Entry System.

Default Floor (Operation Mode 1)

In this operation mode, each authorized cardholder has been assigned a default floor, and certain floors may have been designated as Allowed Floors (public access is allowed without a credential). A potential passenger presents a credential at a Unified credential reader and it is interpreted by the Unified application, or a potential passenger enters a destination floor at the DEC.

This activity results in one of the following responses:

- If a credential was presented and validated, a default floor for the passenger is transmitted to the DEC from Unified application, the DEC forwards the request to the DES for a car assignment, and displays that car assignment to the passenger.
- If Unified application determines that the credential is invalid or the destination entered is not allowed, then Unified application transmits this information to the DEC, and the DEC displays a message informing the potential passenger that the destination request has been denied.
- If the destination request is allowed by the DEC, the DEC forwards the request to the DES for a car assignment, and displays that car assignment to the passenger.

Access to Authorized Floors (Operation Mode 2)

In this operation mode, each authorized cardholder has been assigned Clearances that provide access to specific floors. A potential passenger presents a credential at a Unified application credential reader and selects a destination floor at the OTIS DEC. Unified application interprets the credential and transmits to the OTIS DEC an admit message along with a list of authorized floors, or a reject message.

This activity results in one of the following responses:

- The credential holder is given a car assignment by the DEC because their credential and their destination floor request were valid.
- The DEC displays a rejection message and informs the passenger that they should seek assistance.

User Entry of Destination Floor (Operation Mode 3)

In this operation mode, the potential passenger selects a destination floor. This may be performed with or without the presentation of a credential to Unified application.

This activity results in one of the following responses:

- The passenger's requested floor is accepted without unified application authorization, the DEC forwards the request to the DES for a car assignment., and displays that car assignment to the passenger.
- If the passenger presented a credential to unified application, their Authorized Floors are transmitted to the DEC from unified application, and if their requested floor is authorized, the DEC forwards the request to the DES for a car assignment. and displays that car assignment to the passenger.
- If unified application informs the DEC that the credential and/or the requested floor is invalid, the DEC displays a message informing the potential passenger that the destination request has been denied.

Default Floor or User Entry of Destination Floor (Operation Mode 4)

In this operation mode, the potential passenger presents a credential to the Reader. Within a timeout period (specified on the DDS Editor General tab), the passenger may override the default

floor and choose another destination floor. The timeout period is based on Personnel record settings in unified application, as transmitted to the Otis DEC. If the passenger is a Standard Passenger then the timeout period is 3 seconds. If the passenger is identified in unified application as requiring Alternate Shunt for Americans with Disabilities Act (ADA) compliance, then the timeout is 6 seconds.

This activity results in one of the following responses:

- Unified application transmits the passenger's Default and Authorized Floors to the DEC, the DEC forwards the request to the DES for a car assignment., and displays that car assignment to the passenger.
- Unified application informs the DEC that the credential and/or the requested floor is invalid, and the DEC displays a message informing the potential passenger that the destination request has been denied.

Features

The objective of the OTIS Elevator System integration is to provide a standard, single interface between OTIS Elevator System devices and American Dynamic’s victor Unified Management product.

The following are the features supported:

- Secure access to particular floors of multi-level buildings by ensuring that only authorized personnel may go to a particular floor or exit on that floor.
- Supports Operational Modes 1 through 4, which can also be scheduled.
- Supports Interface Control Document (ICD) Version 1, Version 2 and Version 3
- Provides floor selection message for a DEC
- Provides a DES Audit display that shows the elevator activity of Personnel
- Supports Front and Rear door configuration
- Schedule-based floor access for all personnel
- Supports DEC PIN code entry
- Each elevator group supports 255 floors, and the front and rear doors of each elevator cab
- Each Elevator System supports up to 240 DEC devices
- Supports Default Floor configuration
- Secure, Unsecure floors through Events, Schedules or by Operator
- Exemption Group can access Secured floors

- Supports victor role respect
- Provides integration with victor Object Association
- Provides victor Client-side event management
- Monitor devices on victor Maps and Health dashboard
- Supports Card Swipe on inbuilt Reader of DEC

Minimum Requirements

Hardware

OTIS elevator system integration has the same hardware requirements as victor Unified Client and victor Site Manager. Therefore, if the machine can successfully run victor then it will satisfy OTIS elevator system integration requirements.

The integration requires approximately 50MB of available Hard Disk space.

Installation

The OTIS elevator system installer must be installed on both the victor Site Manager and all victor Unified Client machines.

Procedure 2-1 Installing OTIS Elevator system Integration to victor

Step	Action
1	Close any currently running programs.
2	Open a web browser (for example, Windows Internet Explorer) and navigate to http://www.americandynamics.net
3	Download the appropriate version of the OTIS Integration Software Driver for your version of victor.
4	Launch the OTIS Integration Software Driver. The **End User License Agreement** window appears.
5	Select **I agree to the license terms and conditions** check box, and then click **Install**. For server installations running CrossFire service, the **Tyco CrossFire Service Alert** dialog box appears.
6	Click **OK** to continue with the installation. The **Welcome to the Integration Setup** Wizard displays.
7	Click **Next** to continue with the installation. The **Installation Options** dialog box appears.
8	If you choose to enable the driver for redundancy, select the **Redundant server installation using supported third party redundancy** check box and enter the Virtual sever (alias) name. Otherwise, just click **Next**. The **Ready to Install the Integration** dialog box appears.
9	Click **Install** or click **Back** to modify the installation settings. After a few minutes, the **Completed the Integration Setup Wizard** appears. If you select **Cancel**, installation will roll back to clean state.
10	Click **Finish** to complete the installation process. The **Setup Successful** dialog box appears.
11	Click **Close** to exit the Installation. After installation, a new group called **OTIS** is available on the **Setup** tab.

- End -

OTIS Configuration File

The OTIS configuration file is located at `Tyco/CrossFire/ServerComponents`. This section describes the values that you can change in the OTIS Configuration file:

Note:
If you make any changes to the configuration file you must restart the driver. Ensure that you change the values only after consulting with the product support team.

- **SSIpAddress** - This is the local IP Address of Security System (SS).
- **MulticastIpAddress** - This is the Multicast Group IP address.
- **SSReceiveUnicastPortNumber4mDES** - This is the port number of SS at which SS receives Unicast messages from DES. The default port number is 45303.
- **SSSendUnicastPortNumber2DES** - This is the port number of DES at which SS sends Unicast messages to DES. The default port number is 46303.
- **SSReceiveMulticastPortNumber4mDES** - This is the port number of SS at which SS receives Multicast message from DES for the V2 protocol. The default port number is 47307.
- **DESMulticastPortNumber** - This is the port number of DES at which SS sends Multicast messages to DES for the V2 protocol. The default port number is 48307.
- **SSReceiveMulticastPortNumber4mDESV1** - This is the port number of SS at which SS receives Multicast messages from DES for the V1 protocol. The default port number is 45307.
- **DESMulticastPortNumberV1** - This is the port number of DES at which SS sends Multicast messages to DES for V1 protocol. The default port number is 46307.
- **SSReceiveUnicastPortNumber4mDEC** - This is the port number of SS at which SS receives Unicast messages from DEC. The default port number is 46308.
- **SSSendUnicastPortNumber2DEC** - This is the port number of DES at which SS sends Unicast message to DEC. The default port number is 45308.
- **RetryTimeOutMilliseconds** - Use this variable to specify the duration between the retries. The default value is 1000 milliseconds.
- **NumberOfRetries** - Use this variable to specify the number of times a message must be retried. The default value is 3.
- **ESHeartbeatIntervalinMiliseconds** - Use this variable to define the regular intervals, in milliseconds, to send a HeartBeat. The default value is 1000 milliseconds.
- **HBOfflineChkRetryInterval** - Use this configuration to specify the duration that is used for setting the communication status of the elevator server. It must be less than the 'HeartBeatTimeOut' configuration value. The default value is 2000 milliseconds.
- **HeartBeatTimeOut** - Use this configuration to specify the timeout value for the Heartbeat, which would be compared with the last successful Hearbeat received time from elevator server to driver, to set the communication status of the elevator server. The default value is 5000 milliseconds.
- **TTL** - Use this variable to specify the time to live value for Heartbeat. The default value is 5.

General Hardware information

Detailed hardware information is available for all configured OTIS Elevator System within victor. To access this information, select the required object from the OTIS ribbon on the setup tab, then select Show All. Right-click the object you wish to view information for and select Edit. This information is also available when you right-click an object and select Edit.

victor integration information

Roles

victor roles support OTIS privileges, therefore all context menu actions associated with the devices are added to existing victor roles which can be edited accordingly. For more information on Roles, refer to the victor Unified Client Configuration and User Guide.

Reports

victor's report selection tool and Find in Journal feature support OTIS. For more information on Reports and the Find in Journal feature, refer to the victor Unified Client Configuration and User Guide.

Events

victor Events supports OTIS objects support allowing you to detect, monitor and record specific activities on the system. For further information on Events, refer to the victor Unified Client Configuration and User Guide.

Maps

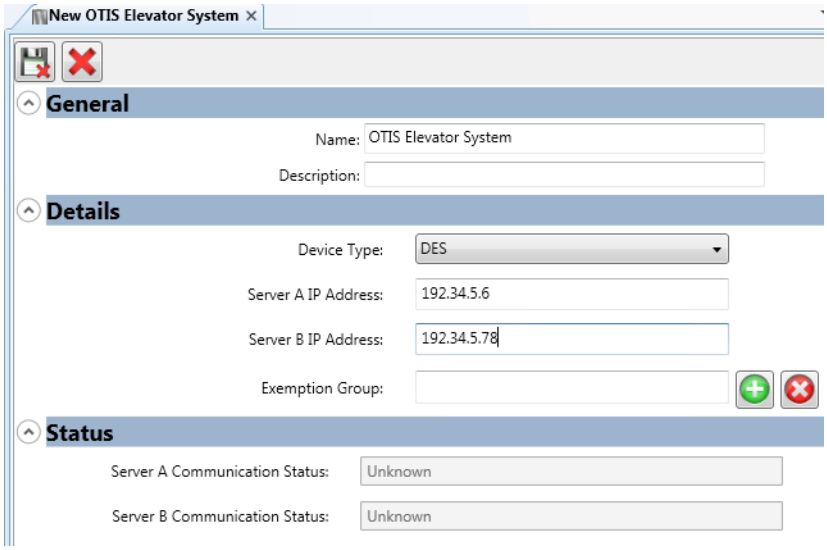
victor Maps and Find on Map features support OTIS objects. For more information on Maps and the Find on Map feature, refer to the victor Unified Client Configuration and User Guide available on the American Dynamics website www.americandynamics.net

victor editors offer various save options when creating/editing objects:

- **Save and Close** button will allow you to save the current object and close the editor.
- **Save (Apply)** button saves changes and keeps the editor open, allowing further changes to be made.
- **Save and New** button allows you to save the current object and opens a new editor to create a new object with default values populated.
- **Close** button cancels changes and closes the editor without saving.

Adding OTIS Elevator System

Procedure 3-1 Adding New OTIS Elevator System



Step	Action

1 Click **New** from left hand navigation to open Create a New Item pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Elevator System** icon.

4 Expand the **General** expander.

Property	Description
Name	Enter a unique name for the OTIS Elevator System.
Description	Enter a general description about the OTIS Elevator System.

5 Expand the **Details** Expander.

Property	Description
Device Type	Select the device type. The available options are: • DES • DER
Server A IP Address	Set the unique primary server IP Address. The value ranges for Primary Server IP Address is from 192.168.(1).250 to 192.168.(8).250.
Server B IP Address	Set the unique secondary server IP Address. IP address will update accordingly by using the same subnet third address as you chose for the Primary IP Address.
Exemption Group	Select a pre-configured personnel group that will be exempt from the manual secure landing action. The exempt personnel group selected allows the personnel in the group access to the landing when it is in the secured state. 1. Click to display the Object Selector. 2. Select the name of the group from the Object Selector. 3. Click **OK**.

6 If required, expand **Status** expander to view the Status:

Expander	Information
Server A Communication Status	The following are the available options: • **Online**: The OTIS Elevator System is configured and communicating with the primary OTIS server (Server A). • **Offline**: The OTIS Elevator System is configured, but not communicating with the primary OTIS server (Server A). • **Unknown**: The status cannot be determined, usually displayed after the initial OTIS Elevator System configuration while waiting for the primary OTIS server (Server A) to update the status.
Server B Communication Status	The following are the available options: • **Online**: The OTIS Elevator System is configured and communicating with the secondary OTIS server (Server B). • **Offline**: The OTIS Elevator System is configured, but not communicating with the secondary OTIS server (Server B). • **Unknown**: The status cannot be determined, usually displayed after the initial OTIS Elevator System configuration while waiting for the secondary OTIS server (Server B) to update the status.

7 Select **Save and Close**.

- End -

Editing OTIS Elevator System

Procedure 3-2 Edit OTIS Elevator System

Step	Action

1 Click **Show All**  from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Elevator System** icon.

4 Right-click the OTIS Elevator System to be edited.

5 Select **Edit**.

6 Expand the **General** expander.

Property	Description
Name	You can modify the name for the OTIS Elevator System.
Description	You can modify the description about the OTIS Elevator System.

7 Expand the **Details** Expander.

Property	Description
Device Type	Select the device type. The available options are: • DES • DER
Server A IP Address	Set the unique primary server IP Address. The value ranges for Primary Server IP Address is from 192.168.(1).250 to 192.168.(8).250.
Server B IP Address	Set the unique secondary server IP Address. IP address will update accordingly by using the same subnet third address as you chose for the Primary IP Address.
Exemption	Select a pre-configured personnel group that will be exempt from the manual secure landing

Property	Description
Group	action. The exempt personnel group selected allows the personnel in the group access to the landing when it is in the secured state. 1. Click  to display the Object Selector. 2. Select the name of the group from the Object Selector. 3. Click **OK**.

8 If required, expand **Status** expander to view the Status:

Expander	Information
Server A Communication Status	The following are the available options: • **Online**: The OTIS Elevator System is configured and communicating with the primary OTIS server (Server A). • **Offline**: The OTIS Elevator System is configured, but not communicating with the primary OTIS server (Server A). • **Unknown**: The status cannot be determined, usually displayed after the initial OTIS Elevator System configuration while waiting for the primary OTIS server (Server A) to update the status.
Server B Communication Status	The following are the available options: • **Online**: The OTIS Elevator System is configured and communicating with the secondary OTIS server (Server B). • **Offline**: The OTIS Elevator System is configured, but not communicating with the secondary OTIS server (Server B). • **Unknown**: The status cannot be determined, usually displayed after the initial OTIS Elevator System configuration while waiting for the secondary OTIS server (Server B) to update the status.

9 Select **Save and Close**.

- End -

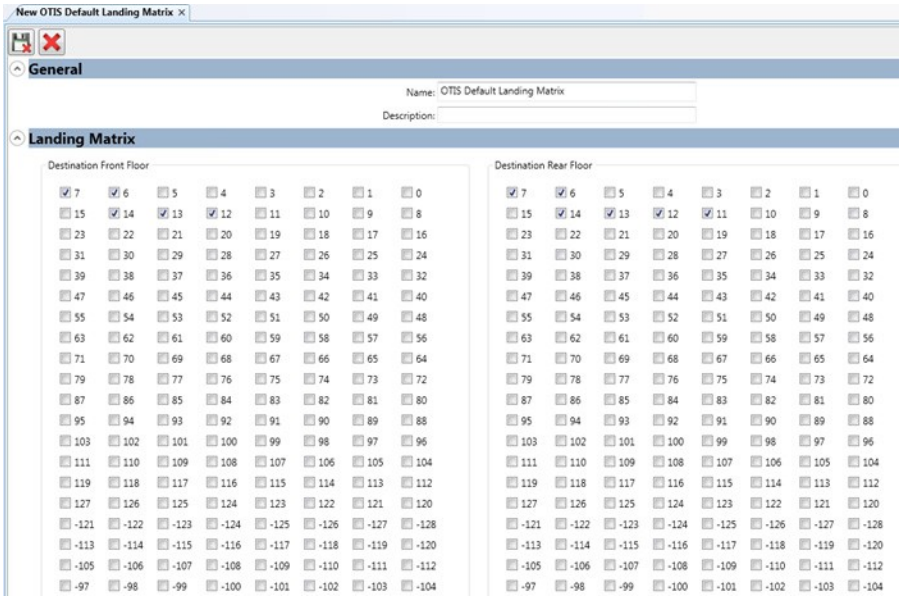
Adding OTIS Default Landing Matrix

Landing Matrix is a collection of landing (floors) that an OTIS elevator system supports. OTIS has two types of Landing Matrices.

- Default Landing Matrix
- Clearance Default Landing Matrix

The OTIS Default Landing Matrix is used to configure a common access Landing Matrix with no personnel clearances.

Note:
You cannot delete a Default Landing Matrix if there are DEC configurations associated with the Default Landing Matrix. You must delete the DEC configurations before you can delete the Default Landing Matrix.



Procedure 3-3 Adding OTIS Default Landing Matrix

Step	Action

1 Click **New** from left hand navigation to open **Create a New Item** pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Default Landing Matrix** icon.

4 Expand the **General** expander.

Property	Description
Name	Enter a unique name for the OTIS Default Landing Matrix.
Description	Enter a general description about the OTIS Default Landing Matrix.

5 Expand the **Landing Matrix** Expander.

Property	Description
Destination Front Floor	Select the check box to allow access to the front door of the destination floor. Valid range is between -128 to 127.
Destination Rear Floor	Select the check box to allow access to the rear door of the destination floor. Valid range is between -128 to 127.

6 Select **Save and Close**.

- End -

Editing OTIS Default Landing Matrix

Procedure 3-4 Edit OTIS Default Landing Matrix

Step	Action

1 Click **Show All**  from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Default Landing Matrix** icon.

4 Right-click the OTIS Default landing matrix to be edited.

5 Select **Edit**.

6 Expand the **General** expander.

Property	Description
Name	You can modify the name of the OTIS Default Landing Matrix.
Description	You can modify the description, of the OTIS Default Landing Matrix.

7 Expand the **Landing Matrix** Expander.

Property	Description
Destination Front Floor	Select the check box to allow access to the front door of the destination floor. Valid range is between -128 to 127.
Destination Rear Floor	Select the check box to allow access to the rear door of the destination floor. Valid range is between -128 to 127.

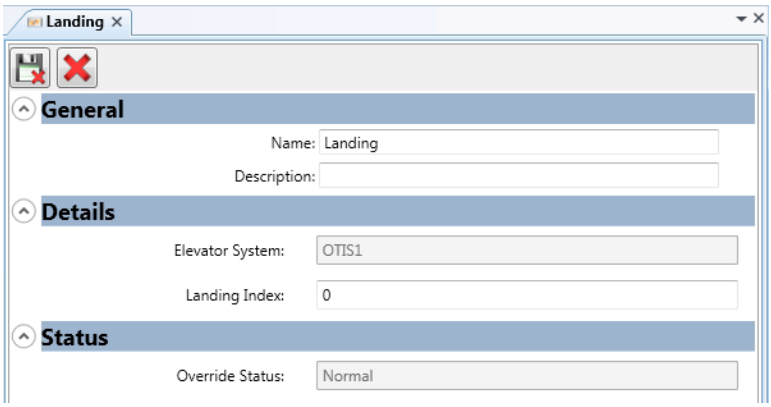
8 Select **Save**.

- End -

Adding OTIS Landing

The OTIS Landing lets you configure a landing to be used by the Elevator System.

Note:
The OTIS Elevator System must be configured before you can add the OTIS Landing. See "Adding OTIS Elevator System".



Procedure 3-5 Add OTIS Landing

Step	Action

1 Click **Show All** from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Elevator System** icon.

4 Expand the **General** expander.

Property	Description
Name	Enter a unique name up to 100 characters long to identify the OTIS Landing.
Description	Enter a general description, up to 500 characters, about the OTIS Landing.

5 Expand the **Details** Expander.

Property	Description
Elevator System	The name of the OTIS elevator system for which the landing is been added. This field is read-only.
Landing Index	Landing index is the index associated with the Landing. Enter the value between -128 to 127.

6 If required, expand **Status** expander to view Status relating to those fields:

Expander	Information
Override Status	Displays the override details of the floor object. This field is read-only.

7 Select **Save**.

- End -

Editing OTIS Landing

Procedure 3-6 Edit OTIS Landing

Step	Action

1 Click **Show All**  from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Landing** icon.

4 Right-click the **OTIS Landing** to be edited.

5 Select **Edit**.

6 Expand the **General** expander.

Property	Description
Name	You can modify the name of the OTIS Landing. Ensure that the name is unique.
Description	You can modify description about the OTIS Landing.

7 Expand the **Details** Expander.

Property	Description
Elevator System	The name of the OTIS elevator system for which the landing is been added. This field is read-only.
Landing Index	You cannot modify the Landing index. Landing index is the index associated with the Landing. The value is between -128 to 127.

8 If required, expand **Status** expander to view Status relating to those fields:

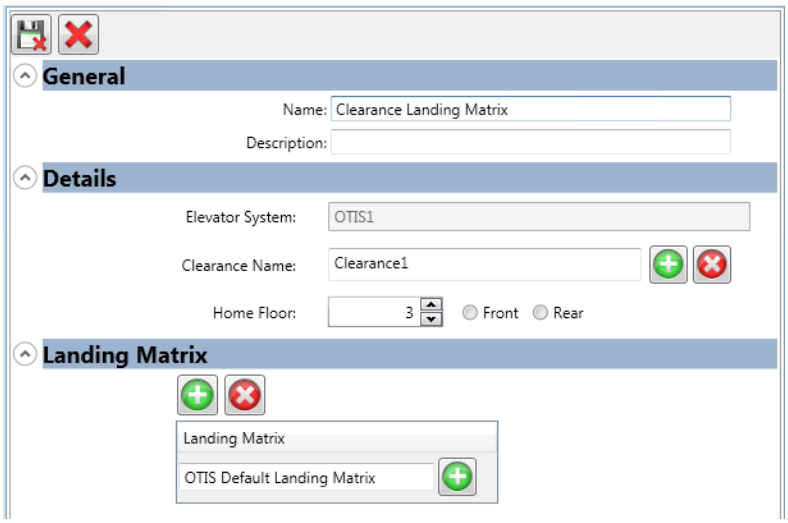
Expander	Information
Override Status	Displays the override details of the floor object. This field is read-only.

9 Select **Save and Close**.

- End -

Adding OTIS DEC Clearance Landing Matrix

The OTIS DEC Clearance Landing Matrix is used to define up to 128 front and 128 rear doors that can be accessed by cardholders that have a clearance associated with the landing matrix.



Procedure 3-7 Add OTIS DEC Clearance Landing Matrix

Step	Action

1 Click **Show All** from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Elevator System** icon.

4 Right click on **OTIS Elevator System** for which you need to add OTIS DEC Clearance Landing Matrix.

5 Select **New OTIS DEC Clearance Landing Matrix**.

6 Expand the **General** expander.

Property	Description
Name	Enter a unique name up to 100 characters long for the OTIS DEC Clearance Landing Matrix.
Description	Enter a general description, up to 500 characters, to identify the OTIS DEC Clearance Landing Matrix.

7 Expand the **Details** Expander.

Property	Description
Elevator System	The name of the elevator system for which you need to add a DEC clearance Landing matrix.
Clearance Name	The pre-configured personnel clearance. This field is used to select the clearance that allows access to the Door with a reader that a person swipes their card to get authorization to use the landing. 1. Click to display the Objector selector. 2. Select the Clearance from the Object Selector. 3. Click **OK**. **Note:** Clearance can be created in C Cure 9000 application only.
Home Floor	Optional. The home floor is the default floor in OTIS and should be mapped to a clearance. This Home Floor should be selected in the landing matrix associated to this clearance. Select the Home Floor from -128 to 127. Select either Front or Rear door. **Note:** Front and Rear door selections are not applicable for ICD Version V1.0.

8 Expand the **Landing Matrix** Expander.

Property	Description
Landing Matrix	Allows selection of a pre-configured Default Landing Matrix. 1. Click  to display the Objector selector. 2. Select the Default Landing Matrix from the Object Selector. 3. Click **OK**.

9 Select **Save and Close**.

- End -

Editing OTIS DEC Clearance Landing Matrix

Procedure 3-8 Edit OTIS DEC Clearance Landing Matrix

Step	Action

1 Click **Show All**  from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS DEC Landing Matrix** icon.

4 Right-click the OTIS DEC Clearance Landing Matrix to be edited.

5 Select **Edit**.

6 Expand the **General** expander.

Property	Description
Name	You can modify the name of the OTIS DEC Clearance Landing Matrix.
Description	You can modify the description, to identify the OTIS DEC Clearance Landing Matrix.

7 Expand the **Details** Expander.

Property	Description
Elevator System	The name of the elevator system for which you need to add a DEC clearance Landing matrix.
Clearance Name	The pre-configured personnel clearance. This field is used to select the clearance that allows access to the Door with a reader that a person swipes their card to get authorization to use the landing. 1. Click  to display the Objector selector. 2. Select the Clearance from the Object Selector. 3. Click **OK**. **Note:** Clearance can be created in C Cure 9000 application only.
Home Floor	Optional. Select the Home Floor from -128 to 127. Select either Front or Rear door. The home floor is the default floor in OTIS and should be mapped to a clearance. This Home Floor should be selected in the landing matrix associated to this clearance. **Note:** Front and Rear door selections are not applicable for ICD Version V1.0.

8 Expand the **Landing Matrix** Expander.

Property	Description
Landing Matrix	Allows selection of a pre-configured Default Landing Matrix.

Property	Description
	1. Click  to display the Objector selector. 2. Select the Default Landing Matrix from the Object Selector. 3. Click **OK**.

9 Select **Save**.

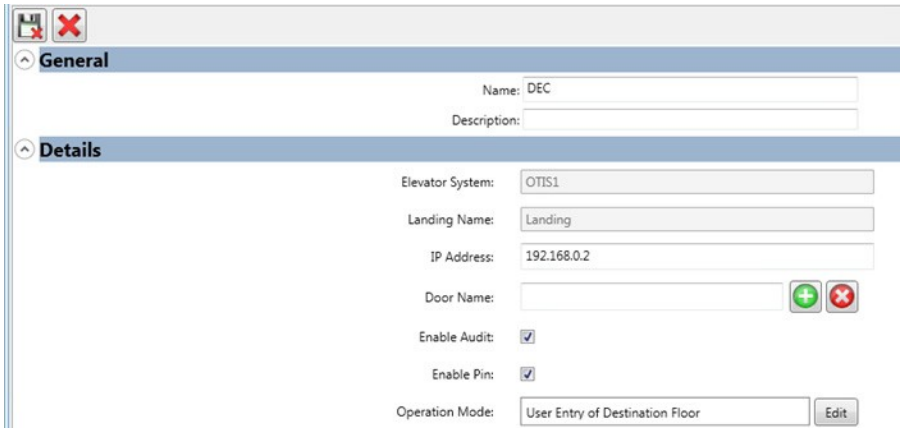
- End -

Adding OTIS DEC

The OTIS DEC lets you configure the DEC general information, including Door Name, IP address, enable Audit, enable Pin, assign a pre-configured schedule and set operation mode.

The following must be configured before you can configure the DEC:

- OTIS Elevator System (See Adding OTIS Elevator System on page 10)
- OTIS Default Landing Matrix (See Adding OTIS Default Landing Matrix on page 16)
- OTIS Landing (See Adding OTIS Landing on page 19)



Procedure 3-9 Add OTIS DEC

Step	Action
1	Click **Show All**  from left hand navigation to open Show a List of All Items pane.
2	Navigate to **OTIS** section.
3	Click on **OTIS Landing** icon.
4	Right click the Landing for which you need to add DEC.
5	Select **New OTIS DEC**.
6	Expand the **General** expander.

Property	Description
Name	Enter a unique name up to 100 characters long for the OTIS DEC.

Property	Description
Description	Enter a general description, up to 500 characters, to identify the OTIS DEC.

7 Expand the Details Expander.

Property	Description
Elevator System	(Read only) The name of the elevator system for which you need to add a OTIS DEC.
Landing Name	The name of the Landing for which you need to add OTIS DEC. This field is read-only.
IP Address	Enter the unique IP Address.
Door Name	1. Click  to display the Object Selector. 2. Select the Door from the Object Selector. 3. Click **OK**. The Door is retrieved from C•CURE 9000.
Enable Audit	Select the check box to enable the audit. Enable indicates that the victor will start receiving floor selection messages from the respective DEC. **Note:** This check box is not applicable for ICD Version V1.0.
Enable Pin	Select the check box to enable the Pin. Enable indicates that the Pin entry is enabled at the respective DEC. When the Enable Pin check box is selected, the DEC can accept or reject the Pin codes. **Note:** This check box is not applicable for ICD Version V1.0.
Operation Mode	(Optional) Click the **Edit** button to change the Operation mode for this DEC in the OTIS System. The following are the available options: • Default Floor • Access to Authorized Floor • User Entry of Destination Floor • Default Floor or User Entry of Destination Floor

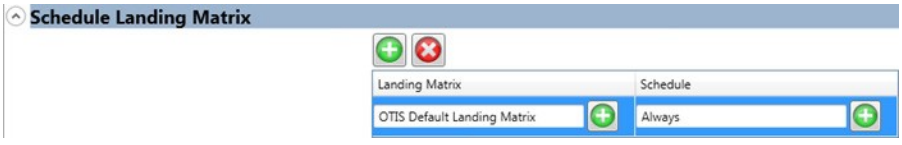
8 If required, expand **Landing Matrix** expander to map a Default Landing matrix.

a Click  to add a row.

b Click  in the Landing Matrix field to display the Object Selector.

c Select the OTIS Default Landing Matrix from the Object Selector and click **OK**.

9 If required, expand **Schedule Landing Matrix** expander to map a Schedule to a landing.



a Click  to add a row.

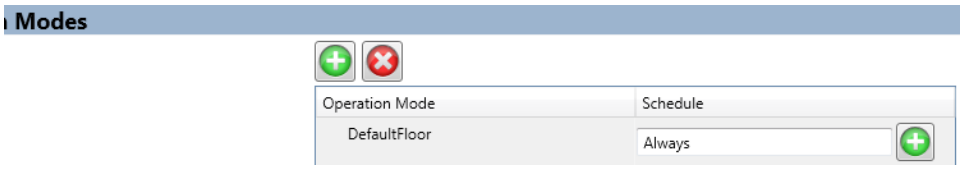
b Click  in the Landing Matrix field to display the Object Selector.

c Select the Default Landing Matrix from the Object Selector and click **OK**.

d Click  in the Schedule field to display the Object Selector.

e Select the Schedule from the Object Selector and click **OK**.

10 If required, expand **Operation Modes** expander to map a operation mode with the schedule:



a Click to add a row.

b Select the Operation mode from the drop down list.

c Click in the Schedule field to display the Object Selector.

d Select the Schedule from the Object Selector and click **OK**.

11 Expand **Pin Code Clearance** expander to map the clearances with the schedule.

a Click to add a row.

b Click in the **Clearance** field to display the Object Selector.

c Select the Clearances from the Object Selector and click **OK**.

d Click in the Schedule field to display the Object Selector.

e Select the Schedule from the Object Selector and click **OK**.

12 If required, expand **Status** expander to view the communication status.

13 Select **Save and Close**.

- End -

Editing OTIS DEC

Procedure 3-10 Edit OTIS DEC

Step	Action
1	Click **Show All** from left hand navigation to open Show a List of All Items pane.
2	Navigate to **OTIS** section.
3	Click on **OTIS DEC** icon.
4	Right-click the **OTIS DEC** to be edited.
5	Select **Edit**.
6	Expand the **General** expander.

Property	Description
Name	You can modify the name of the OTIS DEC.
Description	You can modify the description of the OTIS DEC.

7 Expand the **Details** Expander.

Property	Description
Elevator System	(Read only) The name of the elevator system for which you need to add a OTIS DEC.
Landing Name	The name of the Landing for which you need to add OTIS DEC. This field is read-only.
IP Address	Enter the unique IP Address.
Door Name	1. Click  to display the Object Selector. 2. Select the Door from the Object Selector. 3. Click **OK**. The Door is retrieved from C•CURE 9000.
Enable Audit	Select the check box to enable the audit. Enable indicates that the victor will start receiving floor selection messages from the respective DEC. **Note:** This check box is not applicable for ICD Version V1.0.
Enable Pin	Select the check box to enable the PIN. Enable indicates that the Pin entry is enabled at the respective DEC. When the Enable Pin check box is selected, the DEC can accept or reject the Pin codes. **Note:** This check box is not applicable for ICD Version V1.0.
Operation Mode	(Optional) Click the **Edit** button to change the Operation mode for this DEC in the OTIS System. The following are the available options: • Default Floor • Access to Authorized Floor • User Entry of Destination Floor • Default Floor or User Entry of Destination Floor

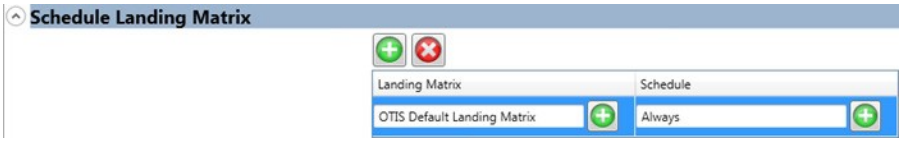
8 If required, expand **Landing Matrix** expander to map a Default Landing matrix.

a Click  to add a row.

b Click  in the Landing Matrix field to display the Object Selector.

c Select the OTIS Default Landing Matrix from the Object Selector and click **OK**.

9 If required, expand **Schedule Landing Matrix** expander to map a Schedule to a landing.



a Click  to add a row.

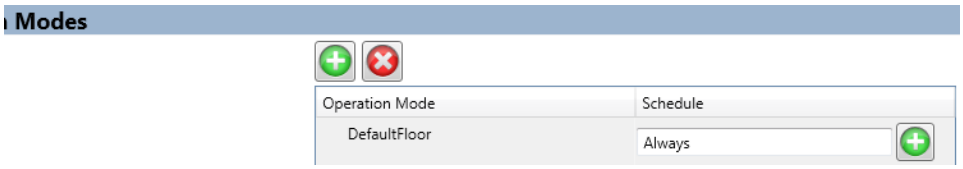
b Click  in the Landing Matrix field to display the Object Selector.

c Select the Default Landing Matrix from the Object Selector and click **OK**.

d Click  in the Schedule field to display the Object Selector.

e Select the Schedule from the Object Selector and click **OK**.

10 If required, expand **Operation Modes** expander to map a operation mode with the schedule:



a Click to add a row.

b Select the Operation mode from the drop down list.

c Click in the Schedule field to display the Object Selector.

d Select the Schedule from the Object Selector and click **OK**.

11 Expand **Pin Code Clearance** expander to map the clearances with the schedule.

a Click to add a row.

b Click in the **Clearance** field to display the Object Selector.

c Select the Clearances from the Object Selector and click **OK**.

d Click in the Schedule field to display the Object Selector.

e Select the Schedule from the Object Selector and click **OK**.

12 If required, expand **Status** expander to view the communication status.

13 Select **Save**.

- End -

Swiping Card at Inbuilt Reader of DEC to Grant or Deny Access

Follow the below workflow of card swipe at inbuilt reader of DEC to grant or deny access:

Note:
This workflow is not applicable when DEC is configured with iSTAR door. Do not configure Clearance - Schedule Mapping when iSTAR door is used for card reads.

1 Swipe the card at inbuilt reader of DEC.

2 Hex value (Card data or Pin data) received from DEC is validated against Card Formats configured under Card Format tab.

3 CHUID (Card holder Unique Identifier) is derived and Personnel is identified based on the matched card format.

4 Use the Clearance configured under Clearance tab of DEC to match if any of the Clearance configured is assigned to Personnel or not.

5 If one of the Clearance matches with Clearances configured in Personnel under Clearance tab, then the user is granted with the access.

Note:
Clearance configured under Clearance tab of DEC with Active schedule is used to grant access. Clearance with Inactive schedule cannot grant access.

Deriving Clearance Landing Matrix and Sending List of Authorized Floors to DEC when the card is swiped or PIN is entered at the Inbuilt Reader of DEC

After access is granted, the OTIS integration follows the below workflow to derive the Clearance Landing Matrix and send the list of floors to DEC:

Refer to the following table for the configuration or mapping of Clearances.

Table 1: Configuration of Clearances

SL.No	DEC (or) Personnel	Clearances	Schedule Status	Notes
1	DEC 1	Clearance 1	Active	Clearances-Schedule mapping under Clearances tab of DEC
	DEC 1	Clearance 2	Inactive	
2	Personnel 1	Clearance 1 Clearance 2 Clearance 3 Clearance 4		Clearances are mapped under Clearance tab of Personnel record in victor environment

Refer the following table for the configuration or mapping of Elevator Systems.

Table 2: Configuration of Elevator Systems

SL.No	Elevator Systems	Clearances	Clearance Landing Matrix (CLM)	Floors
1	Elevator System 1	Clearance 1	Clearance Landing Matrix 1	1, 2, and 3
	Elevator System 1	Clearance 2	Clearance Landing Matrix 2	4, 5, and 6
	Elevator System 1	Clearance 3	Clearance Landing Matrix 3	7, 8, and 9
	Note: Elevator System1 does not have Clearance 4 mapped with any Clearance Landing Matrix.			

Workflow:

1 When **Personnel1** swipes a card at **DEC1** associated with **Elevator System1**, then the Clearance associated under Clearances tab of DEC is used to grant access to Personnel.

- In this case **Clearance 1** is used to grant access. **Clearance 2** cannot grant access, as it has Inactive schedule.

2 After the access is granted, OTIS integration derives the list of all Clearances associated with Personnel.

- In this case the list includes **Clearance 1**, **Clearance 2**, **Clearance 3**, and **Clearance 4**.

3 OTIS integration will now derive the list of associated Clearance mapped with Active schedules under Clearance tab of DEC.

4 OTIS integration performs the comparison of results derived in Steps 2 and 3, and list of Clearances with Active schedule are shortlisted.

- In this case, only **Clearance 1** will be derived as it is mapped to Active schedule and **Clearance 2** will be ignored as it is mapped to Inactive schedule.

5 Any additional Clearances associated with Personnel and mapped with Clearance Landing Matrix will also be considered for Clearance Landing Matrix calculation.

- In this case, **Clearance 3** will be considered and **Clearance 4** will be ignored as it does not have any Clearance Landing Matrix configured in system associated with Personnel.

6 OTIS integration derives the list of associated Clearance Landing Matrices with the above Clearances.

- In this case, following two Landing Matrices are derived:
    - Clearance Landing Matrix 1
    - Clearance Landing Matrix 3
- **Clearance Landing Matrix 2** will not be considered as schedule associated with Clearance 2 is Inactive. Also **Clearance 4** will be ignored as it does not have any Clearance Landing Matrix associated with it.
- CLMs associated with Clearances with Active schedule configured under DEC and Personnel are merged together.
    - In this case Clearance Landing Matrix 1 and 3 are the merged CLMs.
    - As a result, floors associated with Clearance Landing Matrices 1 and 3 are dispatched to DEC, in this case floors 1, 2, 3, 7, 8, 9 are dispatched to DEC.

Deriving Clearance Landing Matrix and Sending List of Authorized Floors to DEC when the card is swiped or PIN is entered at the External Reader of DEC

Note: This workflow is applicable only when DEC is configured with iSTAR readers (Doors).

Use Case: Swiping the card or entering the pin at external reader associated with DEC to Grant or Deny Access and calculate the Clearance Landing Matrix.

After the access is granted, the OTIS integration follows the below workflow to derive the Clearance Landing Matrix and send the list of authorized floors to DEC:

Refer to the following table for the configuration or mapping of Clearances

Table 3: Configuration of Clearances

SL.No	DEC (or) Personnel	Clearances	Notes
1	DEC 1		Clearances-Schedule mapping under Clearances tab of DEC
2	Personnel 1	Clearance 1 Clearance 2 Clearance 3 Clearance 4	Clearances are mapped under Clearance tab of Personnel record in victor environment

Refer the following table for the configuration or mapping of Elevator Systems and Clearance Landing Matrix.

Table 4: Configuration of Elevator Systems and Clearance Landing Matrix

SL.No	Elevator Systems	Clearances	Clearance Landing Matrix (CLM)	Floors
1	Elevator System 1	Clearance 1	Clearance Landing Matrix 1	1, 2, and 3
	Elevator System 1	Clearance 2	Clearance Landing Matrix 2	4, 5, and 6
	Elevator System 1	Clearance 3	Clearance Landing Matrix 3	7, 8, and 9
	Note: Elevator System1 does not have Clearance 4 mapped with any Clearance Landing Matrix.			

Workflow:

1 After the access is granted (in this case by iSTAR reader), the OTIS integration derives the list of all Clearances associated with Personnel.

- In this case the list includes **Clearance 1**, **Clearance 2**, **Clearance 3**, and **Clearance 4**.

2 The OTIS integration derives the list of associated Clearance Landing Matrices with the above Clearances.

- In this case, following three Landing Matrices are derived:
  - Clearance Landing Matrix 1
  - Clearance Landing Matrix 2
  - Clearance Landing Matrix 3
- **Clearance 4** will be ignored as it does not have any Clearance Landing Matrix associated with it.

3 Clearance Landing Matrix 1, 2 and 3 will be merged together. As a result, the floors associated with Clearance Landing Matrices 1, 2 and 3 are dispatched to DEC.

- In this case floors 1, 2, 3,4, 5, 6, 7, 8, and 9 are dispatched to DEC.

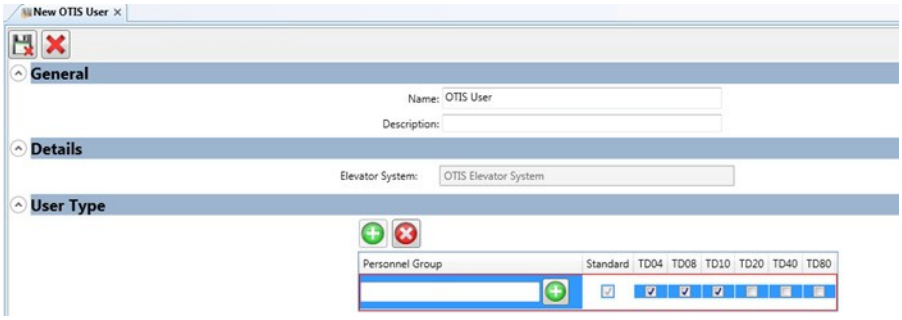
Note: Swiping the valid card at iSTAR reader and clearances with inactive Schedule-Door mapping are also considered while deriving the Clearance Landing Matrix.

Note: Attention- If user associates iSTAR door with DEC and also captures Card Format and Schedule-Clearance mapping on Card Format tab and Clearances tab respectively, then the list of Authorized floors generated (merged CLMs) may differ in case of card swipe at iSTAR reader (Door) mapped with DEC. It may also result in Denying of access, even though personnel have valid clearance to get Access Granted at iSTAR door. This is because, Schedules associated with the clearances under Clearances tab of DEC are not active. Schedule-Clearance mapping done under Clearances tab of DEC takes precedence while authorizing Personnel.

Adding OTIS User Type

The OTIS User Type is used to associate personnel group to a User type. OTIS allows a user to have combination of User Type. The different User Type are Standard, TD04, TD08, TD10, TD20, TD40, and TD80. Type Descriptor (TD) defines information pertaining to the credential holder. For example, standard, person with disability, VIP, vertigo susceptible.

Note:
1. Standard and ADA user cannot not be combined.
2. Per Elevator System, only one object can be created for User Type.



Procedure 3-11 Adding OTIS User Types

Step	Action

1 Click **Show All** from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS Elevator System** icon.

4 Right click **OTIS Elevator System** for which you need to add OTIS User Type.

5 Select **New OTIS User Type**.

6 Expand the **General** expander.

Property	Description
Name	Enter a unique name up to 100 characters long for the OTIS User Type.
Description	Enter a general description, up to 500 characters, to identify the OTIS User Type.

7 Expand the **Details** Expander.

Property	Description
Elevator System	(Read only) The name of the elevator system for which you need to add a OTIS User Type.

8 Expand the **User Type** Expander to select a pre-configured user.

a Click to add a row.

b Click in the Personnel Group field to display the Object Selector.

c Select the user type. You can select more than one user type. The following are the different User Types:

- Standard
- TD04
- TD08
- TD10
- TD20
- TD40

- TD80

9 Select **Save**.

- End -

Editing OTIS User Type

Procedure 3-12 Edit OTIS User Type

Step	Action

1 Click **Show All**  from left hand navigation to open Show a List of All Items pane.

2 Navigate to **OTIS** section.

3 Click on **OTIS User type** icon.

4 Right-click the OTIS User Type to be edited.

5 Select **Edit**.

6 Expand the **General** expander.

Property	Description
Name	You can modify the name of the OTIS User type.
Description	You can modify the description of the OTIS User type.

7 Expand the **Details** Expander.

Property	Description
Elevator System	(Read only) The name of the elevator system.

8 Expand the User Type Expander to select a pre-configured user.

- Click  to add a row.
- Click  in the Personnel Group field to display the Object Selector.
- Select the user type. You can select more than one user type. The following are the different User Types:
  - Standard
  - TD04
  - TD08
  - TD10
  - TD20
  - TD40
  - TD80

9 Select **Save**.

- End -

Configuring OTIS Actions

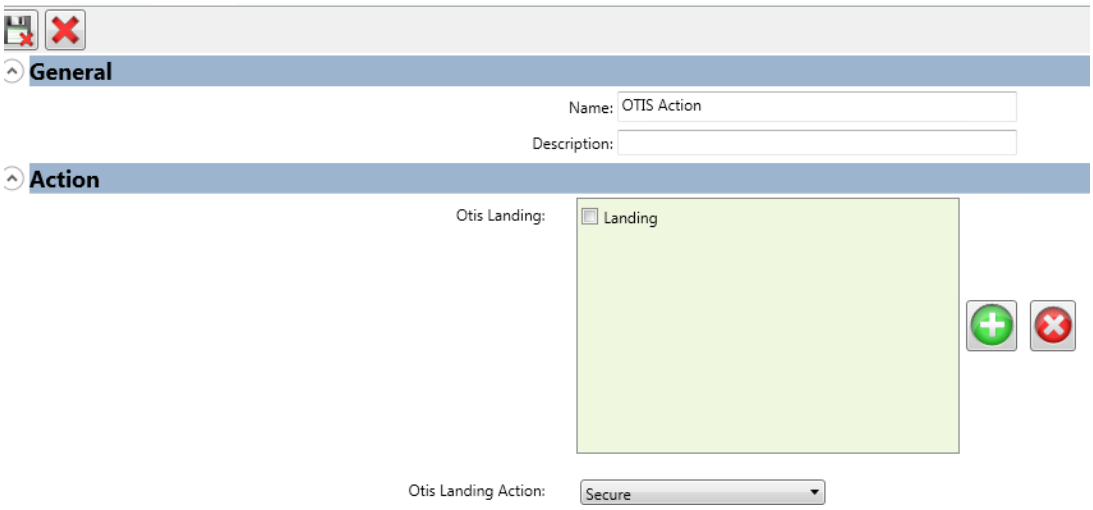
You can schedule actions for the OTIS.

The following are the available actions:

1 Secure

2 Unsecure

3 Normal



Procedure 3-13 Configure OTIS Action

Step	Action
1	Click **New** from left hand navigation to open Create a New Item pane.
2	Navigate to **OTIS** section.
3	Click on **OTIS Action** icon.
4	Enter **Name** (Mandatory) and **Description** (Optional) for the OTIS Action.
5	Expand the Action expander.
6	In the **OTIS Landing** field, select to add landing. Object Selector displays.
7	Select OTIS Landing and click **OK**.
8	Repeat as required.
9	Select desired action from the OTIS **Landing Action** drop-down list.
10	If you want to remove the OTIS Landing, select the Landing matrix check box to be removed and click .
11	Select **Save and Close**.

- End -

Configuring OTIS Alerts

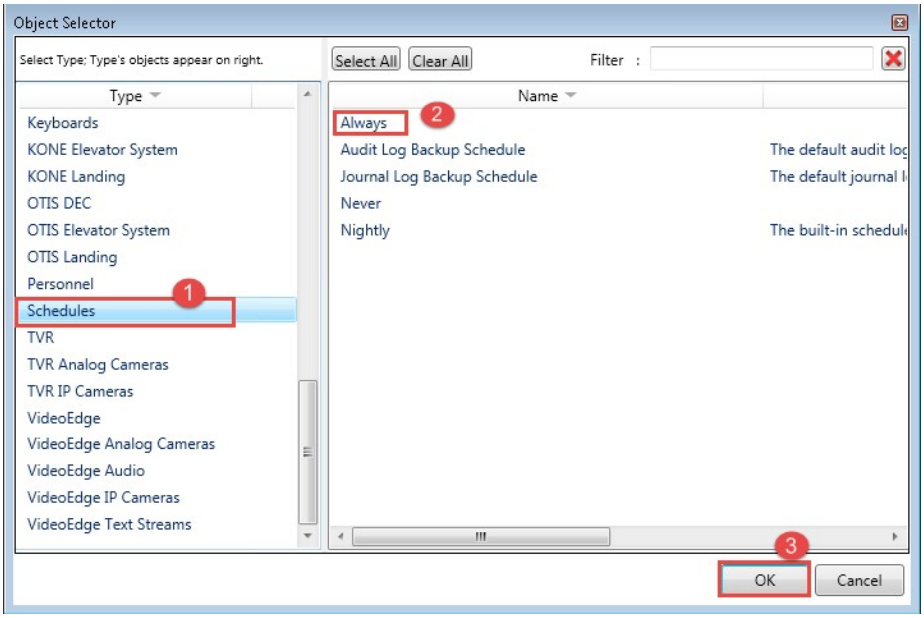
The Event Setup editor can be used to configure alerts action for OTIS Elevator System, OTIS Landing.

Refer to Alert Types for a full list of victor support alert types.

Procedure 3-14 Configuring Schedule Action

Step	Action
1	Select **Event/Schedule Setup** from the **Build** tab. The **Event/Schedule Setup** page opens.
2	Double click the Device node and use the object selector and select Type as **Schedules**.

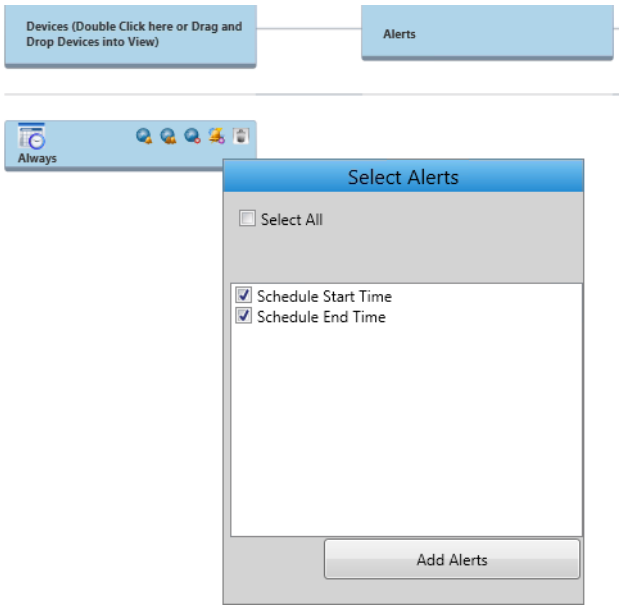
3	Select the required schedule from the list. You should have created the schedule to select it. Refer to victor User manual for more information on Creating a Schedule.



4	Selected Schedule is displayed in the Device node.

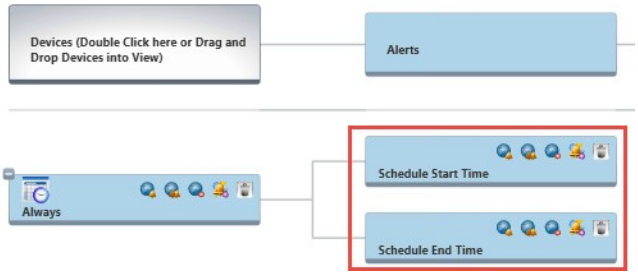
5 Select in device node to add alerts.

6 Select **Schedule Start Time** and **Schedule End Time** check box from the **Select Alert** window.



7 Click **Add Alerts**.

The Schedule Start Time and Schedule End Time is displayed in the Alerts node.



8 Select in the Alerts node to add actions. For example, in the Schedule Start Time alerts.

9 Select OTIS Action from the object selector. You should have already created OTIS Action to select it. See "Configuring OTIS Actions".

10 Repeat as required.

11 Click **Save and Close**.

- End -

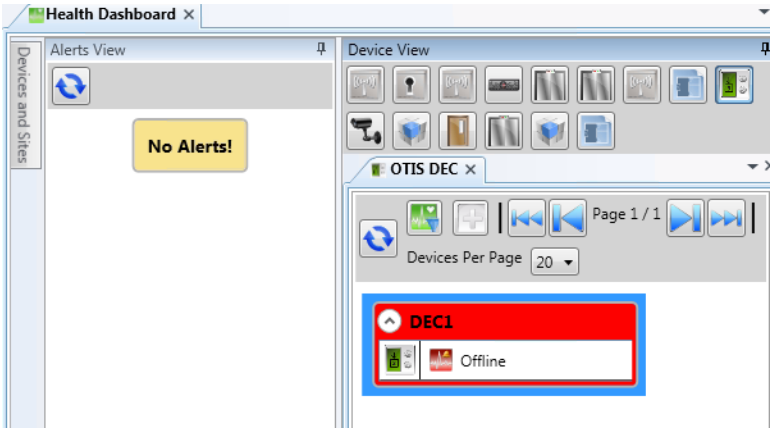
Procedure 3-15 Configuring Schedule Action

Step	Action
1	Click **Show All**  from left hand navigation to open Show a List of All Items pane.
2	Navigate to **OTIS** section.
3	Click on **OTIS Action** icon.
4	Right click on OTIS Action and select **Edit**.
5	Click **General**. Update Name, Description of OTIS Action if Any.
6	Click **Action** to add or remove Landings.
7	Click **OTIS Landing Action** drop-down to change the action.
8	Click **Save and Close**.

- End -

Health Dashboard

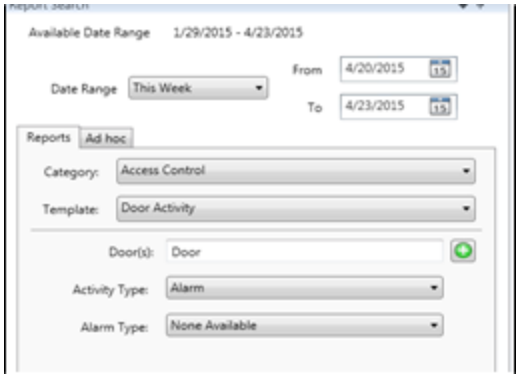
Health status of all OTIS objects is annunciated in victor's Health Dashboard as follows:



Refer to Health Status for a full list of supported health statuses.

Reports

victor journal type **Journal Intrusion Message** can be used to search for OTIS related report entries as detailed below:



For more information on reporting within victor, refer to the *victor Unified Client Administration and Configuration Guide*.

Manual Actions

The following manual actions can be performed for the OTIS Landing:

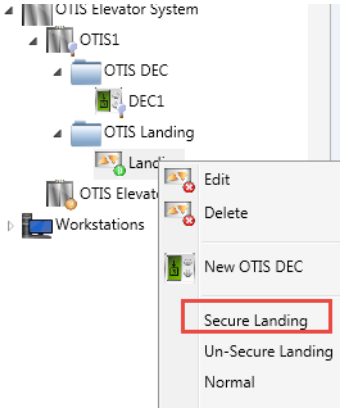
- Secure a Landing
- Unsecure a Landing
- Normal

Secure a Landing

This action secures the Landing. There is no access to the Landing during the date and time value set except the personnels in the Exemption Group list. When a Landing is secured the associated floor of the Default Landing Matrix gets locked:

1 Right-click **Landing**.

2 Select **Secure Landing**.



UnSecure a Landing

This action un-secures the Landing. Everyone will have access to the Landing during the date and time value set. When a Landing is unsecured, the Default Landing Matrix is also un-secured.

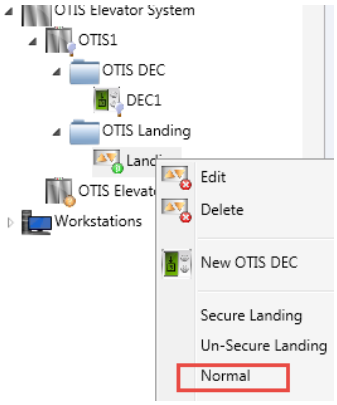
1 Right-click **Landing**.

2 Select **UnSecure Landing**.

Normal Landing

1 Right-click **Landing**.

2 Select **Normal**.


OTIS Elevator System
OTIS1
OTIS DEC
DEC1
OTIS Landing
Edit
Delete
New OTIS DEC
Secure Landing
Un-Secure Landing
Normal
Workstations

Appendix A: Alert Types

The Event Configuration editor is be used to configure alerts for OTIS Elevator system. The following tables detail the supported Alert Types supported for OTIS Elevator system within victor.

Table 5: Alert Types for OTIS Elevator System

Alert Type	Value
Communication Status	Online Offline Unknown

Table 6: Alert Types for OTIS Landing

Alert Type	Value
Override Status	Normal Secure Unsecure

Appendix B: Health Status

Supported Health status annunciations for OTIS object type are as follows

Table 7: Health status for OTIS Elevator System

OTIS Elevator System Status	Health Status
Online	Normal
Offline	Device Alert
Unknown	Unknown

Table 8: Health status for OTIS DEC

OTIS DEC Status	Health Status
Online	Normal
Offline	Device Alert
Unknown	Unknown