Navigation (Navigation)

Overview

The **Navigation** module is used to configure and manage maps, products, kiosks, facilities, tracks, shapes, and connectors required for navigation.

It allows existing products and kiosks to be placed on a map and provides the required navigation structure between different locations.

The Navigation module contains the following sections:

- **Map - Used for add particular map.**
- **Product - Used for mapping products in map.**
- **Kiosk - Used for mapping kiosk in map.**
- **Connector - Used to connect by using Escalators, Pillars etc.**
- **Facility - Used for add facilites like washroom etc**
- **Track - used to add track from one place to another.**
- **Shape - Used to Add Shape for 3d Navigation.**
- **Config - Used for Global Settings**

Product

The **Product** section is used to map existing products onto the selected map.

Products must already be created in the system before they can be mapped.

Purpose

Product Mapping is used to display products at their respective locations on the map.

For example:

```
Existing Product
      ↓
Select Map
```

```
      ↓
Select Shape / Map Point
      ↓
Submit
      ↓
Product displayed on Map
```

Navigation Path

`Modules -> Navigation → Product`

Product Mapping Process:

1. Open the Navigation module.
2. Select the Product tab.
3. Select the required product from the product list.
4. Select the required Map.
5. Select the required Shape, if applicable.
6. Select or define the required Map Point.
7. Verify the mapping details.
8. Click Submit.

```
Note: Product Mapping does not create a new product. It maps an already-created product to a location on the selected map.
```

Kiosk

The Kiosk section works similarly to Product Mapping.

The difference is that instead of mapping a product, an existing Kiosk is mapped to the selected map.

Purpose

Kiosk Mapping is used to display the kiosk at its appropriate location on the navigation map.

Navigation Path

```
Navigation → Kiosk
```

Kiosk Mapping Process

1. Open the Navigation module.
2. Select the Kiosk tab.
3. Select the required kiosk.
4. Select the required Map.
5. Select the required Map Point.
6. Select the appropriate Shape, if applicable.
7. Verify the mapping details.
8. Save/Update the map

The kiosk will then be associated with the selected location on the map.

Connector

The Connector section is used to connect different navigation locations and entities.

Connectors can be used when navigation needs to move from one location to another through a specific facility or route.

Navigation Path

```
Navigation → Connector
```

Available Connector Types The Connector section can contain connector types such as:

- Pillar
- Elevator (Lift)
- Escalator
- Ramp
- Staircase
- Emergency Staircase
- Gate

Purpose

Connectors can represent real-world connections between different locations.

For example:

```
Location A
    ↓
Elevator
    ↓
```

```
Location B
```

Facility

The Facility section is used to create and manage facilities that are available on the map.

Facilities can represent different physical facilities or areas that users may need to navigate to.

The Facility configuration is performed in two stages:

- Add Facility Type
- Add Facility

Navigation Path

```
Navigation → Facility
```

Add Facility Type

Before creating a facility, the required Facility Type must be created.

Process:

1. Open the Facility
2. Click Add Facility Type.
3. Enter the required Type.
4. Enable Published if the facility type should be published.
5. Upload the Facility Logo, if required.

Example

```
Type: Stairs
Published: Enabled
Facility Logo: Uploaded
```

After submission, the facility type will be available for creating facilities.

Add Facility

Once the Facility Type has been created, a facility can be added.

Process

- Open the Facility tab.
- Click Add Facility.
- Select the required Type.
- Enter the Name of the facility.
- Select the required Map.
- Define the Map Point.
- Select the required Shape, if applicable.
- Enable Published if required.
- Click Submit.

Facility Structure

```
Facility Type
      ↓
Facility
      ↓
Map
      ↓
Map Point / Shape
```

Example

```
Type: Stairs
Name: Stairs
Map: Akshit-Map 1
Map Point: X,Y
Shape: Selected Shape
```

```
Important:
The Facility Type should be created before adding a Facility.
```

Track Configuration

The Track section is used to create navigation paths between two points on a map. It is an important part of configuring navigation in VirtuKiosk.

Navigation Path:

```
Modules → Navigation → Track
```

Add Points Before Creating a Track

Before creating a track, you must first add the required points to the map.

Navigate to the Map Layout section, where the following options are available:

```
Add Point: Adds a new point to the map.
Move Point: Moves an existing point to another location.
Delete Point: Removes an existing point from the map.
Add / Delete Track: Allows you to create or delete a track between points.
```

Steps to Add Points

Go to the Track section in navigation modules. Select Add Point. Click on the required locations on the map to create points. Repeat the process until all required points have been added. Verify that the points are positioned correctly.

```
Important: Add the required points before proceeding with track creation.
```

Create a Track

After adding the required points, create a track by defining its Start Point and End Point.

Steps to Create a Track

Navigate to the Map Layout section. Select Add / Delete Track. Select the required Start Point. Select a different End Point. Verify the selected points. Click Submit to save the track. 9.3 Track Information

The Track section displays the following information:

Field Description Map Name The name of the map associated with the track. Start Point The coordinates of the point where the track begins. End Point The coordinates of the point where the track ends. 9.4 Track Validation

The Start Point and End Point must be different. The system does not allow a track to be submitted when both points have the same coordinates.

If both points are identical, the following validation message is displayed:

Start and End Point must be different Validation Checklist Ensure that the Start Point is selected correctly. Ensure that the End Point is different from the Start Point. Verify that both points belong to the intended map. Confirm that the track is saved successfully. 9.5 Verify the Track

After creating the track, verify the following:

The track is associated with the correct map. The Start Point and End Point are correct. The selected points are different. The track configuration is saved successfully. The navigation path behaves as expected.

Important: Always add the required points before creating a track. Correctly defining the Start Point and End Point helps ensure that the navigation path is configured properly.

Steps to Create a Track

1. Navigate to the **Map Layout** section.
2. Select **Add / Delete Track**.
3. Select the required **Start Point**.
4. Select a different **End Point**.
5. Verify the selected points.
6. Click **Submit** to save the track.

9.3 Track Information

The **Track** section displays the following information:

Field	Description
Map Name	The name of the map associated with the track.
Start Point	The coordinates of the point where the track begins.
End Point	The coordinates of the point where the track ends.

Track Validation

The **Start Point** and **End Point** must be different. The system does not allow a track to be submitted when both points have the same coordinates.

If both points are identical, the following validation message is displayed:

```
Start and End Point must be different
```

Validation Checklist

- Ensure that the **Start Point** is selected correctly.
- Ensure that the **End Point** is different from the Start Point.
- Verify that both points belong to the intended map.
- Confirm that the track is saved successfully.

Verify the Track

After creating the track, verify the following:

- The track is associated with the correct map.
- The Start Point and End Point are correct.
- The selected points are different.
- The track configuration is saved successfully.
- The navigation path behaves as expected.

Important: Always add the required points before creating a track. Correctly defining the Start Point and End Point helps ensure that the navigation path is configured properly.

10. Shape Configuration

Navigate to:

`Modules → Navigation → Shape`

Shapes are used to define specific areas or navigation regions on the map.

They are especially important for **3D Navigation** because a shape can be configured with 3D-related properties such as:

- Logo
- 3D Pin
- GLB Model
- 3D Pin Rotation
- 3D Pin Scale
- Active Color
- Inactive Color
- Active Height
- Inactive Height

---

11. Creating a Shape

Navigate to:

`Modules → Navigation → Shape`

Use the map layout drawing functionality.

Select:

`Map Layout → Draw`

Add the required points around the area that needs to be converted into a shape.

11.1 Add Shape Points

Click on the map to add points.

For example:

- Point 1
- Point 2
- Point 3
- Point 4

The points define the boundary of the shape.

A minimum of **3 points** should be used to create a proper closed shape.

11.2 Close Shape

After adding the required points, select:

`Close Shape`

This completes the shape boundary.

> **Important: Draw** and **Close Shape** should not be treated as simultaneous actions. Complete the required drawing first and then close the shape.

11.3 Undo

If an incorrect point is added, use:

`Undo`

to remove the most recent drawing action.

11.4 Duplicate Shape

Existing shapes can be duplicated when a similar shape is required.

Select:

`Duplicate`

Then modify the duplicated shape as required.

This can save time when multiple shapes have similar configurations.

---

12. Shape Configuration for 3D Navigation

After creating a shape, configure its 3D properties.

The shape can contain the following configurations:

- Title
- Logo
- Pin 3D
- 3D Pin Rotation
- 3D Pin Scale
- Active Color
- Inactive Color
- Active Height
- Inactive Height

12.1 Title

Enter a meaningful name for the shape.

Examples:

- ATM Area
- Gate Area
- Entrance
- Information Desk

12.2 Logo

Select the required logo image.

The logo should first be uploaded through:

`Modules → Files`

After uploading the file, it can be selected in the Shape configuration.

12.3 Pin 3D

The **Pin 3D** option is used for the 3D representation of the shape or navigation point.

Select the appropriate 3D asset.

12.4 3D Pin Rotation

Configure the rotation of the 3D pin according to the required direction.

Examples:

- Rotation: 0°
- Rotation: 90°
- Rotation: 180°
- Rotation: 270°

12.5 3D Pin Scale

Configure the size of the 3D pin.

The scale should be selected according to the map and visual requirements.

---

13. Active and Inactive Shape Configuration

3D Navigation provides separate configurations for active and inactive shapes.

Active Shape

The active configuration controls the appearance of a selected or active navigation area.

Possible settings include:

- Active Color
- Active Height

Inactive Shape

The inactive configuration controls the appearance of shapes that are not currently selected.

Possible settings include:

- Inactive Color
- Inactive Height

Example Configuration

- Active Color: Required Color
- Active Height: Required Height
- Inactive Color: Required Color
- Inactive Height: Required Height

---

14. Bulk Configuration

The Shape section provides **Bulk Configuration**.

The available options include:

- Select One
- Custom
- Global

These options determine where the configuration changes will be applied.

14.1 Custom Configuration

Select:

`Bulk Configuration → Custom`

The **Custom** configuration applies the selected changes **only to the current map**.

Example

Suppose there are three maps:

- Map 1
- Map 2
- Map 3

If Custom configuration is applied to Map 1, the changes will affect **Map 1 only**.

They will not automatically affect Map 2 or Map 3.

Custom Configuration Flow

1. Select the map.
2. Open Bulk Configuration.
3. Select Custom.
4. Apply the required changes.
5. Verify that the changes apply to the current map only.

---

15. Global Configuration

Select:

`Bulk Configuration → Global`

The **Global** configuration applies the selected changes across **all available maps**.

Example

Suppose the system contains four maps:

- Map 1

- Map 2
- Map 3
- Map 4

If Global configuration is applied, the changes will be applied across all four maps.

Global Configuration Flow

1. Open Bulk Configuration.
2. Select Global.
3. Apply the required changes.
4. Verify that the changes apply to all maps.

> **Important:** Use **Global** carefully because the configuration can affect multiple maps.

---

16. Custom vs. Global Configuration

Configuration	Scope
Custom	Applies changes to the selected/current map only
Global	Applies changes to all maps

Example

Suppose you have three maps:

- Map A
- Map B
- Map C

If you change the shape color using **Custom**, only the selected map will be affected.

If you use **Global**, the same configuration will be applied across Map A, Map B, and Map C.

---

17. Important Shape Configuration Considerations

When configuring multiple shapes, verify whether the required change is:

- Specific to one map
- Required across all maps

Use **Custom** when the change is required only for a particular map.

Use **Global** when the same configuration should be applied to all maps.

This helps avoid unnecessarily modifying other maps.

---

18. Map Layout

The Map Layout provides the main working area for configuring navigation data.

The available controls include:

- Add Point
- Move Point
- Delete Point
- Add / Delete Track

The Map Layout is used for:

- Adding map points
- Moving points
- Deleting points
- Creating tracks
- Defining navigation paths
- Creating shape boundaries

---

19. Map Layout Options

Add Point

Used to create a new point on the map.

`Add Point → Click on Map`

Move Point

Used to change the position of an existing map point.

`Move Point → Select Point → Move to Required Location`

Delete Point

Used to remove an existing map point.

`Delete Point → Select Point`

Add / Delete Track

Used to create or remove tracks between map points.

`Add / Delete Track`

This functionality is especially important for navigation routes.

Revision #7
Created 2026-07-13 04:29:05 UTC by Akshit Jain
Updated 2026-10-09 09:48:20 UTC by Akshit Jain