



Plan Manager
User Guide
10.3

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Document information

Document title: Plan Manager User Guide 10.3

Document number: EN.701.004-V10.3.B(1)

Document update date: August 14, 2014

You can send your comments, corrections, and suggestions about this guide to documentation@genetec.com.

About this guide

This guide provides the information you need to set up and configure Plan Manager to work in your Security Center system. It explains the basic settings you must configure before Plan Manager can be used, as well as other settings you'll need to change such as adding privileges to your users. Last-minute updates can be found in the *Plan Manager Release Notes*.

This guide is written for both operators who need to use Plan Manager Client in Security Desk and administrators who need to configure and manage Plan Manager Server in Config Tool. You should be familiar with the following concepts and systems:

- Administrator
 - Security Center administration
 - Security Center Config Tool
- Operator
 - Security Desk
 - Alarm and event monitoring

Notes and notices

This section explains how the following notes and notices are used in this guide:

- **Tip.** Suggests how to apply the information in a topic or step.
- **Note.** Explains a special case, or expands on an important point.
- **Important.** Points out critical information concerning a topic or step.
- **Caution.** Indicates that an action or step can cause loss of data, security problems, or performance issues.
- **Warning.** Indicates that an action or step can result in physical harm, or cause damage to hardware.

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Getting started

This section includes the following topics:

- ["What is Plan Manager?"](#) on page 2
- ["Opening the Plan Manager workspace"](#) on page 3
- ["Plan Manager workspace"](#) on page 4
- ["Plan Manager 10.3 features"](#) on page 10

What is Plan Manager?

Plan Manager is an advanced map-based interface built into Security Center. It allows users to view, control, and monitor the Security Center system from an interactive map within Security Desk.

With Plan Manager, you can:

- Monitor the security equipment (cameras, doors, zones, intrusion panels, input pins, LPR units) managed by Security Center in real time.
- View the physical location of the security equipment as objects on maps.
- Monitor the status of the security equipment on maps (online/offline, open/closed, locked/unlocked, armed/disarmed, active/inactive, and so on) through change of colors, change of icons, and blinking effect.
- View security equipment on local and remote Security Desk monitors.
- Customize how security equipment is represented on maps.
- Locate and mark points of interest (fire exits, first aid kits, and so on) on maps.
- Annotate maps with text comments for private or public use.
- View thumbnail video when you point to the camera.
- View license plate reads and hits from fixed LPR cameras.
- Manually move PTZ cameras by dragging their field of view (*FOV*) on maps.
- Point all PTZ cameras to a location on the map by clicking that location and ignoring the cameras with obstructed *FOV*'s (for example, wall obstructions).
- Lock and unlock doors directly on maps.
- Arm and disarm zones directly on maps.
- Identify the zone sensor that triggered the alarm.
- Arm and disarm intrusion detection areas directly on maps.
- Control the behavior of output pins directly on maps.
- View and respond to Security Center alarms directly on maps.
- Automatically center maps on the equipment that triggered the alarm.
- Use touch-screen devices to interact with the maps.
- Move around and zoom in and out on maps.
- Quickly find equipment on maps.
- Logically organize your maps for ease of navigation.
- Easily navigate through different maps.
- Control the map navigation on remote Security Desk monitors.
- Connect to online map providers (GIS) using the WMS protocol.

For a detailed list of Plan Manager features, see "[Plan Manager 10.3 features](#)" on page 10.


Opening the Plan Manager workspace

To monitor and manage your Security Center equipment with Plan Manager, you must load Plan Manager Client in a Security Desk tile.

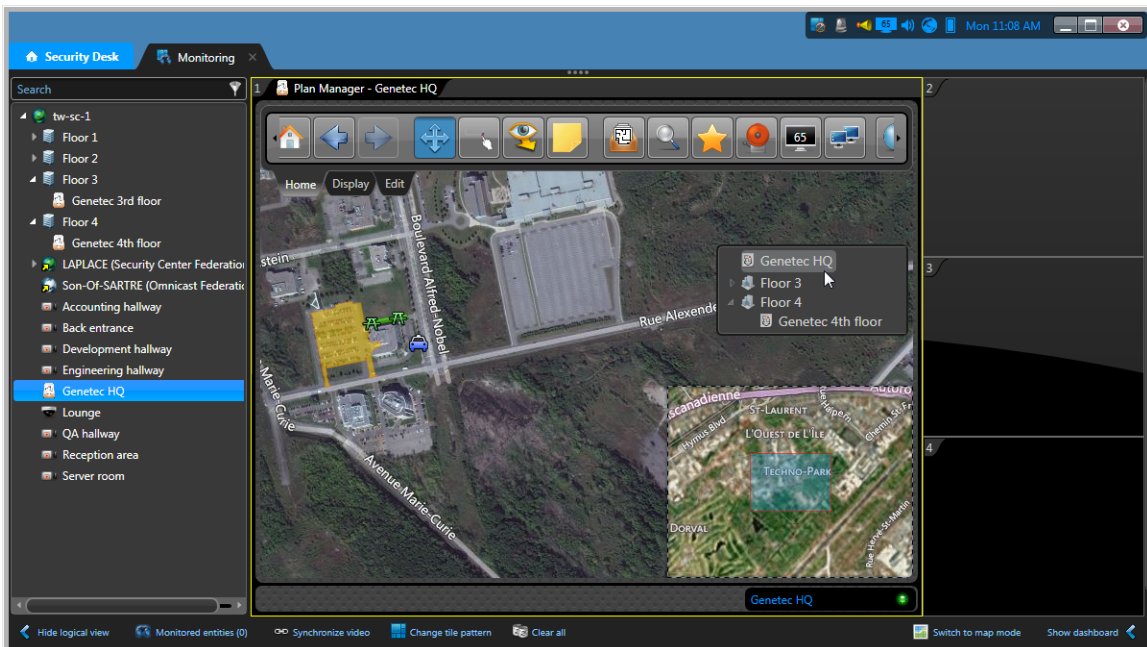
What you should know

You can only load Plan Manager Client once in your Security Desk application. The tile used to display the Plan Manager workspace is called the *Plan Manager tile*. There can only be one Plan Manager tile per Security Desk task.

To open the Plan Manager workspace:

- 1 Log on to Security Center with Security Desk and open a *Monitoring* task.
- 2 From the *Logical view*, double-click a Plan Manager map (), subsequently called *map*.
Alternatively, you can also drag the map to a tile of your choice.

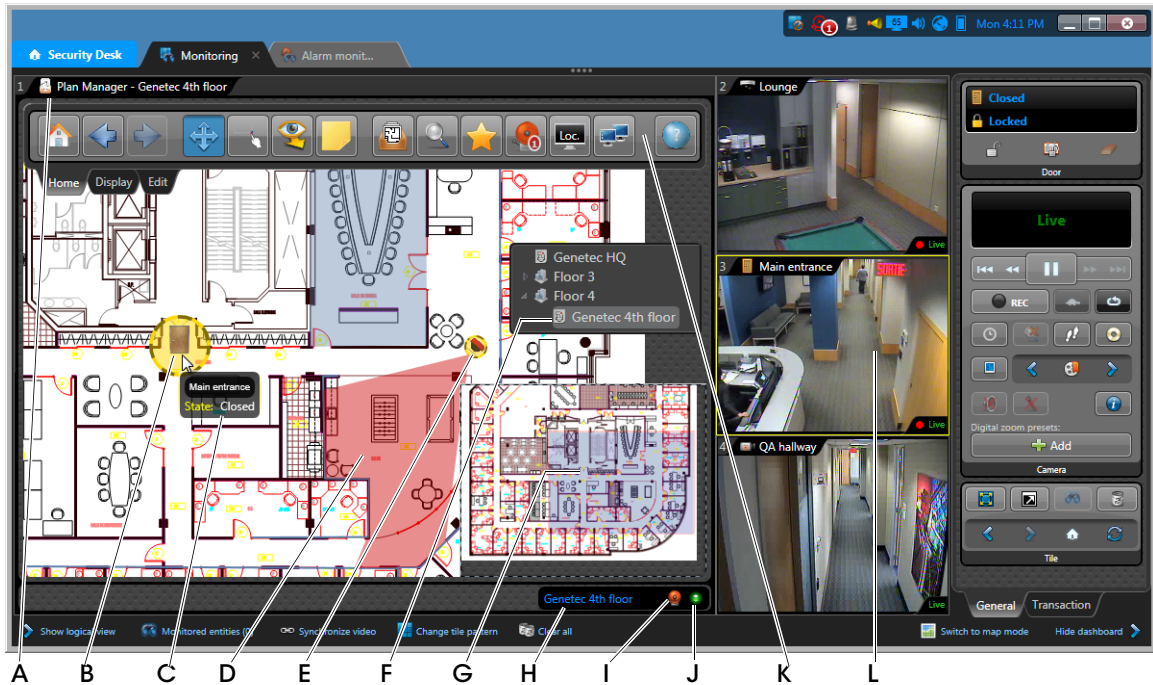
The Plan Manager workspace appears in the first empty tile in your canvas. Security Desk displays the *default view* of the selected map. A *map view* is a defined display position and zoom level for a given map.



NOTE Subsequently, if you try to display a different map in another tile within the same task, it will always display it in the existing Plan Manager tile. If you have other Plan Manager tiles in different tasks, they all display the same map view.

Plan Manager workspace

The Plan Manager workspace displays inside a single Security Desk tile called the *Plan Manager tile*. From the Plan Manager tile, you can navigate through the maps and floor plans representing the physical locations of the security equipment you want to monitor and control.

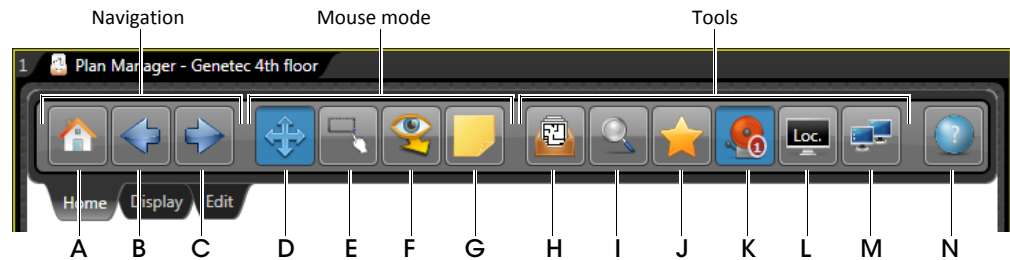


- | | | |
|----------|----------------------------|--|
| A | Plan Manager tile | This tile is your Plan Manager workspace. |
| B | Map object | An interactive icon that represents a Security Center entity such as a camera or a door. Standard Security Center icons are used by default. The position of the map object on the map corresponds to its physical location. The map object displays the status of the entity (online, offline, and so on). When the linked entity is displayed in a tile, the map object is highlighted with a circle on the map. See L . |
| C | Additional info | Point to a map object to see additional information such as the entity name and its current state (for example, if the door is locked or unlocked). Point to a camera object to view a video thumbnail. Double-click a map object to view the linked Security Center entity in an empty tile. See L . |
| D | Field of view (FOV) | The cone attached to a camera represents the FOV. Depending on the PTZ camera features, you can view the FOV moving in real time on the map as users move the PTZ. You can also control the PTZ directly on the map by dragging the FOV to where you want the camera to point; the FOV follows the shape of the walls. |
| E | Blinking red icon | Indicates a camera or a door is associated to an active alarm. Right-click to access the alarm response commands in a context menu. See also I . |

F	Quick map selector	Click on a map button to switch to the corresponding map. You can show or hide the quick map selector. See " Display ribbon " on page 7.
G	Mini-map	Shows the section of the larger map you are viewing. Drag the blue rectangle to view a different area of the map. You can show or hide the mini-map. See " Display ribbon " on page 7.
H	Current map	Name of the current map.
I	Alarm notification icon	Appears in the tile footer when there is an active alarm. Click the alarm icon to show the list of current alarms and their linked map objects. See " Viewing alarms in Plan Manager " on page 40.
J	Connection status LED	Indicates the Plan Manager Client connection status to Plan Manager Server. Green means you are connected, red means you are not connected, and grey means you are connecting.
K	Ribbon	Point to the ribbon or the left panel to view them at 100% opacity. The ribbon includes three sets of commands: <ul style="list-style-type: none">• "Home ribbon" on page 6• "Display ribbon" on page 7• "Edit ribbon" on page 9
L	Linked entity	Display the Security Center entity linked to any map object in an empty tile by double-clicking or dragging the map object icon to a tile. Map objects displayed in a local tile are circled and highlighted on the map. See B .

Home ribbon

The *Home ribbon* contains the most commonly used Plan Manager commands.

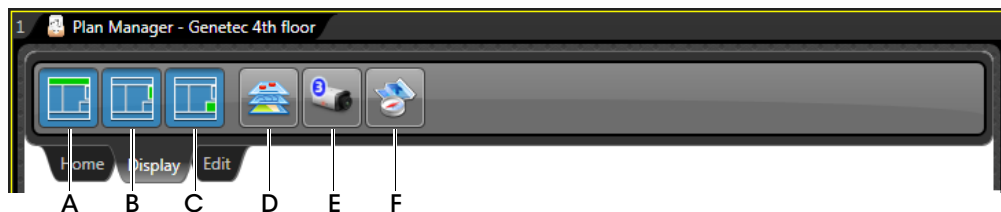


A	Go to home	Switches to your default map display. To set the current map view as your home location, right-click on the map and select <i>Set as home location</i> .
B	Back	Moves to the map you previously viewed.
C	Forward	Moves to the next previously viewed map.
D	Pan mode	Switches the mouse to <i>Pan mode</i> . This is your default map interaction mode. You must be in this mode to interact with the map objects (cameras, doors, and so on) on the map. See " Ways to navigate through maps " on page 19.
E	Lasso mode	Switches the mouse to <i>Lasso mode</i> . This mode enables you to select a group of objects on the map by drawing a rectangle around them. Two sub-modes are available: <ul style="list-style-type: none"> Left-click and drag. Draws a rectangle around the map objects you want displayed in the empty tiles of the canvas. If there are not enough empty tiles, extra objects do not display. Right-click and drag. Draws a rectangle around the map objects to list their common action commands in the left panel instead of displaying them on the canvas. Clicking an action command applies the action to all selected objects.
F	Smart mode	Switches the mouse to <i>Smart mode</i> . This mode enables you to click a location on the map to display, on the <i>target monitor</i> , all cameras that can see that location. All selected PTZ cameras that support <i>position feedback</i> point to the clicked location. This feature takes into account the objects that can block the camera FOVs. See " Add a wall " on page 9.
G	Note mode	Switches the mouse to <i>Note mode</i> . This mode enables you to add a note to the location on the map where you click. A note can be private (only visible to you) or public (visible to all users).
H	Map selector	Shows or hides the <i>map selector</i> (left panel). Same functionality as the <i>quick map selector</i> . See " Plan Manager workspace " on page 4.
I	Search	Shows or hides the <i>search tool</i> (left panel).
J	Favorites	Shows or hides the list of your favorite map views (left panel).

K	Alarms	Shows or hides the list of active alarms and their associated map objects (left panel). If there are active alarms displayed in Plan Manager, the alarm count appears on top of the button. See " Viewing alarms in Plan Manager " on page 40.
L	Target monitor	Shows or hides the list of Security Desk monitors that you can select as your <i>target monitor</i> (left panel). Your target monitor is where your map objects display when you double-click on them. By default, your local monitor ("Loc") is configured as your target monitor. You can switch target monitors to control all the monitors making up a video wall. See " Viewing map objects on remote monitors " on page 32.
M	Remote	Shows or hides the list of remote <i>Plan Manager tiles</i> (left panel). It enables you to select a remote Plan Manager tile and to control the map it displays.
N	About	Displays the Plan Manager version and build number.

Display ribbon

Using the *Display ribbon*, you can configure the parts of the UI that you want to show or hide.



A	Show or hide ribbon	When the ribbon is hidden, point to the top area of the tile to make it appear.
B	Show or hide quick map selector	The <i>quick map selector</i> shows your map hierarchy as buttons. When the quick map selector is hidden, use the map selector instead. See " Home ribbon " on page 6.
C	Show or hide mini-map	The mini-map shows which section of a larger map you are viewing. When the <i>mini-map</i> is hidden, drag the map to pan. See also " Plan Manager workspace " on page 4. The mini-map is only shown for zoom level 3 and above.
D	Object selection	Enables you to show or hide map objects according to their type. See " Showing or hiding objects on maps " on page 25.
E	Cluster configuration	Enables you to configure which map object types are clustered during the zoom out. When you zoom out, a single icon displays multiple map objects of the same type if they are located close to each other. The actual number of objects in the cluster is shown at all times.
F	Plan Manager options	Shows or hides the Plan Manager options in the left panel. See " Plan Manager options " on page 8.

Plan Manager options

From Plan Manager Client you can configure the following display options:

- **Automatically center on alarms.** Select this option if you want Plan Manager to automatically navigate to the map that shows the map object attached to the active alarm, and center on it.
- **Panel transparency.** Sets the panel transparency for when the mouse cursor is not directly on a panel.
- **Activate map cache.** Select this option for Plan Manager to use cache memory to speed up navigation between maps.
- **Remote Plan Manager.** Specifies how the current map view will display on the remote Plan Manager tile.
 - *Send bounding box.* Displays the same area of the current map view on the remote Plan Manager tile by adjusting the zoom level to fit the size of the tile.
 - *Send same zoom factor.* Displays the current map view on the remote Plan Manager tile by using the same zoom level.
- **Auto layout.** When your canvas is full, this option enables you to automatically adjust the screen layout of your target monitor while you are issuing commands to display entities from Plan Manager.
 - *Disabled.* Does not change the layout. When the canvas is full, the new entities will replace the old ones.
 - *Auto adapt.* Automatically switches to a tile pattern that has enough empty tiles to display all the entities (up to a configurable maximum).
 - *Cycle.* Automatically creates new Monitoring tasks with a pre-configured tile pattern and cycles through your tasks.
- **Area behavior.** Default action when you double-click an area on the map.
 - *Display.* Display the area in a tile.
 - *Navigate.* Navigate to the map view linked to the area.
 - *Display and navigate.* Display the area in a tile and navigate to the map view linked to the area.

Edit ribbon

Selecting the *Edit ribbon* switches the Plan Manager Client to *Edit mode* where you can configure map objects on your maps. When in Edit mode, the Plan Manager workspace is highlighted with a red border.



A	Add a map link	Map links are colored polygons on the map that you can click to jump to different map views. See "Adding map links to your maps" on page 117.
B	Add a hotspot	Hot spots are used to mark locations on the map that require special attention or close monitoring. See "Adding hotspots to your maps" on page 107.
C	Add an I/O object	I/O objects are used to monitor the state of input pins and control the behavior of output relays, associated to Security Center entities such as cameras, doors, zones, and so on. See "Adding I/O objects to your maps" on page 125.
D	Add a wall	Walls are objects that obstruct the FOVs of cameras. A wall can represent a dividing wall on a floor plan or a building on a street map. See "Adding walls to your maps" on page 112.
E	Add a point of interest	Points of interest (POI) are simple map objects that can be added to any type of map to mark the important locations, such as fire exits, first aid kits, and so on. Unlike KML objects, they do not require any scripting language and are not restricted to georeferenced maps. See "Adding points of interest to your maps" on page 132.
F	Add a custom object	This button appears only if you have custom objects installed on your system. Right-click the button to select the type of custom object you want to create. Contact <i>Genetec Custom Solutions</i> for the development of custom objects.
G	Lasso mode	Switches the mouse to <i>Lasso mode</i> . This mode enables you to select multiple objects and edit them at the same time. See "Editing multiple map objects simultaneously" on page 133.
H	Undo changes	Undoes your changes.
I	Save changes	Saves your changes.
J	Delete map object	Deletes the selected map object.

Related topics:

- ["Map object configuration"](#) on page 83

Plan Manager 10.3 features

Plan Manager is offered in three different configurations: *Plan Manager Basic* (BAS), *Plan Manager Standard* (STD), and *Plan Manager Advanced* (ADV). Each configuration requires a different Security Center license option. The following table describes the feature set available with each license option.

Feature	Description	BAS	STD	ADV
Product characteristics				
Advanced mapping interface for Security Center	Plan Manager Server can be installed on Security Center Server 5.2 SR4 or later.	✓	✓	✓
	Plan Manager Client can be installed on workstations with Security Center Client 5.2 SR4 or later.	✓	✓	✓
Operating system	Windows 8/7/2008/2008R2, 32 and 64-bits.	✓	✓	✓
User workstation	Desktop, laptop, and Windows tablet computers.	✓	✓	✓
Number of workstations running Plan Manager	As many as there are Security Desk workstations available.	✓	✓	✓
Web SDK	Custom applications can call Web SDK (using REST) to control map navigation.		✓	✓
User experience				
Interactive map display	Displays in any tile in the Security Desk canvas.	✓	✓	✓
Canvas layout (tile patterns)	Uses either the standard tile patterns predefined for Security Desk or custom tile patterns configured in an XML file.	✓	✓	✓
	Full screen display. Follows all Security Desk display modes.	✓	✓	✓
	Automatic layout adjustment to fit the number of entities to display.		✓	✓
Touch screen interface	Supported, including Windows MultiTouch devices.		✓	✓
Remote display control	Controls map navigation and entity display on remote Security Desk monitors directly from the maps.		✓	✓
User profile and privilege management	Uses Security Center software security model. Map visibility is controlled by partitions. Entities (cameras, doors, zones, and so on) that users are not permitted to see in Security Center do not appear on their map display.	✓	✓	✓
Mapping capabilities				
Map types	Standard raster formats (JPG, PNG, BMP, TIFF).	✓	✓	✓
	Vector format (PDF).		✓	✓
	GIS via WMS (Web Map Service) protocol.			✓

Feature	Description	BAS	STD	ADV
Map import/viewing	Imports, edits, and scales maps (raster and vector formats) using Security Center Config Tool.	✓	✓	✓
	Views online maps (Bing, OpenStreetMap) with real time interactions.		✓	✓
	Views maps from all GIS conforming to the WMS 1.1 OGC (Open Geospatial Consortium) standard.			✓
	Imports custom KML (Keyhole Markup Language) objects.			✓
Logical organization	Maps are created directly in the Logical view for ease of navigation and search. See also Favorites and Map links .	✓	✓	✓
Map size	Unlimited. Internal map representation can be customized to match the desired zoom levels. See also Zoom .		✓	✓
Number of maps	Unlimited.	✓	✓	✓
Number of entities represented on maps	Unlimited.	✓	✓	✓
Map navigation				
Interface device	Mouse (recommended): left-click for action, right-click for information and contextual menu, mouse wheel for scrolling and zooming.	✓	✓	✓
	Touch screen: panning, zooming, and selecting.		✓	✓
Map selection and display	From a list.	✓	✓	✓
	Name search (can be partial).	✓	✓	✓
	Use map links and areas. See Map links .	✓	✓	✓
	On alarm (linked to a map object).	✓	✓	✓
Zoom	Scroll the mouse wheel to transition between zoom levels (1 to 20+), depending on map import parameters.	✓	✓	✓
	Use the PLUS and MINUS SIGN keys on the keyboard.	✓	✓	✓
Panning	Use the mouse to pan in any direction.	✓	✓	✓
	Use the ARROW keys on the keyboard.	✓	✓	✓
	Use the mini-map. See Mini-map .	✓	✓	✓
Mini-map	Thumbnail showing a large scale version of the map and indicating which portion of the map you are currently viewing.	✓	✓	✓
	Allows you to quickly move the viewed area on the map.	✓	✓	✓
	Can be shown or hidden.	✓	✓	✓

Feature	Description	BAS	STD	ADV
Favorites	Memorizes a given map view (position and scale) and enables you to quickly recall it at a later stage from a list or by name.	✓	✓	✓
	Can be public or private (restricted to one user).	✓	✓	✓
Moving between maps	Moves back, moves forward.	✓	✓	✓
	A map selector resembling an elevator allows you to quickly switch floor plans (maps) within a building (area).	✓	✓	✓
	Hyperlinks to other maps. See Map links .	✓	✓	✓
Map objects				
Object representation	Security Center entities (cameras, doors, areas, zones, and so on) and physical locations. See Hotspots and Points of interest) represented by icons on maps.	✓	✓	✓
	Entity specific information appears in a status window when you point to it. A video thumbnail displays when a camera is attached.	✓	✓	✓
	Points to an LPR camera to show the last read, last hit, and live video from the associated context camera.	✓	✓	✓
	Shows or hides all map objects of a given type.	✓	✓	✓
	Shows or hide s map objects based on zoom level (configurable).	✓	✓	✓
	Clusters closely placed map objects into a single icon when zooming out to avoid map clutter.		✓	✓
Object configuration	Graphical configuration tool.	✓	✓	✓
	Choice of icons from an icon database or custom icons defined by the administrator (JPG, PNG, or BMP file).		✓	✓
	Size and position are configurable on the maps.	✓	✓	✓
	Predefined default states for each represented entity type. For example (for a door entity): <i>Online, Offline, Opened, Closed, Locked, Unlocked, Alarm</i> .	✓	✓	✓
	Customizable display properties for all default states (choice of icon, color, transparency, blinking rate).	✓	✓	✓
	Custom states which can be associated to specific events or alarm types by using configurable display properties.		✓	✓
	Uses object templates to ensure consistent look and behavior throughout the entire system.		✓	✓

Feature	Description	BAS	STD	ADV
Areas	Areas represented as clickable colored polygons that can link you to other maps.		✓	✓
	Status shows people count and list of people present.		✓	✓
	Double-click to view an area in a tile, link to another map, or both.		✓	✓
	Issue recursive commands to all entities contained within the area hierarchy.		✓	✓
Cameras	Camera's field of view represented by a cone (viewing cone).	✓	✓	✓
	Orientation of the camera's viewing cone (updated in real time based on current PTZ settings).		✓	✓
	View of live video with a double-click or drag-and-drop to a viewing tile.	✓	✓	✓
	Control of the camera's pan and tilt by directly dragging its field of view (FOV) on the map.		✓	✓
	Point all PTZ cameras to a desired location on the map by clicking that location, ignoring the ones whose FOV are obstructed by obstacles (such as walls).		✓	✓
Doors, access monitoring and control	Different icons represent open and closed doors in real time.	✓	✓	✓
	Lock and unlock door commands available from the right-click menu.		✓	✓
Intrusion detection areas	Intrusion detection areas are represented by polygons.		✓	✓
Walls	Obstacles that block camera FOVs by showing the areas that each camera can see.		✓	✓
Zones	Zones and virtual zones represented by icons.		✓	✓
Map links	Clickable icons (or areas) on the map which enable you to switch to another map view with a double-click.	✓	✓	✓
Hotspots	Clickable icons which enable you to quickly focus on points of interest. Double-click a position on the map to display a predefined list of cameras on the canvas. PTZ cameras are turned to preset positions.	✓	✓	✓
I/O objects	Monitors the inputs and controls the outputs associated to cameras and doors.	✓	✓	✓
	Monitors the inputs and controls the outputs associated to zones and intrusion detection areas.		✓	✓
Points of interest	Custom icons marking important locations on maps, such as fire exits, fire extinguishers, first aid kits, and so on.		✓	✓
Notes	Private and public text annotations anywhere on maps.		✓	✓

Feature	Description	BAS	STD	ADV
Intercom	SIP (Session Initiation Protocol) intercom supported by Security Center: Commend, Zenitel, Castel, and so on.		✓	✓
KML objects	Keyhole Markup Language (KML) objects can be layered on georeferenced maps.			✓
Geolocated mobile object	KML object displayed and custom objects with real time position tracking, are displayed on WMS maps. For example, a security guard equipped with a GPS, doing his rounds.			✓
	Custom actions can be developed using the Security Center SDK. For example, to implement geofencing.			✓
Custom objects	Custom objects can be developed using the Security Center SDK to run macros or perform specific processing.		✓	✓
Status updates	Object status updates are in real time based on the current status of the device it represents (online, offline, on alarm, open, closed, and so on) via a combination of visual effects, such as changing the shape, color, transparency, or blinking rate of the icon.	✓	✓	✓
	Object status links to a Security Center event or alarm.		✓	✓
Primary action on left-click	Executes the default action associated to the object type with a mouse click. For example, viewing live video from a camera object.	✓	✓	✓
Secondary actions on right-click	Right click an object icon to open the contextual menu.		✓	✓
	Standard secondary actions depend on object types. For example, unlocking a door.		✓	✓
	Can execute a Security Center macro.		✓	✓
	Can run custom tasks developed with Security Center SDK.		✓	✓
	Can launch an external application or display a website in a Security Desk tile.		✓	✓
Object search	By type and/or partial name.	✓	✓	✓
	By dragging the searched object from the Logical view or the canvas to the map.	✓	✓	✓

Feature	Description	BAS	STD	ADV
Alarm management				
Management of alarms linked to map objects	Uses the standard Security Center alarm management mechanism: trigger, display mode, acknowledgement, forward to another Security Desk user, and so on.		✓	✓
	Lists of all alarms (linked to a map object) in Plan Manager with the name of the map where it appears		✓	✓
	Map objects linked to an active alarm are shown with different display attributes (icon, color, blinking rate).		✓	✓
	Automatically switches to the map where an alarm has been triggered (configurable by the user).		✓	✓
	Alarms can be acknowledged directly from the alarm list displayed in Plan Manager.		✓	✓
Plan Manager configuration				
Configuration principles	All security devices are configured with Security Center Config Tool.	✓	✓	✓
	Plan Manager Server is a role and can only be configured by Security Center administrators in Config Tool.	✓	✓	✓
	Plan Manager maps are created by Security Center administrators in Config Tool and configured (adding map objects) by privileged users in Security Desk.	✓	✓	✓
	A specific privilege is required for the viewing and the editing of each type of map object.	✓	✓	✓

Operation

This section includes the following topics:






- ["Ways to navigate through maps" on page 19](#)
- ["Supported map objects" on page 17](#)
- ["Switching map views using areas and map links" on page 20](#)
- ["Finding entities and map objects in Plan Manager" on page 22](#)
- ["Showing or hiding objects on maps" on page 25](#)
- ["Viewing cameras on maps" on page 27](#)
- ["Controlling PTZ cameras on maps" on page 29](#)
- ["Accessing additional map object commands" on page 30](#)
- ["Viewing LPR cameras on maps" on page 31](#)
- ["Viewing map objects on remote monitors" on page 32](#)
- ["Controlling map navigation on a remote Plan Manager" on page 35](#)
- ["Viewing inside areas" on page 37](#)
- ["Viewing alarms in Plan Manager" on page 40](#)
- ["Responding to alarms in Plan Manager" on page 42](#)

Supported map objects

Map objects are graphical objects (icons and polygons) displayed on *Plan Manager maps* that represent Security Center entities or hyperlinks. You use map objects to monitor and control your Security Center system and to navigate through maps.

Plan Manager supports the following map objects:

Icon	Name	Description	Use it to
	Area	Map object linked to a Security Center area. It appears as a colored polygon covering the area on the map. See also Map link .	Monitor alarms, show people count and people presence. Issue recursive commands on entities contained in the area. Jump to the linked map view with a double-click.
	Door	Map object linked to a Security Center door. By default, it appears as a door icon on the map. Can be shown as open or closed.	Monitor door status (open, closed, locked, unlocked) and to lock/unlock the door.
	Fixed camera	Map object linked to a Security Center camera. By default, the map object appears as a camera icon with a green cone. The green cone represents the camera's field of view.	Monitor live video, alarms, and control the pan and tilt of PTZ cameras (only for models that support position feedback).
	PTZ camera		
	LPR	Map object linked to a fixed Security Center LPR camera. By default, it appears as a stack of license plates with an orange arrow indicating where the camera is pointing.	Monitor the reads and hits from an LPR camera, and view live video from the associated context camera.
	Zone	Map object linked to a Security Center zone. By default, the map object appears as a zone icon on the map.	Monitor the zone, and alarms. Arm and disarm the zone.
	Intrusion detection area	Map object linked to a Security Center intrusion detection area. It is represented by a semi-transparent colored polygon covering the area on the map.	Monitor the status of the intrusion detection area, arm and disarm the area.
	I/O	Map object linked to multiple Security Center entities that are associated to inputs and outputs, such as doors, cameras, zones, and intrusion detection areas.	Monitor the states of input pins and control the behavior of the output relays, associated to a single entity.
	KML	KML (Keyhole Markup Language) object appearing on georeferenced maps. KML objects are imported from KML files.	Mark a point of interest on a georeferenced map. Track mobile units on map.

Icon	Name	Description	Use it to
	Hotspot	Marks a location on the map that requires special attention or close monitoring. By default, it appears as a yellow marker on the map.	Display all linked cameras (fixed and PTZ) on the canvas with a double-click. Turn all PTZ cameras towards the marked location. NOTE A hotspot is in the alarm state when one of its linked cameras is in the alarm state.
	Map link	Hyperlink to a map view (a favorite or a published map). It appears as a colored polygon covering the area you can click on the map. Map links are not linked to any Security Center entities. See also Area .	Jump to the linked map view with a double-click. NOTE A map link is in the alarm state when the map it links to contains objects in the alarm state.
	Walls	Walls represents obstacles that obstruct the FOVs of cameras. A wall can be a dividing wall on a floor plan or a building on a street map.	Support the <i>smart camera selection</i> , where only cameras that can see the location you clicked are selected.
	Point of interest	Custom icons showing the location of points of interest. Unlike KML objects, they do not require any scripting language and are not restricted to georeferenced maps.	Mark important locations such as fire exits, fire extinguishers, first aid kits, and so on.
	Note	Private or public text notes.	Annotate the maps for oneself or all users.
	Custom object	Custom map objects can be added to Plan Manager.	Examples of custom objects include: custom intercom solution, GPS tracker for mobile units. Contact your Genetec representative for information on Genetec Custom Solutions.

Related topics:

- "[Map object configuration](#)" on page 83

Ways to navigate through maps

The following table lists the different ways to move around the maps.

To do this	Mouse	Touch	Keyboard (press)
Move around the map	<ul style="list-style-type: none"> • Drag 	<ul style="list-style-type: none"> • Swipe 	<ul style="list-style-type: none"> • ARROW keys
	<ul style="list-style-type: none"> • Drag the mini-map 	<ul style="list-style-type: none"> • Swipe the mini-map 	<ul style="list-style-type: none"> • N/A
Zoom in/out	<ul style="list-style-type: none"> • Rotate the wheel 	<ul style="list-style-type: none"> • Pinch 	<ul style="list-style-type: none"> • PLUS SIGN key • MINUS SIGN key
Zoom in to a specific area of the map	<ul style="list-style-type: none"> • Press SHIFT and drag 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A
Switch to a different map	<ul style="list-style-type: none"> • Click a map in the <i>quick map selector</i> 	<ul style="list-style-type: none"> • Tap a map in the <i>quick map selector</i> 	<ul style="list-style-type: none"> • N/A
	<ul style="list-style-type: none"> • Use the <i>map selector</i> • Drag a map (<i>tile plugin</i>) from the Logical view to the canvas 	<ul style="list-style-type: none"> • Use the <i>map selector</i> • Drag a map (<i>tile plugin</i>) from the Logical view to the canvas 	
Switch to a different map view <i>A map view is a defined display position and zoom level for a given map.</i>	<ul style="list-style-type: none"> • Click <i>Go to home</i> • Click <i>Back/Forward</i> • Double-click an <i>area</i> or a <i>map link</i> • Right-click an <i>area</i> or a <i>map link</i> and select the <i>map view</i> from the contextual menu. 	<ul style="list-style-type: none"> • Tap <i>Go to home</i> • Tap <i>Back/Forward</i> • Double-tap an <i>area</i> or a <i>map link</i> • N/A 	<ul style="list-style-type: none"> • N/A
	<ul style="list-style-type: none"> • Click a <i>Favorite</i> • Use <i>Search</i> and click a search result • Drag an entity from the Logical view to the map (centers on the map where the entity is found) 	<ul style="list-style-type: none"> • Tap a <i>Favorite</i> • Use <i>Search</i> and tap a search result • Drag an entity from the Logical view to the map (centers on the map where the entity is found) 	

Related topics:

- ["Home ribbon" on page 6](#)
- ["Switching map views using areas and map links" on page 20](#)

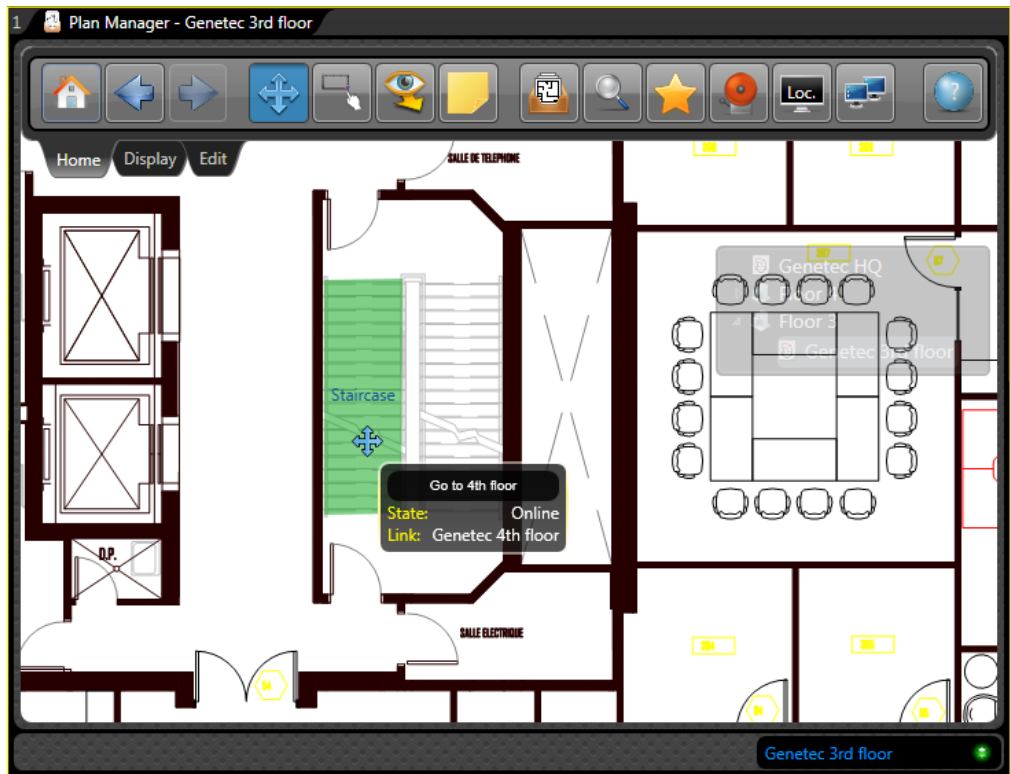
Switching map views using areas and map links

You can double-click an *area* or a *map link* to jump to a different *map view*.

What you should know

A *map view* is a defined display position and zoom level for a given map. Both *areas* and *map links* can be used to jump to different map views. Both are represented by colored polygons on the map. The color and transparency of the polygons are customizable.

NOTE A map link is always linked to a map view, but not necessarily an area.



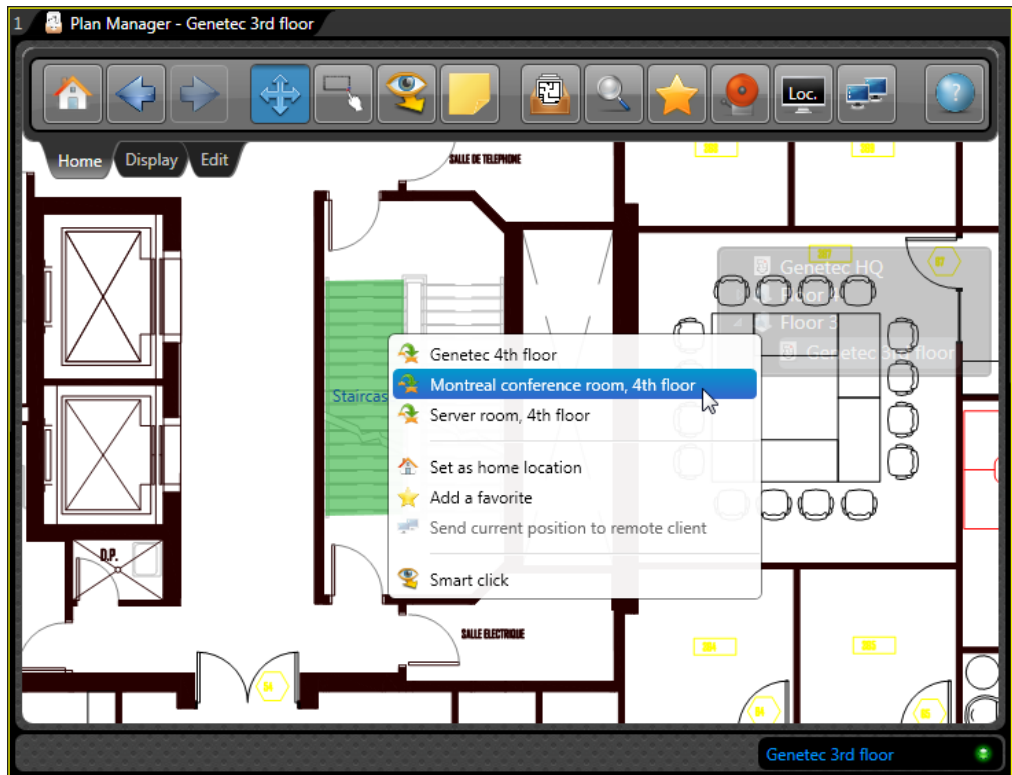
To view the name of the linked default map view:

- Move the mouse over the colored polygon representing the *map link* or *area*.
The name of the *map link* (or *area*) appears in a pop-up window, along with the name of the default map view you will jump to you double-click the object.
An area also shows the people count. See "[Viewing inside areas](#)" on page 37.

To jump to the default map view:

- Double-click the colored polygon.

NOTE An area is not necessarily linked to a default map view.

To jump to an alternate map view:

- 1 Right-click the colored polygon.
- 2 Select an alternate map view from the top section of the contextual menu.

NOTE Alternate map views are not necessarily configured.

Finding entities and map objects in Plan Manager

You have two ways to find entities and map objects in Plan Manager. You can either drag a Security Center entity from the Logical view to the Plan Manager tile, or you can search for any map objects by name and object type.

What you should know

Do not confuse Security Center entities with map objects. A map object is a representation of a Security Center entity on a map. Only entities linked to a map object can be found in Plan Manager. See "[Supported map objects](#)" on page 17.

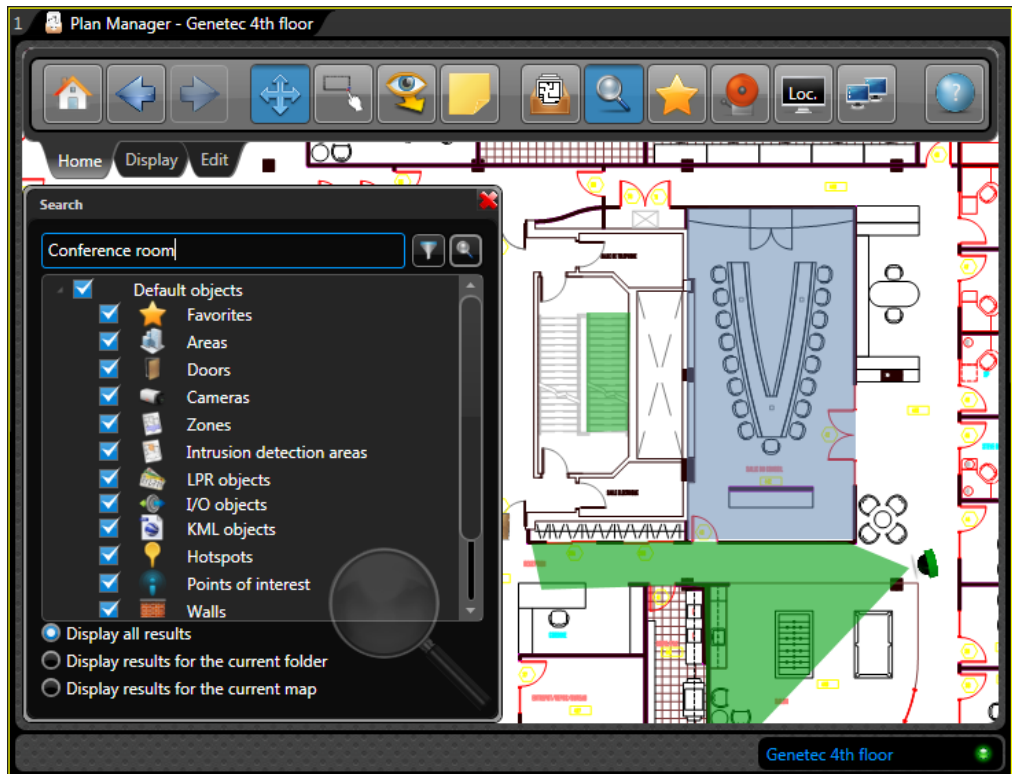
To find a Security Center entity on a map:

- Do one of the following:
 - From the Logical view, drag an entity to the Plan Manager tile.
 - From the canvas, drag an entity displayed in another tile to the Plan Manager tile.

If the entity is represented by a map object in Plan Manager, then the map where it is located is displayed, centered on the map object.

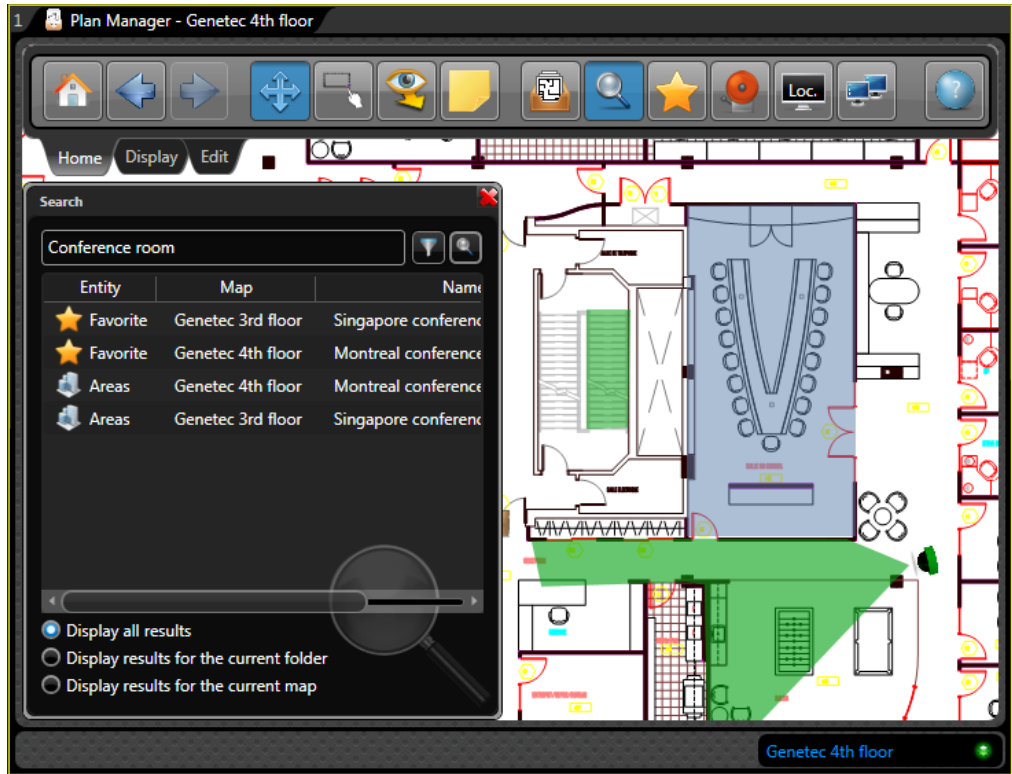
To find a map object by its name and object type:

- 1 From the Home ribbon, click Search (🔍).
The *Search tool* appears in the left panel.



- 2 Select the types of entities you want to search for.
- 3 In the search field, enter a text or the name of the entity.
Leave this field blank if you want to find all entities of the selected types.
- 4 Click Search (🔍).
Map objects matching your search criteria are listed with their type (icon and type), the name of the map where they are found, and the name of the map object.
NOTE If you are using Bing maps, the name search also returns the strings (street names and points of interest) matching your search string found in the Bing maps.
- 5 To narrow your search to the current folder or current map, click the corresponding radio button at the bottom of the Search tool.

6 To locate an entity on the map, double-click it in the list.



7 To start a new search, click (🔍).

After you finish

Click (✖) to close the left panel.


Showing or hiding objects on maps

You can show or hide certain types of objects on your map to temporarily remove the clutter. For example, if you only want to monitor cameras and doors, then you can hide all other object types.

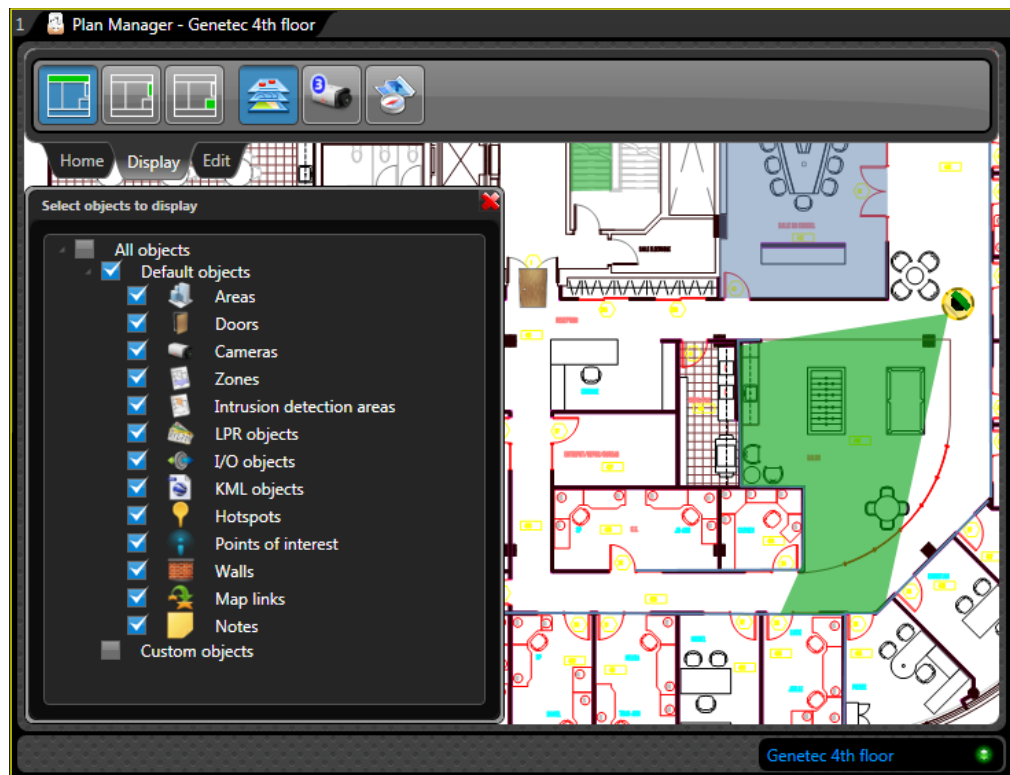
What you should know

When you choose not to display certain types of objects on the map, Plan Manager behaves as though they do not exist. This is not the same as making certain objects invisible by setting their transparency to be 100%, like the walls for example.

To show or hide objects on a map:

- 1 Select the **Display ribbon** and click **Object selection** ().

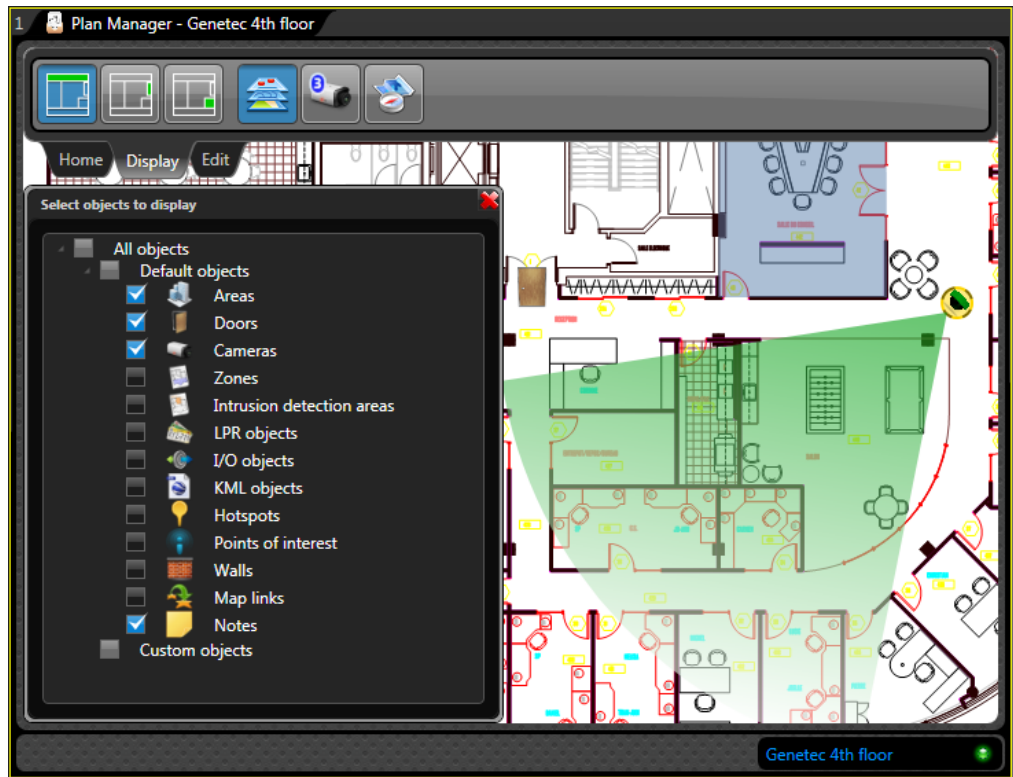
The *Object selection tool* appears in the left pane.



- 2 Select the types of map objects you want to display.

Plan Manager displays only the types of map objects that are selected.

Note that if you choose not to display walls, then the cameras FOVs will no longer be bounded by them.



After you finish

Click (✖) to close the left panel.

Viewing cameras on maps

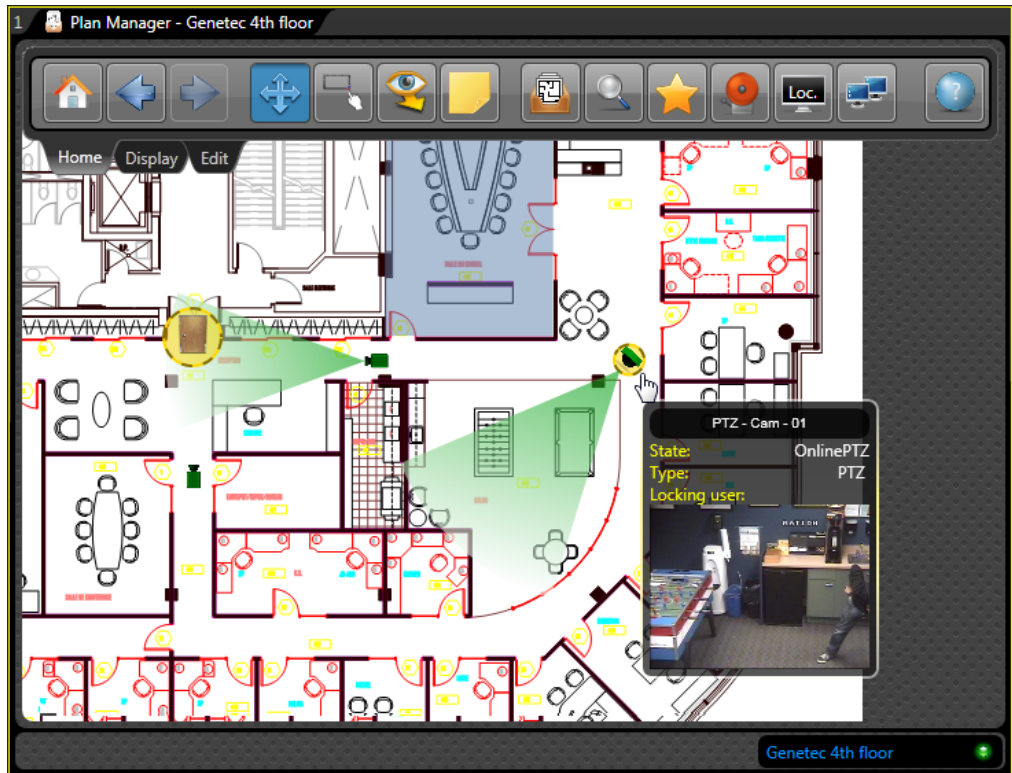
You can view live video from cameras displayed on the map in a video thumbnail or in an adjacent tile on the canvas.

What you should know

Plan Manager also allows you to view your cameras on remote monitors. To find out how, see "[Viewing map objects on remote monitors](#)" on page 32.


To view a camera on a map:

- To view a camera in a video thumbnail, point to the camera icon on the map.



- To view a camera in an empty tile, do one of the following:
 - Double-click the camera icon on the map.
 - Right-click the camera icon and select **Display**.
- To view live video in any tile on the canvas:
 - Drag the camera icon from the map to a tile of your choice on the canvas.

To view all cameras that can “see” a location you click on the map:

- 1 From the Home ribbon, click **Smart mode** ().
- 2 Click a location on the map.

All cameras that can see the location you clicked are displayed on the canvas. A camera can see a location if its FOV is not blocked by any walls and if the location you clicked is within reach of the FOV of the camera (defined by the *Maximum distance* property). Moreover, the PTZ with the *position feedback* capability will point towards the location you clicked.

Controlling PTZ cameras on maps

You can control the PTZ of cameras directly on the map by dragging the camera's field of view (FOV), which is represented by a green cone.

What you should know

Only PTZ cameras that have the *position feedback* capability can be controlled on the map. PTZ cameras that do not have this capability are shown with a circular FOV on the map. If it says “No PTZ position received from this camera”, then you cannot control the camera on the map.

To control a PTZ camera on a map:

- To pan the camera, click on the FOV and drag it around.
- To tilt the camera down, click the far end of the FOV and drag towards the camera icon.
- To tilt the camera up, click the near end of the FOV and drag away from the camera icon.
- To zoom in and out, you must display the camera in a tile and use the PTZ commands in the dashboard.

Accessing additional map object commands

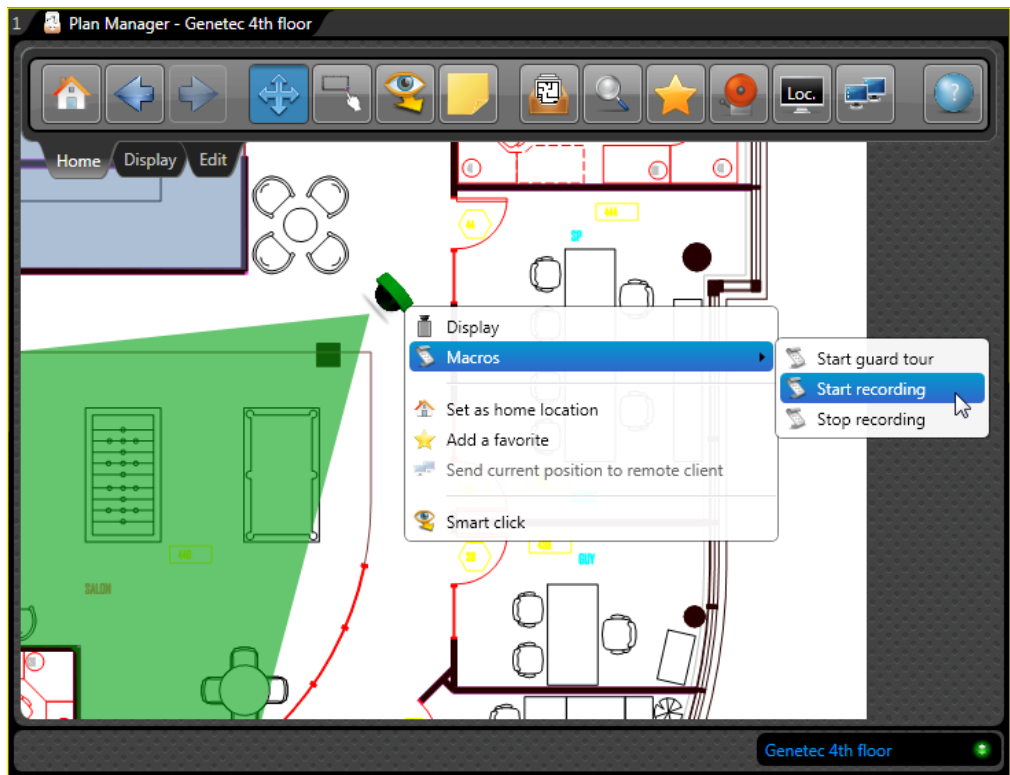
If additional commands are available for a map object, you can access them by right-clicking the map object icon.

What you should know

Additional commands are added to a map object by linking the map object to Security Center macros.

To access additional camera commands:

- Right-click the camera icon and select the command from the contextual menu.

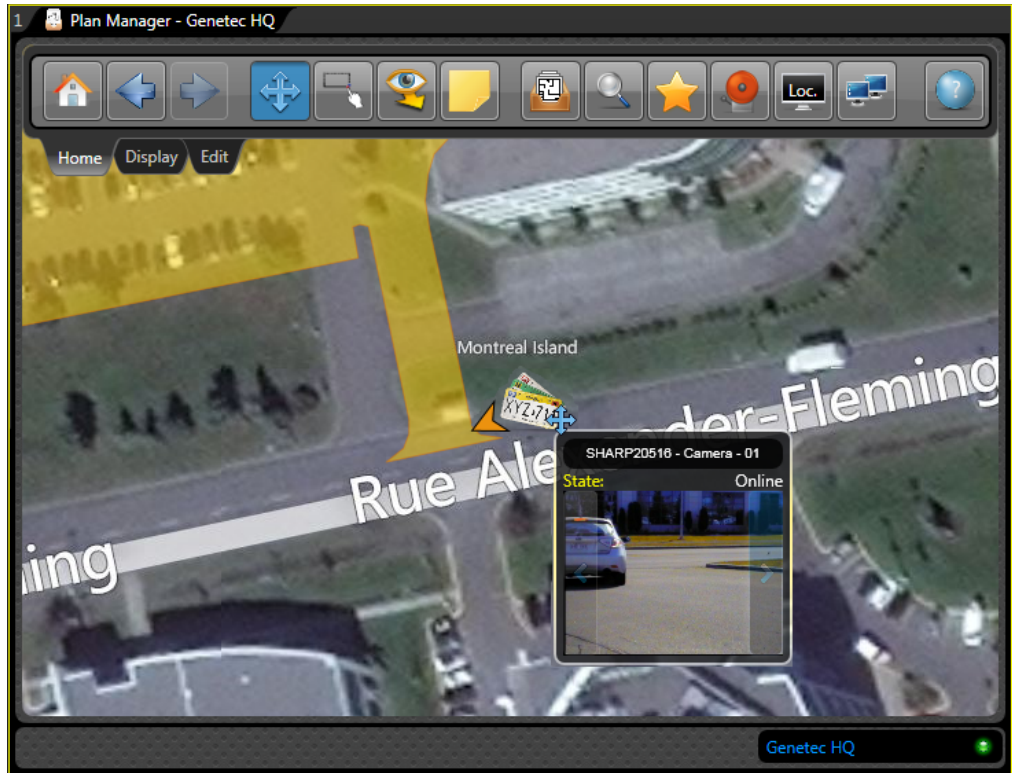


Viewing LPR cameras on maps

You can view the last read, the last hit, and the live video from the context camera associated to an LPR camera by pointing to the LPR icon on the map.

To view an LPR camera on a map:

- 1 To show the video thumbnail, point to the LPR icon on the map.



- 2 To view the last read or the last hit from an LPR camera:
 - a Click the left or right blue arrow in the video thumbnail to alternate the display between:
 - ◆ The last read
 - ◆ The last hit, and
 - ◆ The live video from the context camera.
 - b Double-click the LPR icon to display the context camera in a empty tile on the canvas.

Viewing map objects on remote monitors

You can display your map objects on a remote monitor, or any local monitor controlled by your Security Desk, other than your main monitor.

What you should know

Plan Manager displays every map object you wish to display on your current *target monitor*. The ID of your current target monitor is indicated on the *Home ribbon*, inside the monitor icon. The default is “Loc”, which stands for your main local monitor.



This feature only allows you to control what is displayed on remote monitors, except what is displayed in the Plan Manager tile. To control the map displayed on a remote Plan Manager workspace, see ["Controlling map navigation on a remote Plan Manager"](#) on page 35.

To view map objects on a different monitor than your main monitor:

- 1 Assign a remote monitor to your target monitor list. See ["Configuring target monitors"](#) on page 33.
- 2 Select the target monitor where you want to display your map objects. See ["Switching between target monitors"](#) on page 34.
- 3 Do one of the following:
 - Double-click the map object you want to display.
 - Click the map object and select **Display** from the contextual menu.

Depending on whether your target monitor is local or remote, one of the following occurs:

- If the target monitor is your main monitor, your command is ignored if your canvas is full.
- If the target monitor is remote, the entity is always displayed. If the remote canvas is full, the oldest entity is replaced by the new one.
- If the target monitor is any local monitor other than your main monitor, then you can select one of the following *Auto layout* options:
 - *Disabled*. Does not change the layout. When the canvas is full, the new entities will replace the old ones.
 - *Auto adapt*. Automatically switches to a tile pattern that has enough empty tiles to display all the entities (up to a configurable maximum).
 - *Cycle*. Automatically creates new Monitoring tasks with a pre-configured tile pattern and turn task cycling on.

For more information, see "Auto layout" on page 8.


Configuring target monitors

You must add the ID of a remote monitor to your target monitor list before Plan Manager can display map objects on that monitor. By default, only your main monitor is part of this list.

What you should know


Security Center assigns a unique monitor ID to every PC monitor controlled by a Security Desk workstation. You can configure multiple target monitors for Plan Manager and switch between them.

To configure a target monitor:

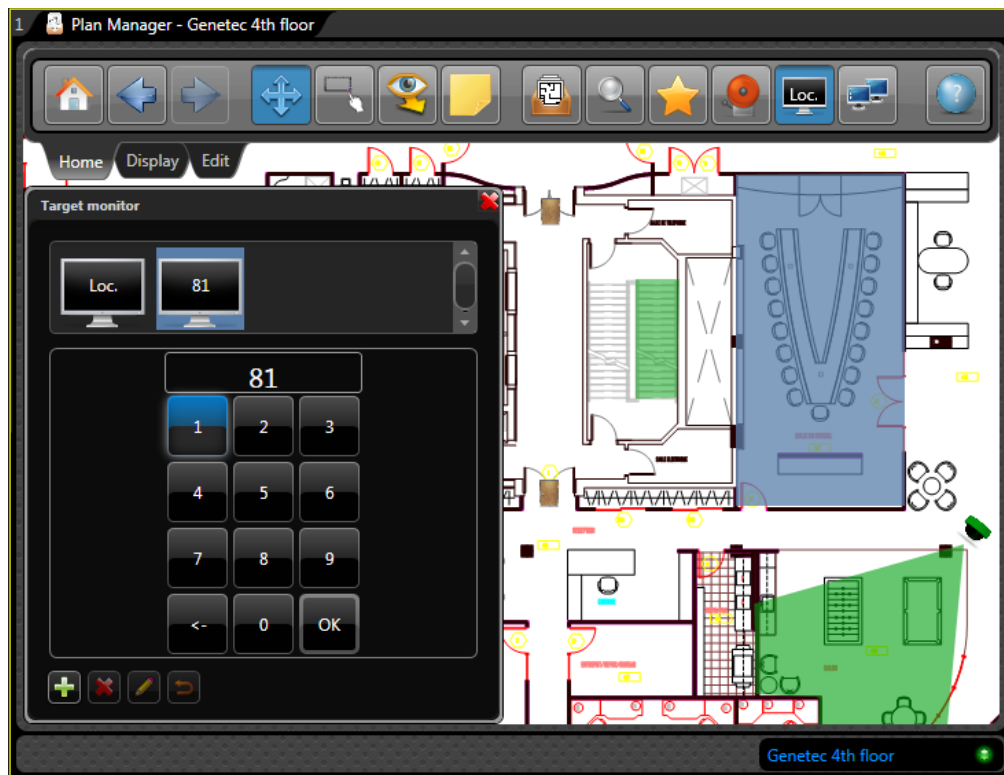
- 1 From the Home ribbon, click **Target monitor** ().

The current list of target monitor icons appears in the left pane. "Loc." corresponds to your main local monitor.

- 2 You can do the following:

- Click () to add a new monitor to the list.

Use the numeric keypad to enter the monitor ID and click **OK** to finish.



- Click (✖) to delete the selected monitor.
- Click (✎) to change the ID of the selected monitor.
- Click (↶) to undo your change.

The target monitor you add is automatically selected.


Switching between target monitors

You can decide on which monitor to display your map objects on by selecting the target monitor from the *Home ribbon*.

Before you begin

You must configure at least one additional target monitor. See "[Configuring target monitors](#)" on page 33.

To switch between target monitors:

- 1 From the Home ribbon, click **Target monitor** ().

The current list of target monitor icons appears in the left pane. “Loc.” corresponds to your main local monitor.

- 2 Select the target monitor.

The ID of the selected monitor appears as the label on the *Target monitor* button. Any map object you double-click from this point forward will appear on the target monitor from the *Home ribbon*.



NOTE If the Security Desk application controlling the remote target monitor is logged on with your username, then everything you display on the remote monitor also appears on your local monitor.



Controlling map navigation on a remote Plan Manager

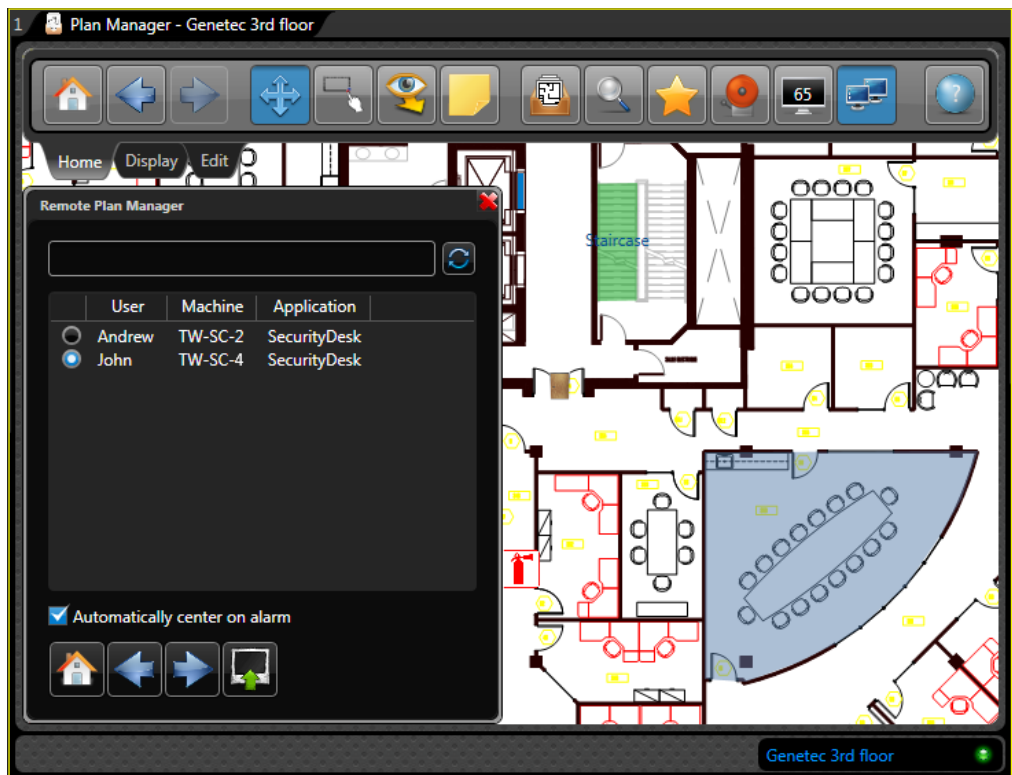
You can control the map displayed on a remote Plan Manager from your local Plan Manager workspace.






What you should know

A remote Plan Manager is a Plan Manager Client running on a remote Security Desk. In order to control a remote Plan Manager, you must have the *Control remote client* privilege and the remote user must have the *Can be remotely controlled* privilege.

To control the map display on a remote Plan Manager:

- 1 From the Home ribbon, click **Remote** ().
The *Remote Plan Manager* controls appear in the left pane.
- 2 Click ().
The list of remote Plan Manager users that you can control and who are currently online appears.
- 3 Select the remote client you want to control.





- 4 To send your current map view to the remote client, click ().
You can select how your map views are displayed on the remote client. See "[Selecting your remote map display options](#)" on page 36.
- 5 To send the *Go to home* command to the remote client, click ().
- 6 To send the *Go back* command to the remote client, click ().
- 7 To send the *Go forward* command to the remote client, click ().
- 8 Select **Automatically center on alarm** to configure the remote client to automatically center the map on active alarms.
- 9 For any other types of map navigation commands, such as panning, zooming, using map the map selector and map links, you must execute them locally, and then click ().
- 10 To display a map object on the remote monitor, see "[Viewing map objects on remote monitors](#)" on page 32.

Selecting your remote map display options

What you see in your Plan Manager tile may not look the same on someone else's Plan Manager tile. It all depends on the size of their monitor, and the tile pattern they chose. Because of these differences, Plan Manager gives you two options on how to display your map views on someone else's monitor.

To select your remote map display options:

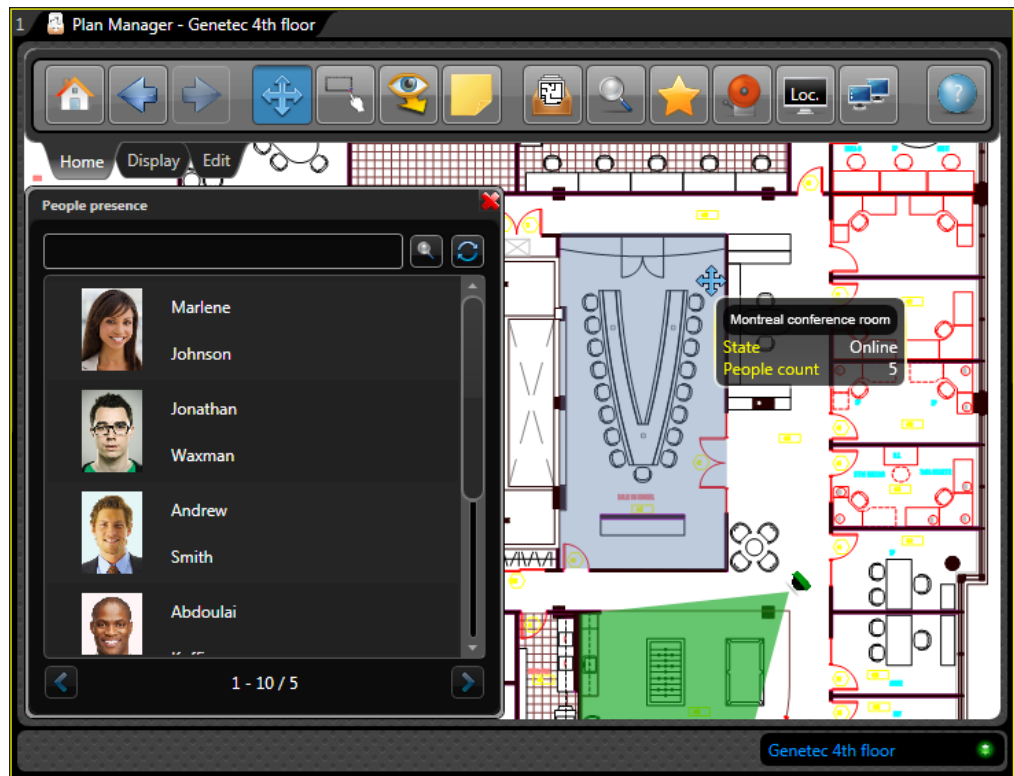
- 1 Click the Display ribbon, and click **Plan Manager options** ().
The *Plan Manager options* appear in the left panel.
- 2 Click **Remote Plan Manager**.
- 3 Select one of the following options:
 - *Send bounding box*. Displays the same area of the current map view on the remote Plan Manager tile by adjusting the zoom level to fit the size of the tile.
 - *Send same zoom factor*. Displays the current map view on the remote Plan Manager tile by using the same zoom level.
- 4 Click () to close the left panel.

Viewing inside areas

When an area is represented on the map, you can view its status, who is currently inside the area, and control all the Security Center entities that are enclosed within that area.

To view the inside of an area:

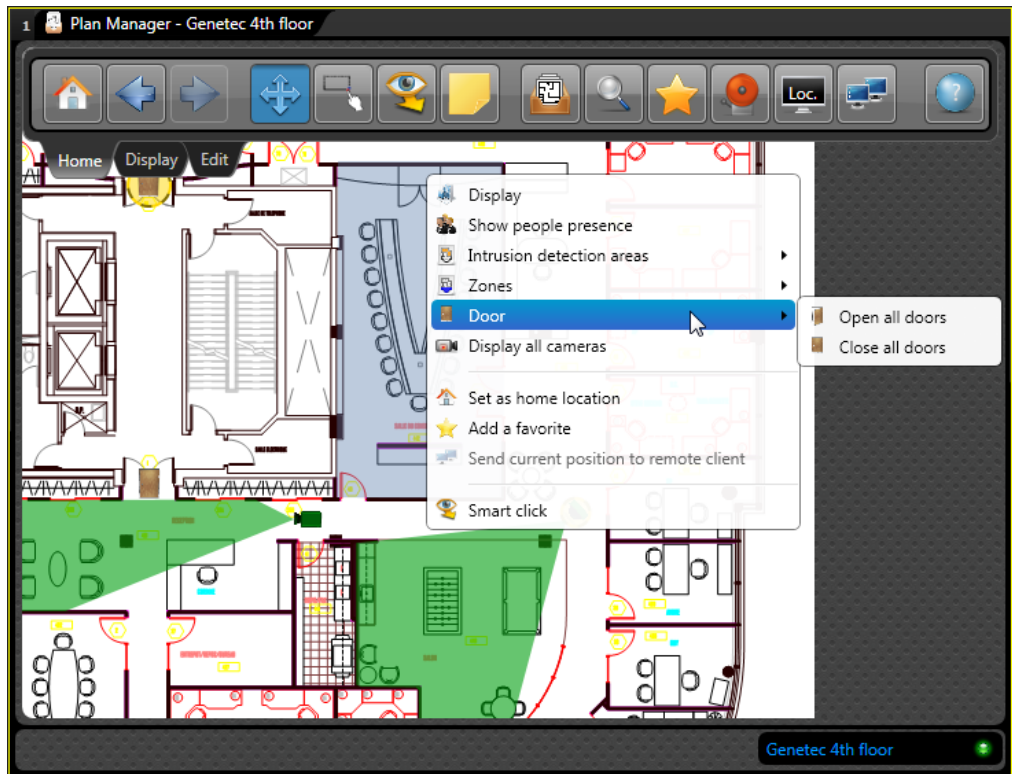
- To view the name, current status and people count of the area, point to the area.
- To see the people (cardholders) currently inside the area, right-click and select **Show people presence**.



- To control the entities found within the area hierarchy all at once, right-click the colored polygon representing the area. See "[Area command options](#)" on page 38.

Area command options

You can right-click an area on a map to control the entities found within the area hierarchy all at once.



The available commands are:

- **Display.** Display the area in a empty tile. Same as a double-click.
- **Show people presence.** Show the people currently present in the area in the left panel.
- **Intrusion detection areas.** Apply commands to all intrusion detection areas that are found within the area hierarchy:
 - *Disarm (recursive).* Set the intrusion panel to ignore all sensors attributed to the selected intrusion detection area.
 - *Perimeter arm (recursive).* Arm the intrusion detection areas so that only sensors attributed to the area perimeter set off the alarm if triggered.
 - *Master arm (recursive).* Arm the intrusion detection areas so that all sensors attributed to the area set off the alarm if triggered.

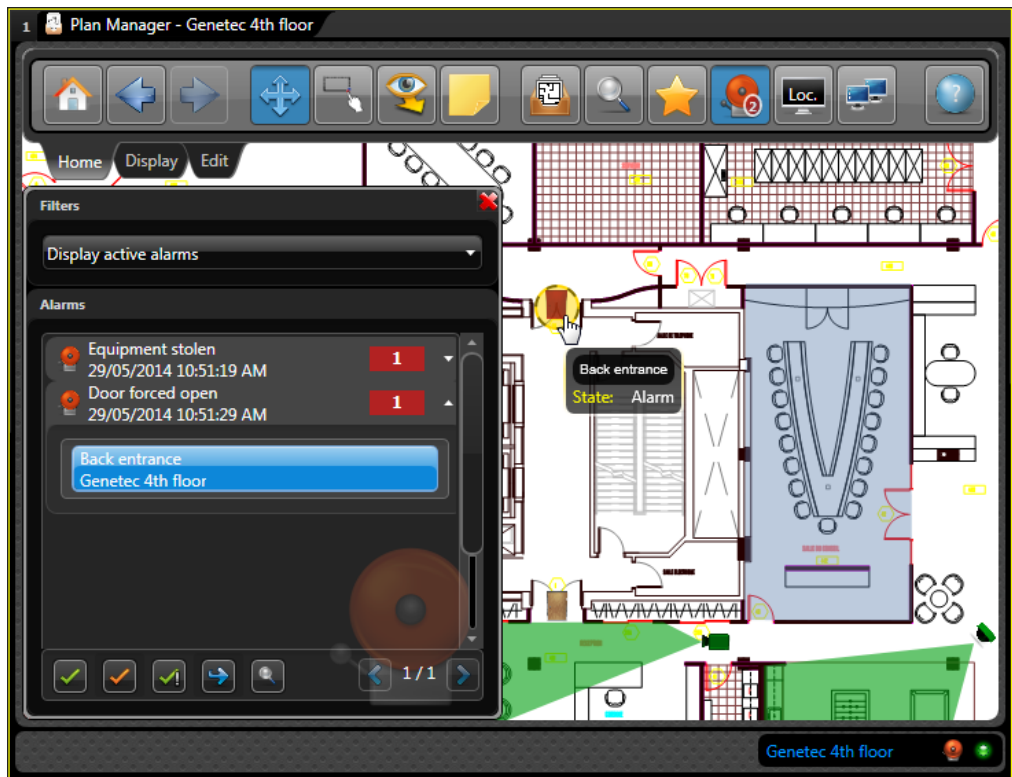
- **Zones.** Apply commands to all zones that are members of the area or one of its sub-area:
 - *Disarm (recursive).* Disarm the zones.
 - *Arm (recursive).* Arm the zones.
- **Doors.** Apply commands to all perimeter doors of the area:
 - *Open all doors.* Open all perimeter doors of the area.
 - *Close all doors.* Close all perimeter doors of the area.
- **Display all cameras.** Display all cameras that are members of the area in available empty tiles.

Viewing alarms in Plan Manager

You can view alarms from the Plan Manager tile if the alarms are linked to map objects.

What you should know

When alarms linked to map objects are triggered in Security Center, the alarm indicator (🔴) appears in the footer of the Plan Manager tile. If the ribbon is displayed, the number of active alarms is displayed on top of the Alarms button. For more information, see "[When can I view alarms in Plan Manager?](#)" on page 41.



To view an alarm in Plan Manager:

- Do one of the following:
 - In the Plan Manager tile footer, click **Display alarms** (🔴).
 - In the **Home** ribbon, click the **Alarms** button.

The list of active alarms appears in the left panel. Each row indicates the alarm name, the time the alarm was triggered, and the alarm priority in Security Center.

- Click an alarm in the list to show the list of attached map objects.

- 3 Double-click a map object to display the map centered on the map object.
The map object (being in the Alarm state) appears in its configured alarm state (by default, blinking in red).
- 4 Double-click the map object on the map to view the linked Security Center entity in an empty tile.

After you finish

Respond to the alarm. See "[Responding to alarms in Plan Manager](#)" on page 42.

When can I view alarms in Plan Manager?

Depending on how your maps are configured, you may not be able to view in Plan Manager all Security Center alarms that you can view in the *Alarm monitoring* task.

A Security Center alarm appears in Plan Manager when the following criteria are met:

- You can view the alarm in the *Alarm monitoring* task.

Plan Manager follows the software security rules enforced by Security Center.

- The alarm is still active.

You cannot view past alarms in Plan Manager.

- A map object is linked to the alarm.

A map object is linked to an alarm when the Security Center entity (camera, door, zone, and so on) attached to the alarm is linked to the map object. To find out which entities can be linked to map objects, see "[Supported map objects](#)" on page 17.

A map object can also be explicitly linked to an alarm through a custom state. See "[Adding a custom state](#)" on page 97.

IMPORTANT If an alarm is not linked to any map object, the alarm would not be displayed in Plan Manager even though you can see it in the *Alarm monitoring* task.

Once an alarm appears in Plan Manager, snoozing from the *Alarm monitoring* task or forwarding the alarm to another user does not remove it from Plan Manager.

TIP Plan Manager can be configured to automatically switch to the map where the alarm appears. For more information, see "[Plan Manager options](#)" under "[Display ribbon](#)" on page 7.

Responding to alarms in Plan Manager

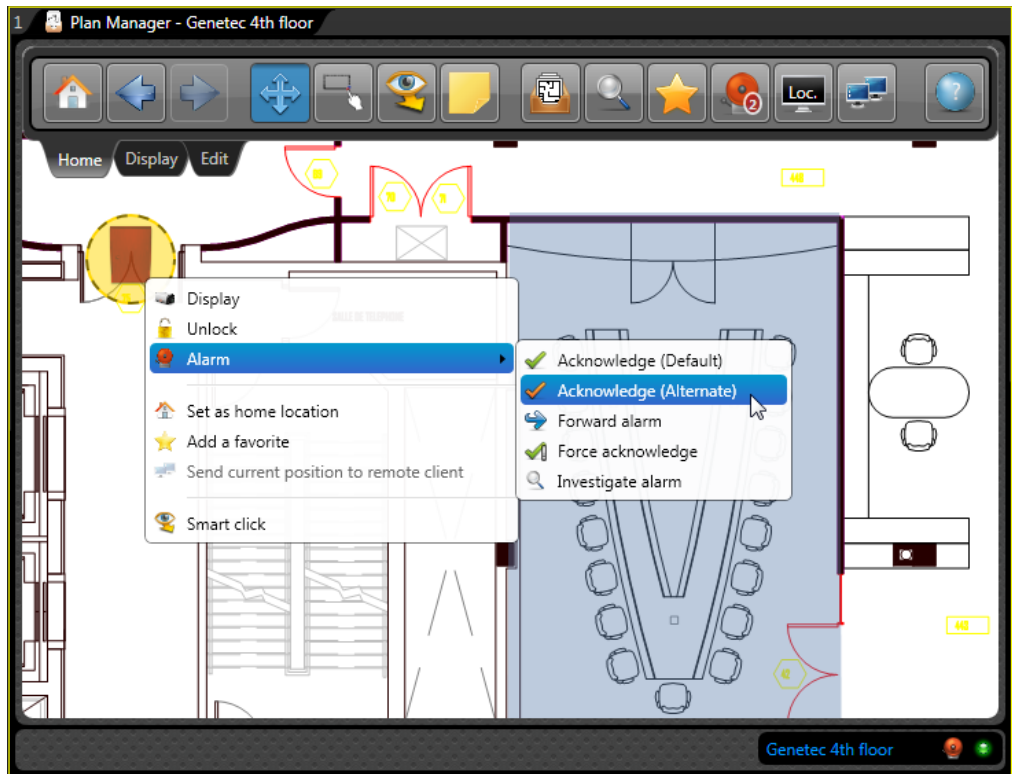
You can respond to alarms directly from the Plan Manager tile.

What you should know

There are some additional ways you can respond to alarms from the *Alarm monitoring* task in Security Desk, such as snoozing the alarm. For more information about the other alarm commands, see "Acknowledging alarms" in the *Security Desk User Guide*.

To respond to an alarm in Plan Manager:

- Do one of the following:
 - In the alarm list, select an alarm, then at the bottom of the alarm panel, click an alarm response button. See "Viewing alarms in Plan Manager" on page 40.
 - Right-click a map object that is blinking red, then click **Alarms** followed by an alarm response command.



The available alarm response commands are:

- *Acknowledge (Default)* (✓). The alarm is removed from the list.

- *Acknowledge (Alternate)* (👉). Sets the alarm to the *alternate* acknowledged state. The reasons for using this state are defined by your company. For example, if a false alarm is triggered, you might want to acknowledge the alarm in this way. This state can be used as a filter in alarm queries.
- *Forward alarm* (➡). Forwards the alarm to another user in the system. Before forwarding the alarm, you must select a user. You can also type a message.
- *Investigate* (🔍). Only available in Security Center 5.2. Investigates the alarm. This option is only available if the alarm is triggered with an acknowledgement condition attached to it (for example, *Door forced open*), and the condition is not yet cleared (for example, *Door closed*). This lets other users in the system know that someone has seen the alarm.
- *Force acknowledge* (👍). Only available in Security Center 5.2 and only if you are logged on as an administrator. Forces the alarm to be acknowledged. This is helpful for clearing alarms that are currently under investigation and their acknowledgement is not yet cleared.

Deployment

This section includes the following topics:

- ["Deploying Plan Manager"](#) on page 45
- ["Installing Plan Manager Server"](#) on page 46
- ["Installing Plan Manager Client"](#) on page 49
- ["Upgrading Plan Manager"](#) on page 52
- ["Plan Manager silent installation"](#) on page 54

Deploying Plan Manager

To deploy Plan Manager in your Security Center system, you must install the Plan Manager plugins (server and client), configure the Plan Manager role, create your maps, and configure map objects.

Before you begin

- Read the *Plan Manager 10.3 Release Notes*.
- If you have an earlier version of Plan Manager installed then follow the procedure "[Upgrading Plan Manager](#)" on page 52, instead.

To deploy Plan Manager:

- 1 Install Plan Manager Server on all Security Center servers where the Plan Manager role will be hosted. See "[Installing Plan Manager Server](#)" on page 46.
Wherever both Plan Manager Server and Client are needed on the same machine, they can be installed at the same time.
- 2 Install Plan Manager Client on the Security Desk workstations where Plan Manager will be used. See "[Installing Plan Manager Client](#)" on page 49.
- 3 Create and configure the Plan Manager roles.
Depending on the size of your system, you may choose to have one or two Plan Manager roles. See "[Configuring the Plan Manager roles](#)" on page 59.
- 4 Create the *map sources*. These are the background images used for your maps. See "[Creating map sources](#)" on page 64.
- 5 If applicable, import the *KML objects*. See "[Importing KML objects](#)" on page 72.
Once imported, the KML objects can be used on any georeferenced map source.
- 6 Publish your map sources in the Logical view. See "[Publishing map sources](#)" on page 74.
- 7 Using Security Desk, configure the *map objects*. See "[Map object configuration](#)" on page 83.
- 8 Grant Plan Manager privileges to Security Desk users. See "[Granting privileges for using Plan Manager](#)" on page 76.

Installing Plan Manager Server

To use Plan Manager, you must install Plan Manager Server on all Security Center servers where you plan to run Plan Manager Server (server plugin).

Before you begin

Ensure completion of the following prerequisites:

- Servers meet the hardware requirements described in the *Plan Manager Release Notes*.
- Security Center Server pre-installed on servers where Plan Manager Server is to be installed.

Use two servers if the *Data Server* and the *Map Server* will be hosted on separate roles. Use four servers if each role will support failover.

- Install the Config Tool where you want to configure the Plan Manager role.

What you should know

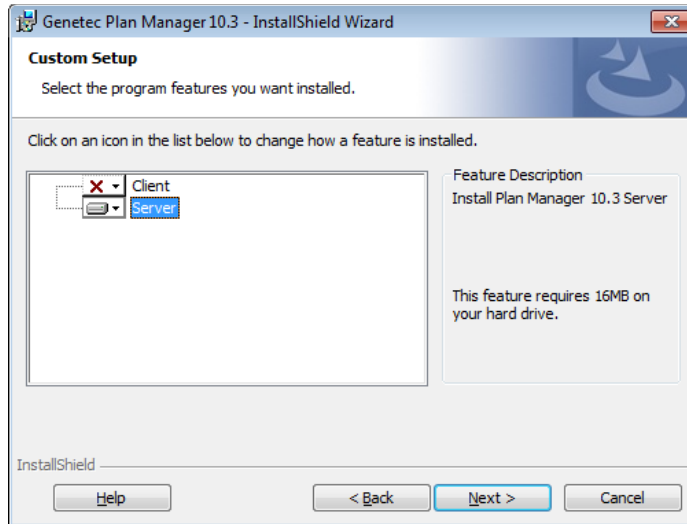
Plan Manager Server is a server plugin (🔧) that runs as a *Plugin* role. It must be installed on each Security Center server that will host the Plugin role. Plan Manager Server includes two server modules, *Data Server* and *Map Server*. These two modules can be hosted on the same or different Plugin roles.

To install Plan Manager Server:

NOTE Plan Manager can be installed as part of Security Center (Security Center 5.2 SR5 and later). For more information, see the *Security Center Installation and Upgrade Guide*.

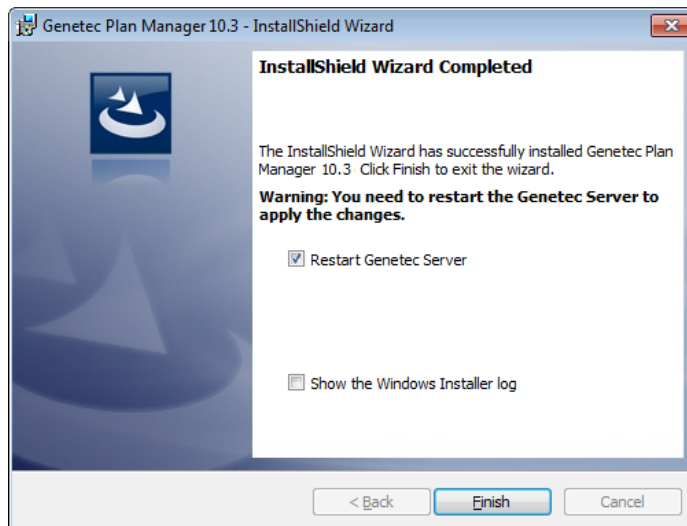
- 1 Download the Plan Manager installation package to your local machine.
Plan Manager is available for download from the GTAP Product Download page at <https://gtap.genetec.com>. Specific Security Center license options must be activated. To log on to GTAP, you will need a username and password. For more information, see "Technical support" on page 139.
- 2 Double-click **setup.exe** and then click **Yes**.
The *Genetec Plan Manager Installation* dialog box appears.
- 3 From the dialog box, select the installation language: **English** or **French**. This does not restrict the language from the installed software. Plan Manager uses the language selected for Security Center.
- 4 Click **Plan Manager installation**.
- 5 On the InstallShield Wizard *Welcome* page, click **Next**.
- 6 On the *License Agreement* page, click **I accept the terms in the license agreement** and then click **Next**.

- 7 On the *Custom Setup* page, select **Server** (and optionally **Client**) and then click **Next**.



- 8 On the *Server Destination Folder* page, if necessary, change the folder and click **Next**.
 9 On the *Config Tool Destination Folder*, if necessary, change the folder and click **Next**.
 10 On the *Ready to Install* page, click **Install** to start the installation process.

The installation may take a few minutes before the following page appears.



- 11 Restart *Genetec Server* service for the system to detect a new plugin installation, and to ensure you can create the Plan Manager role.

The *Genetec Server* service restart causes a short interruption of Security Center service on this server. If it is not a good time to interrupt Security Center service now, clear the option **Restart Genetec Server**. Be sure to restart *Genetec Server* service later but before you create the Plan Manager role.

12 Click Finish.

After you finish

Configure the Plan Manager roles. See "[Configuring the Plan Manager roles](#)" on page 59.

Installing Plan Manager Client

You must install Plan Manager Client to use Plan Manager maps and to configure map objects.

Before you begin

Make sure of the following:

- Plan Manager Server is installed on at least one Security Center server. See "[Installing Plan Manager Server](#)" on page 46.

NOTE You can install Plan Manager Server and Client at the same time.

- Security Center Client is installed on this computer.

What you should know

Plan Manager Client runs on as a *tile plugin* in Security Desk. It must be installed on each Security Desk workstation that will use Plan Manager.

To install Plan Manager Client:

NOTE Plan Manager can be installed as part of Security Center (Security Center 5.2 SR5 and later). For more information, see the *Security Center Installation and Upgrade Guide*.

- 1 Download the Plan Manager installation package to your local machine.

Plan Manager is available for download from the GTAP Product Download page at <https://gtap.genetec.com>. Specific Security Center license options must be activated. To log on to GTAP, you will need a username and password. For more information, see "[Technical support](#)" on page 139.

- 2 Double-click **setup.exe** and then click **Yes**.

The *Genetec Plan Manager Installation* dialog box appears.

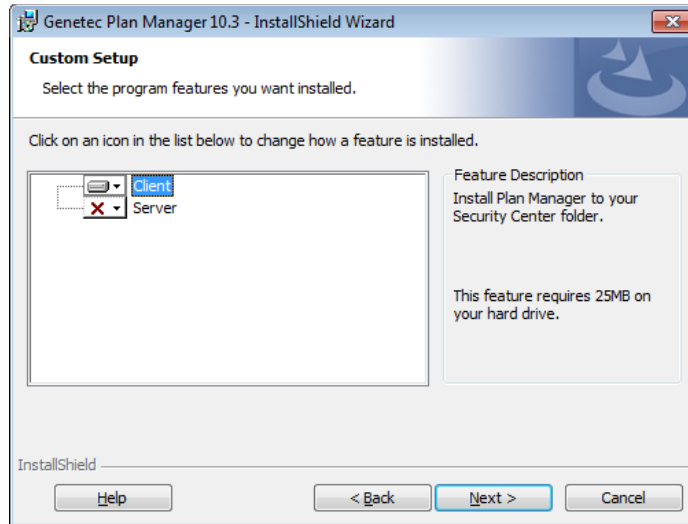
- 3 From the dialog box, select the installation language: **English** or **French**. This does not restrict the language from the installed software. Plan Manager uses the language selected for Security Center.

- 4 Click **Plan Manager installation**.

- 5 On the InstallShield Wizard *Welcome* page, click **Next**.

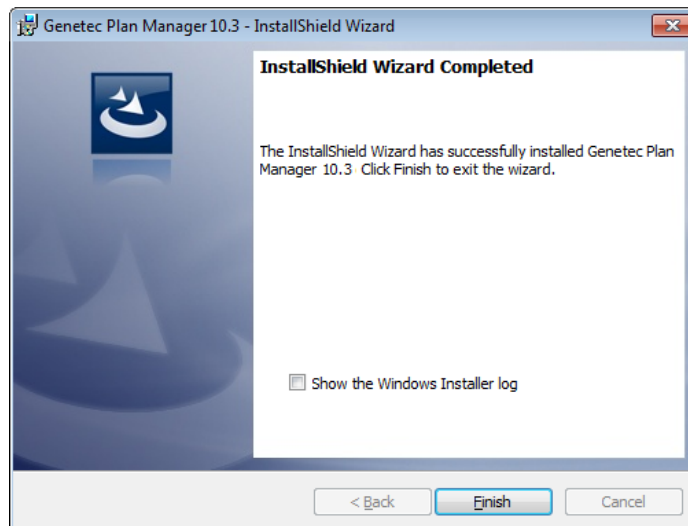
- 6 On the *License Agreement* page, click **I accept the terms in the license agreement** and then click **Next**.

- 7 On the *Custom Setup* page, select **Client** (and optionally **Server**) and then click **Next**.



- 8 On the *Client Destination Folder* page, if necessary, change the folder and click **Next**.
- 9 On the *Config Tool Destination Folder*, if necessary, change the folder and click **Next**.
- 10 On the *Ready to Install* page, click **Install** to start the installation process.

The installation may take a few minutes before the following page appears.



- 11 Click **Finish**.

After you finish

Continue with the next step of the deployment procedure. See "[Deploying Plan Manager](#)" on page 45. If your *map sources* are already created. See "[Creating map sources](#)" on page 64), publish in the Logical view. See "[Publishing map sources](#)" on page 74.

Upgrading Plan Manager

If you are using an earlier version of Plan Manager, you must upgrade it to version 10.3.




Before you begin



The following procedure explains how to upgrade Plan Manager from version 10.0, 10.1, or 10.2 to 10.3. To upgrade from Plan Manager 7, contact "[Technical support](#)" on page 139.

To upgrade Plan Manager from an earlier version:

- 1 Make sure your Plan Manager server is also a Security Center server.

Plan Manager 10.3 requires Security Center Server to be installed on the same server where it runs. If it is not yet the case, install Security Center Server with the *expansion server* option on the Plan Manager server. See *Security Center Installation and Upgrade Guide*.
- 2 Upgrade your Plan Manager server.

Follow the same procedure used for a new installation. Plan Manager setup automatically detects the previous version and upgrades your software. If Plan Manager Server is installed on two computers, upgrade the Data Server first. See "[Installing Plan Manager Server](#)" on page 46 and "[Configuring the Plan Manager roles](#)" on page 59.
- 3 Log on to Security Center with Config Tool.
- 4 Update the Plan Manager database.
 - a Open the *Plugin* task, select the Plan Manager role, and then the **Resources** tab.
 - b Make sure you select the database server and name used in the previous version (default=PMX).
 - c Click **Update database**.
 - d Click **Apply**.
- 5 Restart the Plan Manager role.
 - a Select the Plan Manager role.
 - b Click **Deactivate role** (), and click **Continue**.
 - c Click **Activate role** (), and wait for the role to turn back online.
- 6 Select **Manage servers**, click (), and then click **Update**.

The old map structure (folders and maps) is added to the Logical view under a new branch named **Plan Manager**. The map folders are converted to *area* entities, and the published maps are converted to *tile plugin* entities (), called *map* entities thereafter.
- 7 Open the *Logical view* task, and update the map hierarchy.
 - a Locate the newly created map hierarchy (**Plan Manager**), and move the map entities () created by the upgrade to their desired location in the entity tree.
 - b Delete the duplicate areas if necessary.

- c If your published maps used to belong to specific partitions, update the partition memberships of the newly created map entities accordingly.
 - d Locate the old Plan Manager client interface and delete it. It is no longer needed.
- 8 Upgrade your Plan Manager Client workstations.

Follow the same procedure used for a new installation. Plan Manager setup automatically detects the previous version and upgrades your software. See "[Installing Plan Manager Client](#)" on page 49.

IMPORTANT If you are upgrading from Security Center at the same time, upgrade Security Center first.

After you finish

Log on to Security Center with Security Desk, and test the converted map entities. You should see the same default map view as before, and all the map objects.

Plan Manager silent installation

A silent installation is an automated way of installing software without user intervention. The silent installation is run from the command line using the setup.exe executable, and Windows Installer commands.

You can customize the following options from the command line:

- Installation language
- Client or Server installation path
- Client or Server features to install

Limitations

A command line is limited to a maximum of 850 characters.

TIP One way to shorten the command line length is to reduce the installation path length. This can be achieved by copying the installation files onto a local drive or by mapping a network drive to the path of setup.exe.

Preparing to perform a silent install

There are certain tasks you should perform prior to the installation, to ensure it goes smoothly.

Perform the following tasks before performing a silent installation:

- Make sure you have all the software prerequisites installed before you launch a silent install. Plan Manager installer automatically verifies and installs the software prerequisites on your system. This may cause your system to restart. Therefore, it is best practice to manually install the software prerequisites before running the silent installer. For more information, see "Software prerequisites" in the *Release Notes*.
- Make sure you have a database server for Plan Manager Server to connect to. If there is no database server, you can install Microsoft® SQL Server 2008 R2 Express Edition on your server computer, which is available on the Security Center DVD in the folder \Full\SQLExpress. For more information, see "Install SQL Server on a separate drive" in the *Security Center Installation and Upgrade Guide*.

InstallShield command line reference

When performing a silent installation, specific program options are required to run the install.

The syntax for calling Plan Manager setup program in silent mode is:

```
Setup.exe /L<language> /s /v"/qn <option_list>"
```

The setup.exe program is located on the Plan Manager installation package in the *Full* folder.

The following table lists the setup.exe options.

Option	Description
<code>/L<language></code>	Sets the language used by the installation program. Immediately precedes the four-digit language code. No space is allowed. <ul style="list-style-type: none"> <code>/L1033</code> for English (default) <code>/L3084</code> for French
<code>/s</code>	Sets the setup.exe executable to run in silent mode with no user interaction.
<code>/v"</code>	Makes sure that the options within the quotation marks are sent directly to the <code>msiexec.exe</code> executable.
<code>/qn</code>	Runs the install in silent mode.
<code><option_list>"</code>	Sets the installer option list. Each option in the list uses the following syntax: <code><option>=<value_list></code> where <code><option></code> is an option name, and <code><value_list></code> is a list of comma-separated values. No space is allowed on either side of the equal sign (=). If the value list must contain spaces, the entire value list must be included between a pair of double quotes preceded by a backslash (\). The individual options and their values are described in "Installer options" on page 55.

Installer options

When performing a silent installation, you can specify additional options for the install.

The following table lists the installer options.

Option	Description
<code>INSTALLDIR</code>	Specify the path where Plan Manager Server should be installed. EXAMPLES <ul style="list-style-type: none"> <code>INSTALLDIR=C:\MyChoiceOfFolder</code> <code>INSTALLDIR="D:\Program Files\Security Center\"</code> Note that in the second example, (\) is required because the value contains spaces. If omitted, it will be installed at <code>[ProgramFilesFolder]Genetec Plan Manager Server</code> .
<code>INSTALLDIR_CLIENT</code>	Specify the path where Plan Manager Client should be installed. The syntax is the same as for <code>INSTALLDIR</code> . If omitted, it will be installed at <code>[ProgramFilesFolder]Genetec Plan Manager Client</code> .

Option	Description
ADDLOCAL	Specify the features to be installed. <ul style="list-style-type: none"> • ALL (Plan Manager Server and Client) • Client (Plan Manager Client) • Server (Plan Manager Server)
INSTALLDIR_CONFIGTOOL	Parameter which lets the user specify the installation directory for ConfigTool. This applies to both Client and/or Server installations. If not specified, the default value of <i>[ProgramFilesFolder]Genetec Plan Manager ConfigTool</i> is used
REBOOT	This option allows you to force or suppress a reboot after the Server installation has ended. Possible values are: <ul style="list-style-type: none"> • F - To force a reboot when your installation is complete. • S - To suppress any reboot except the one caused by the ForceReboot action. • R - To suppress any reboot caused by Windows Installer actions.
RESTART_GENETEC_SERVER	Parameter which lets the user choose to restart the Genetec server at the end of the installation (1) or not (0). By default this is set to 1 so if the user doesn't want to restart the Genetec server automatically, RESTART_GENETEC_SERVER=0 needs to be specified.

Sample silent installation commands

Using the different command options, you can customize your silent install.

EXAMPLE Plan Manager Server and ConfigTool installed to an installation path different than the default.

```
Setup.exe /L1033 /s /v"/qn ADDLOCAL=Server
INSTALLDIR=C:\PLANMANAGERSERVER_PATH
INSTALLDIR_CONFIGTOOL=C:\PLANMANAGERCONFIGTOOL_PATH"
```

EXAMPLE Plan Manager Server and ConfigTool installed to default installation path but without automatically restarting the Cenetec Server.

```
Setup.exe /L1033 /s /v"/qn ADDLOCAL=Server RESTART_GENETEC_SERVER=0"
```

EXAMPLE Plan Manager Client and ConfigTool installed to an installation path different than the default.

```
Setup.exe /L1033 /s /v"/qn ADDLOCAL=Client
INSTALLDIR_CLIENT=C:\PLANMANAGERCLIENT_PATH
INSTALLDIR_CONFIGTOOL=C:\PLANMANAGERCONFIGTOOL_PATH"
```

Uninstalling Plan Manager in silent mode

Plan Manager can be uninstalled in silent mode.

To uninstall both Plan Manager Client and Server components in silent mode:

- Run the following command from the *Full* folder of the Plan Manager installation DVD:
`setup.exe /s /v"/qn" /x`

To uninstall Plan Manager Client when Plan Manager Server is also installed:

- Run the following command from the *Full* folder of the Plan Manager installation DVD:
`setup.exe /s /v"/qn REMOVE=Client"`

To uninstall Plan Manager Server when Plan Manager Client is also installed:

- Run the following command from the *Full* folder of the Plan Manager installation DVD:
`setup.exe /s /v"/qn REMOVE=Server"`

4

Server configuration

This section includes the following topics:

- ["Configuring the Plan Manager roles"](#) on page 59
- ["Creating map sources"](#) on page 64
- ["Differences between imported and online map sources"](#) on page 66
- ["Connecting to online map sources"](#) on page 67
- ["Importing map sources from image files"](#) on page 69
- ["Importing KML objects"](#) on page 72
- ["Publishing map sources"](#) on page 74
- ["Granting privileges for using Plan Manager"](#) on page 76
- ["Configuring Plan Manager role failover"](#) on page 78
- ["Backing up the map database"](#) on page 81
- ["Restoring the map database"](#) on page 82

Configuring the Plan Manager roles

You must create and configure Plan Manager roles before you can start using Plan Manager on your system.

Before you begin

Install Plan Manager Server on all Security Center servers where the Plan Manager role will be hosted. See "[Installing Plan Manager Server](#)" on page 46. If you did not restart *Genetec Server* service at the time of installation, do it now.



What you should know

If Plan Manager Server is installed on your main server, the Plan Manager role is created by default. Plan Manager Server has three distinct modules, two compulsory and one optional:

- **Data Server.** Plan Manager Server module that manages the map configuration database.
- **Map Server.** Plan Manager Server module that manages the map sources imported from image files.
- **Web SDK.** Plan Manager Server module that handles Plan Manager function calls from custom web applications using the REST (Representational State Transfer) protocol.

The *Data Server* and the *Map Server* must each be assigned to one and only one Plan Manager role. The Plan Manager role can be the same for both or a different one for each. The *Web SDK* is optional and rarely used. It can be assigned to the same role as the Data Server and the Map Server, or to a different one. Having more than one Plan Manager role allows you to distribute the processing load over several servers.


To configure the Plan Manager roles:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task.
If the Plan Manager role () has already been created by default, continue with [Step 9](#).
- 3 Click **Plugin** () at the bottom of the page.
The Plugin role creation wizard appears.
- 4 In the **Server** drop-down list, select the server that is going to host the Plan Manager role.
- 5 In the list of installed plugins, select **Plan Manager**.
- 6 Enter the values for **Database server** and **Database** for the Plan Manager database.

Only the *Data Server* manages the database.

If you are creating a role for the *Map Server* only, then you do not need to bother about the database parameters. The database is not going to be used by this role.

If you are creating a role for the *Data Server*, and you plan to configure the failover for this role, your database server must be hosted on a third machine. For information on how to configure a remote database server, see "Connect roles to a remote database server" in the *Security Center Administrator Guide*.

- 7 Click **Next**, and enter the **Entity name**, **Description** and **Partition** for this role.
Best practice: If you plan to distribute the processing of Plan Manager Server to two separate roles, make sure you name each role based on the server module it is running.
- 8 Click **Next**, check the information you entered, click **Creat**, and then click **Close**.
The new Plan Manager role () appears in the list of Plugin roles, and the focus is on its **Resources** tab. It takes a few seconds for the role to create its database.
- 9 Decide which server modules are to be assigned to this Plan Manager role. See "[Assigning server modules to the Plan Manager role](#)" on page 61.
- 10 If only one server module is assigned to this Plan Manager role, create additional Plan Manager roles to run the other server modules.
Make sure each Plan Manager role is hosted on different server.
- 11 Open the ports used by your Plan Manager roles in your firewall. See "[Default ports for Plan Manager Server](#)" on page 63.

After you finish

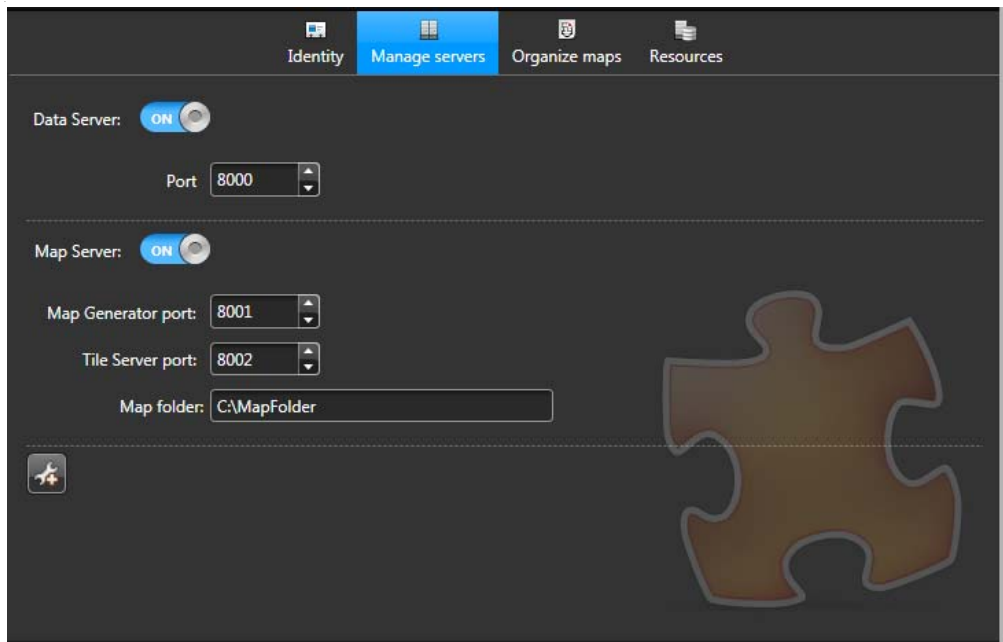
Create the *map sources*, which are the background images used for your maps. See "[Creating map sources](#)" on page 64.

Assigning server modules to the Plan Manager role

You must assign at least one server module (*Data Server* or *Map Server*) to each Plan Manager role you create, and each server module must be assigned to one and only one Plan Manager role.

What you should know

After you first create a Plan Manager role, the *Data Server* and *Map Server* are assigned to the same role by default. If you have only one Plan Manager role, you don't need to change anything. But if you plan to have two or more Plan Manager roles, you need to choose which server module to assign to each role.



To assign server modules to the Plan Manager role:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task, select the *Plan Manager* role (🧩) and click **Manage servers**.
- 3 Turn the **Data Server** switch on if you want this role to manage the Plan Manager database where the map configuration (map sources and map objects) is kept.

The TCP port used by the *Data Server* to listen to connection requests from *Map Server* and *Plan Manager Client* is assigned by default. Do not change the default value (8000) unless it is already reserved by your IT department for a different purpose.

A map configuration database (default=`PlanManager`) is also created by default. If you prefer to use a different database, see “Managing databases” in the *Security Center Administrator Guide*.

IMPORTANT If failover is to be configured for this role, the database server must be located on a third machine that all servers assigned to this role can access.

4 Select **Map Server** if you want this role to manage the imported maps.

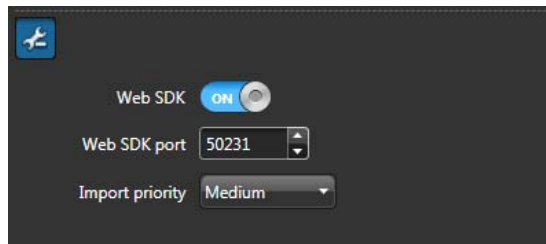
You also need to configure the following:

- *Map Generator port.* TCP port used by the subprocess responsible for creating map sources by importing them from image files. Do not change the default value (8001) unless it is already reserved by your IT department for a different purpose.
- *Tile Server port.* HTTP port used by the Tile Server subprocess to listen to Plan Manager Client requests. Do not change the default value (8002) unless it is already reserved by your IT department for a different purpose.
- *Map folder.* Enter the path to the root folder where all imported map files are stored. For each image file you import, the *Map Generator* creates a subfolder to store the generated map tiles.

NOTE If you need to rename or move the folder to a different location in the future, you need to update the *MapFolder* path. The content of this folder is backed up and restored along with the Plan Manager database.

IMPORTANT If failover is to be configured for this role, the map folder must be located on a shared network drive that all servers assigned to this role can access. See "[Configuring Plan Manager role failover](#)" on page 78.

5 (Optional) Click **Advanced** (⚙️) to open the advanced parameters section.



- Turn the **Web SDK** switch on if you want this role to handle the Web SDK function calls. Do not change the default Web SDK port (50231) unless it is already reserved by your IT department for a different purpose.

IMPORTANT If the Web SDK is assigned to the same role as the Data Server, make sure they both use the same database instance. As a best practice, we recommended assigning the Web SDK to the same role as the Data Server.

- Change the **Import priority** if necessary. The import priority is only used by the Map Server. It tells the operating system how much CPU to allocate to the process of importing maps.

6 Click **Apply** (✓).

The Plan Manager role restarts. This will take a few seconds.

Default ports for Plan Manager Server

Before using Plan Manager, the ports used by Plan Manager Server modules must be open and redirected for firewall and network address translation purposes. The following table lists the default ports used by Plan Manager Server.

Server module	Server port	Default	Protocol
Data Server	Connection port	8000	TCP
Map Server	Map Generator port	8001	TCP
	Tile Server port	8002	HTTP
Web SDK	Web SDK port	50231	HTTP using Representational State Transfer protocol (REST)

Creating map sources

To create interactive maps, you must create the background images. Plan Manager displays the *map objects* over these images. These background images are called *map sources*.

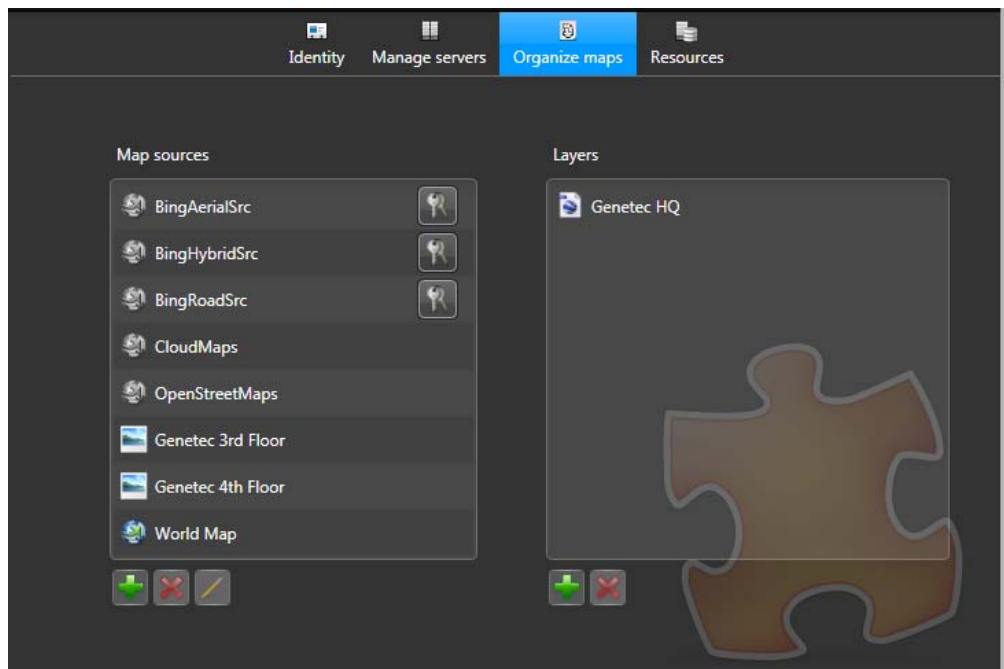
Before you begin

Create and configure the Plan Manager roles. See "[Configuring the Plan Manager roles](#)" on page 59.

What you should know

Map sources can be stored locally on your hard drive or provided online by third-party map providers. See "[Differences between imported and online map sources](#)" on page 66.

From Config Tool, you can create map sources from the *Organize maps* tab of any Plan Manager role.



By default, Plan Manager installs a few WMS maps (online map sources). Maps with with a (🔑) require a license key before use.

To create a map source:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task, select any Plan Manager role (🧩), and then click **Organize maps**.
- 3 Click **Add a new map source** (+) and do one of the following.

- Select **From online map provider** to create an online map source. See "[Connecting to online map sources](#)" on page 67.
 - Select **From file** to import a map source from an image file. See "[Importing map sources from image files](#)" on page 69.
- 4 (Optional) Add layers of KML objects to your maps.
 - 5 Click **Apply** (✓).

After you finish

If your map sources are georeferenced, import the *KML objects* if you have any. See "[Importing KML objects](#)" on page 72. If not, publish your map sources in the Logical view. See "[Publishing map sources](#)" on page 74.

Differences between imported and online map sources

A *map source* is the background image on top of which Plan Manager displays the *map objects*. Map sources can be imported from graphic files and stored on your local drives or obtained online through third-party map providers.

The differences between imported and online map sources are as follows.

Characteristics	Imported (local) map source	Online map source
Map source	Any raster (JPG, PNG, BMP, TIFF) or vector (PDF) image file representing a site map or a floor plan. ^a	Online map provider. A GIS (Geographic Information System) that supports WMS (Web Map Service) protocol.
Typical use	Small scale maps (site map, building plans, floor plans).	Large scale maps (campus, city, country, world).
Cost	Cost of producing or acquiring the image files.	Depends on your provider. May require a one-time or recurrent license fee.
Updates	Done manually by re-importing an updated image file.	The online map provider is responsible for keeping the maps up to date.
Zoom levels^b	Defined at the time of import. Plan Manager ensures that you always get the optimum image resolution at any zoom level.	Depends on the map provider.
Map storage requirement	The storage requirement for your maps increases as you increase the zoom level.	None required.
Map scale	The map scale must be configured manually, either by indicating the distance between two points, or by georeferencing two points.	All WMS maps are georeferenced, therefore, all distances and proportions are as accurate as it can be.
Georeference	Yes, if you are importing a land map. But you must georeference the map yourself ^c .	Yes. You can accurately locate a position on the map based on its longitude and latitude.
Map objects^c	Yes. But KML objects are supported only if your map is georeferenced.	Yes. All types are supported.

a. See "Supported file formats for imported maps" in the *Release Notes*

b. See "Creating map sources" on page 64

c. See "Supported map objects" on page 17.

Connecting to online map sources

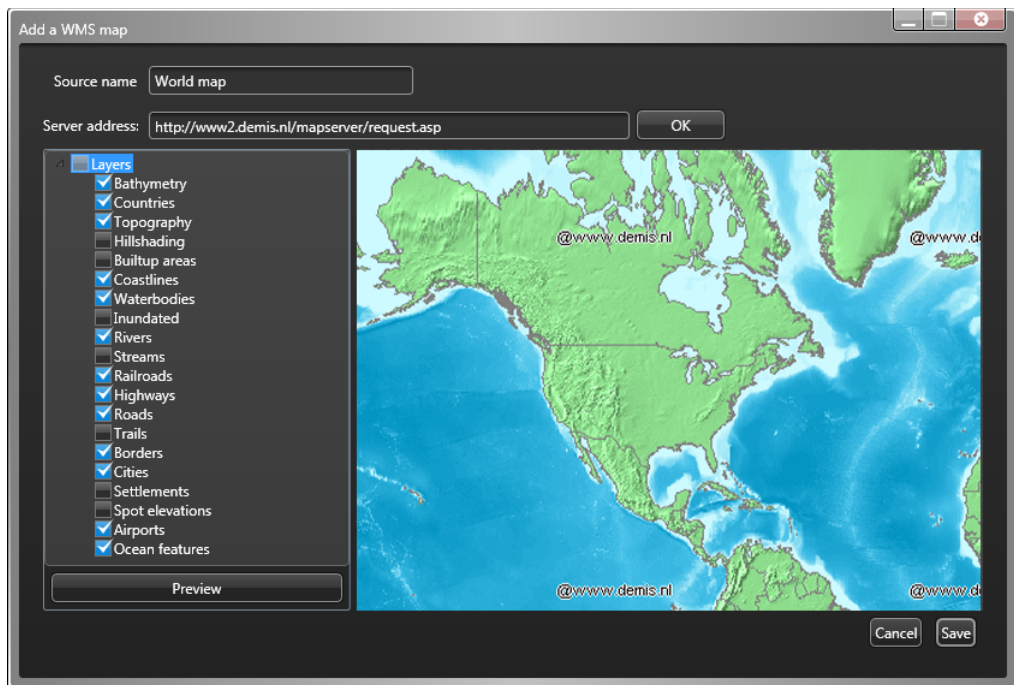
You can create online map sources by connecting Plan Manager to third-party map providers.

What you should know

Plan Manager uses the following parameters to connect to online map providers:

- *WMS version.* 1.1.0, 1.1.1, or 1.3.0
- *Image format.* PNG
- *Geocoordinate system.* EPSG 4326 (WSG 84)

To learn more about map sources, see "[Differences between imported and online map sources](#)" on page 66.



To create an online map source:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task, select any Plan Manager role (🔧), and then click **Organize maps**.
- 3 Under the list of map sources, click **Add a new map source** (+) and select **From online map provider**.

The *Add a WMS map* dialog box opens.

- 4 In **Source name**, enter the name of this map source.

- 5 In **Server address**, enter the URL of the map server and click **OK**.
A list of available layers (details on the map) appears in the left pane.
- 6 Select the layers you want to show on the map and click **Preview**.
A preview of the map with the selected layers appears in the right pane.
- 7 Continue to add and remove layers until you are satisfied with what you see.
- 8 Click **Save**.

A new online map source () is added to the list of available map sources.

After you finish

Import the *KML objects* if you have any. See "[Importing KML objects](#)" on page 72. If not, publish your map sources in the Logical view. See "[Publishing map sources](#)" on page 74.

Importing map sources from image files

You can create your own map source by importing it from an image file (raster or vector) representing a map or a floor plan.

What you should know

It is better to use vector files (PDF) than raster files (JPG, PNG, BMP, TIFF), as the former produce sharper images at all zoom levels. To learn more about map sources, see ["Differences between imported and online map sources"](#) on page 66.

To import a map source from an image file:

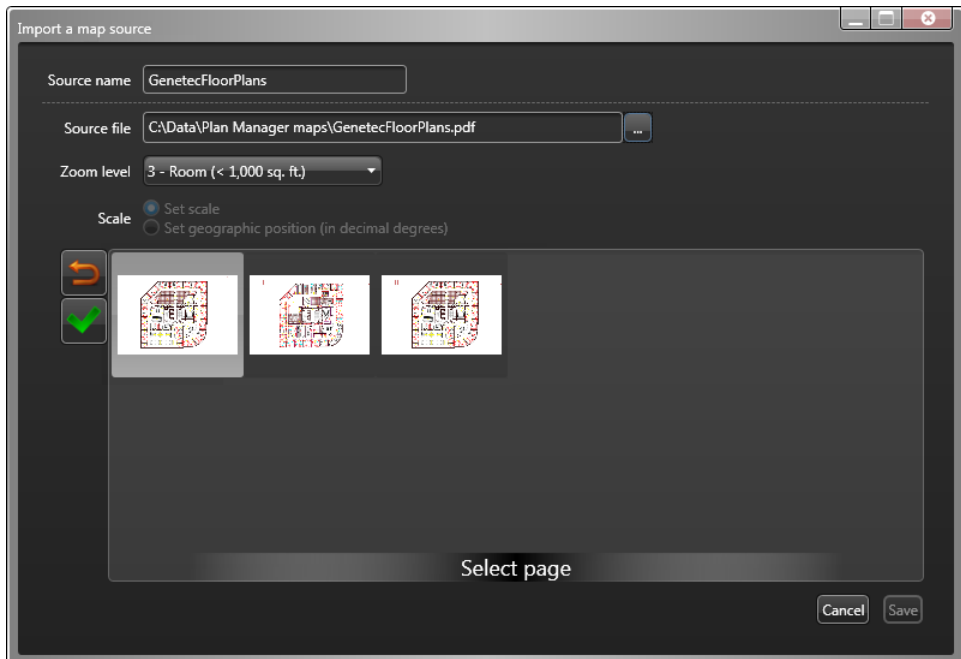
- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task, select any Plan Manager role (🔧), and then click **Organize maps**.
- 3 Under the list of map sources, click **Add a new map source** (+) and select **From file**.

The *Import a map source* dialog box opens.

- 4 In **Source name**, enter the name of this map source.
If you leave it blank, the name of the source file will be used as default.
- 5 In **Source file**, enter the path to the image file you want to import.

Alternatively, you can browse (...) for the file, or drag a file from *Windows Explorer*.

A preview of the file content appears. A PDF file may contain multiple pages.

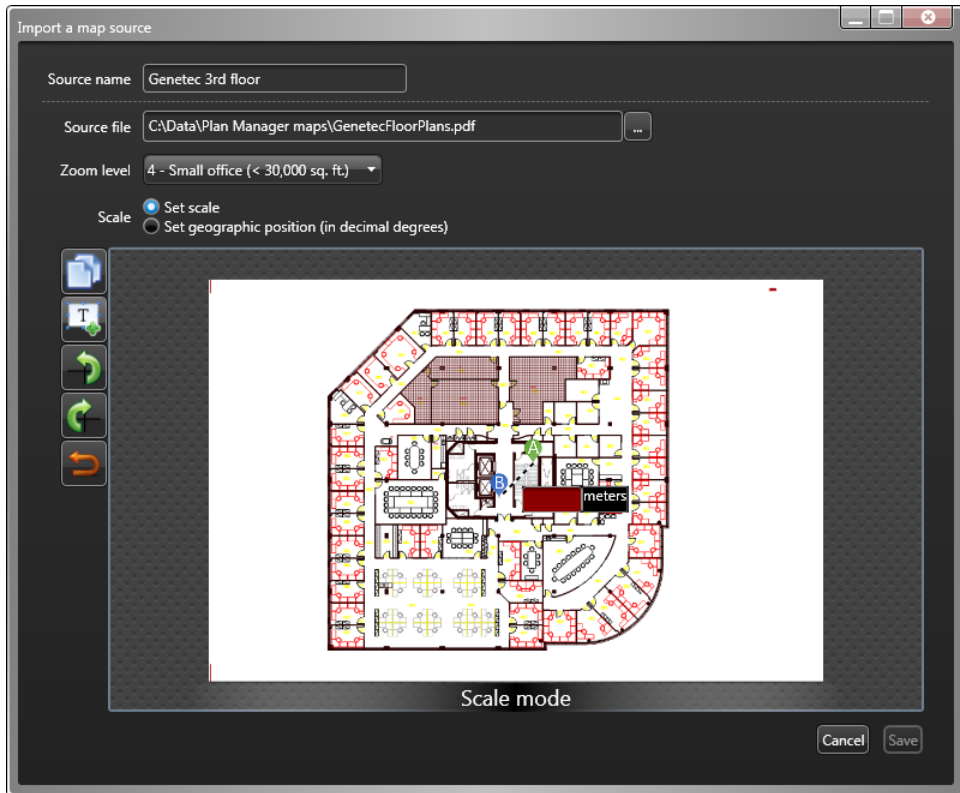


- 6 Click the **Zoom level** drop-down list and select the zoom level (2 to 10) that best describes the scale of your map.

The zoom level says how many times you can zoom in from the whole map view. A higher zoom level allows you to get closer to your map and view more details. The *Map Generator* (server module) creates a different set of map tiles for each zoom level you require.

NOTE The more zoom levels you need, the longer it takes to import the file, and the more storage it requires.

- 7 Select the page you want to import and click **Select page** (✓).




- 8 Use the graphic tools found in the left margin to modify the image if necessary.
- 9 Set the map scale.

Do one of the following:

- Select **Set scale** (default) and enter the distance between two points (marked A and B) on the map. Use this method if you do not have any GPS references on the map, such as a floor plan. Move the points with the mouse if necessary.
- Select **Set geographic position (in decimal degrees)** and enter the GPS coordinates (latitude and longitude) of two points (marked A and B) on the map.

It is recommended to use this method when geocoordinates are available. Georeferenced maps offers you more flexibility, such as the use of KML objects and the ability to preserve the positions of your map objects on the map even when the map image is updated.

10 Click **Save**.

A new imported map source () is added to the list of available map sources. If you need to update an imported map source, see ["Modifying imported map sources"](#) on page 71.




After you finish

If your map sources are georeferenced, import the *KML objects* if you have any. See ["Importing KML objects"](#) on page 72. If not, publish your map sources in the Logical view. See ["Publishing map sources"](#) on page 74.

Modifying imported map sources

You can update your imported map sources when newer versions of the source files become available. You can also increase the level of details on your maps by re-importing the source files with a higher zoom level.

To modify an imported map source:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task, select any Plan Manager role () , and then click **Organize maps**.
- 3 Select the map source () you want to modify and click **Edit** () .
The *Edit map source* dialog box opens.
- 4 To import a new source file, click **Change**, browse to the new source file and click **Save**.
- 5 To increase the zoom level, select a new zoom level and click **Save**.

Increasing the zoom level gives you more details, but requires more storage space.

IMPORTANT Whenever you change the background image by changing the source file or re-cropping the image, always recheck your map scale settings. If you have already published this map source, recheck the positions of your *map objects* on the map.

Importing KML objects

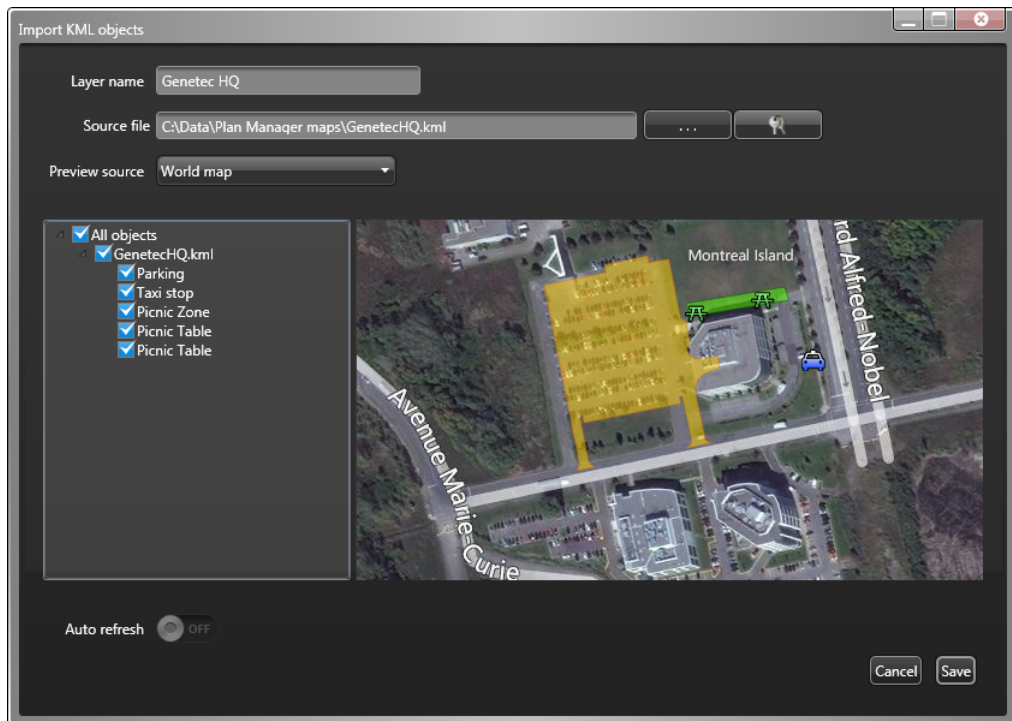
You can import KML (Keyhole Markup Language) objects to represent static objects (such as parks, buildings, and so on) or dynamic objects (such as moving objects or animated diagrams).

Before you begin

You must have at least georeferenced map sources. A georeferenced map source can be any online map source or an imported map source that you georeferenced. See "[Connecting to online map sources](#)" on page 67 and "[Importing map sources from image files](#)" on page 69.

What you should know

KML objects are imported in groups called layers. Once a KML object layer is created, you can selectively display it on any georeferenced map in Plan Manager.



Plan Manager can update dynamic KML objects at regular interval so you can track their GPS position (such as a vehicle) or status (such as the radioactivity level of a nuclear plant) in real time on the map. For help in the evaluation or custom development of this feature, contact your Genetec representative.

To import a layer of KML objects:

- 1 Log on to Security Center with Config Tool.

- 2 Open the *Plugins* task, select any Plan Manager role (🔧) and click **Organize maps**.
- 3 Under the list of imported layers, click **Add a new layer** (+).
The Add WMS maps dialog box opens.
- 4 In **Layer name**, enter the name of this KML object layer.
- 5 In **Source file**, enter the path to the KML file or click (⋮) to browse to the file.
A KML file uses either the extension “kml” or “kmz”.
A list of KML objects available in the file appears in the left pane.
- 6 If the KML file is password protected, click (🔑) and enter the username and password.
- 7 Click **Preview source** to select the map source to view your KML objects with.
You can view the KML objects with any georeferenced map source.
- 8 In the left pane, select the KML objects you wish to import.
The selected KML objects instantly appear in the preview pane.
- 9 If your KML objects represent dynamic objects (for example moving vehicles), turn on **Auto refresh** and set the refresh rate in terms of hour (H), minutes (M), and seconds (S).



The KML objects will be refreshed at the set interval.

For help on configuring KML objects to track dynamic objects, contact your Genetec representative.

- 10 Click **Save**.


Publishing map sources

You must publish your *map sources* in the Logical view as *maps* before Security Desk operators can use them.

Before you begin

Install Plan Manager Client on all Security Desk workstation where Plan Manager will be used. See "[Installing Plan Manager Client](#)" on page 49), and create the *map sources*, which are the background images used for your maps. See "[Creating map sources](#)" on page 64.

What you should know





Map sources are published as *Plan Manager maps* () in the Logical view (hierarchy of all viewable entities in Security Center).

Each Plan Manager map is characterized by the following:

- **Map source.** Map background image.
- **Default map view.** Map view (position and zoom level) used to display the map when no specific map view is specified.
- **Map objects.** Map objects are graphical objects displayed on the map, such as cameras, doors, or hyperlinks, that allow you to monitor and control your Security Center system, or to navigate to other maps. Map objects belong to a specific map, not to the map source. The same map source can be published multiple times as different maps, each with a different name, default map view and set of map objects.

NOTE A *Plan Manager map* is a special type of *tile plugin*.

To publish a map source:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Logical view* task.
- 3 Select an area and click **Publish a map** ().
- 4 In the dialog box that appears, enter the map name and click **OK**.
A new map entity () is created under the selected area.
- 5 If it is the first map you publish, select the **Properties** tab and click **Modify**.
- 6 Browse to the file *Genetec.PlanManager.TilePlugin.dll* file and click **Open**.
The default path is *C:\Program Files (x86)\Genetec Plan Manager Client\AppData\Tile Plugin* on a 64-bit computer.
- 7 Click **Apply** () and select the **Map** tab.
- 8 Select a map source (background image), and select the layers of KML objects you want to include in this map.
- 9 Using the mouse, move and zoom in to the location you want as the default map view, then click **Default view** ().

10 Click **Apply** (✔).

After you finish

Using Security Desk, configure the *map objects*. See "[Map object configuration](#)" on page 83.

Granting privileges for using Plan Manager

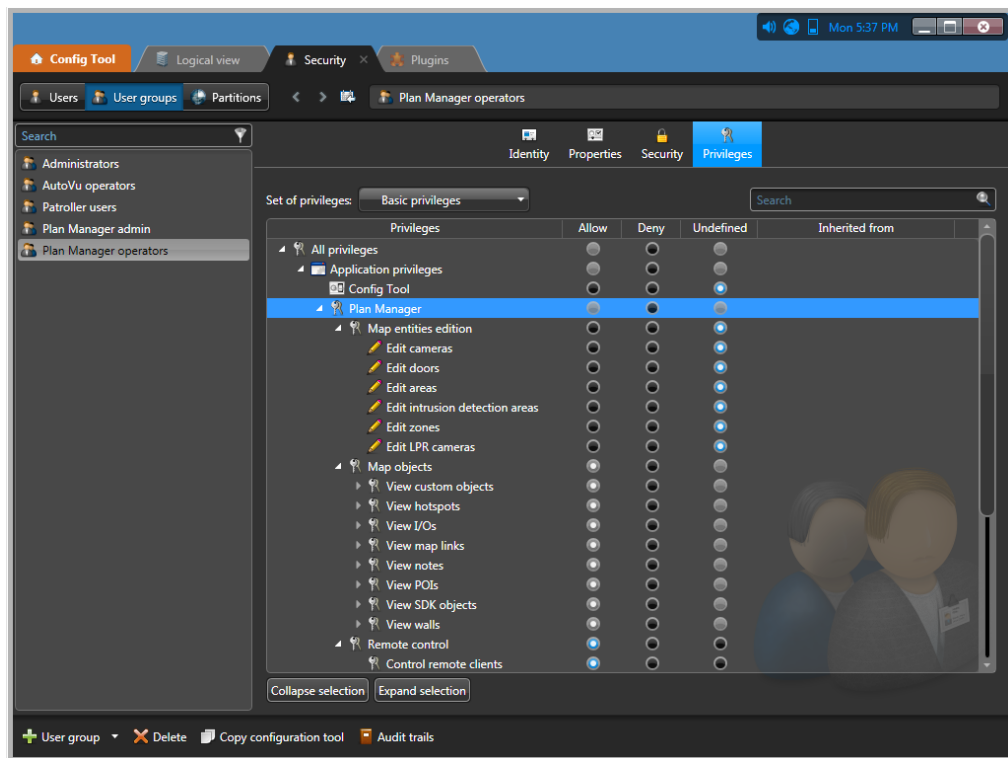
You must grant new privileges to Security Desk users to allow them to use Plan Manager.

What you should know

When you install Plan Manager, new Plan Manager-specific privileges are added. They are grouped under *Application privileges > Plan Manager*. These privileges are set to *Undefined* by default.

To grant privileges for using Plan Manager:

- 1 Log on to Security Center with Config Tool and open the *Security* task.
- 2 Update the privileges of the user groups according to their needs.



The Plan Manager privileges are divided into three groups:

- *Map entities edition*. Privileges that allow users to create and edit *map objects* linked to Security Center entities (cameras, doors, areas, intrusion detection areas, zones, and LPR cameras). The privileges to view and use these map objects in Plan Manager depend on the user's privilege to view and use the linked Security Center entities.

- *Map objects.* Privileges that allow users to view or edit the *map objects* that are exclusive to Plan Manager. These are *custom objects* (include the *KML objects*), *hotspots*, *I/O objects*, *map links*, *notes*, *points of interests (POI)*, *SDK objects*, and *walls*.
- *Remote control.* Privileges that allow users to control the map navigation on a remote Security Desk workstation, or to be remotely controlled.

After you finish

Test your system configuration, making sure each user group does see the objects they need to see, and can perform the operations required by their work.

Related topics:

- ["Supported map objects" on page 17](#)

Configuring Plan Manager role failover

You can protect the Plan Manager role against hardware failures by assigning standby servers to the role.

Before you begin

Install Plan Manager Server on all the servers you wish to use as a standby server for the Plan Manager role.

What you should know

Both your Plan Manager database and map folder must be hosted on servers other than those hosting the Plan Manager roles. See ["What you should know about Plan Manager role failover"](#) on page 79.

To configure the Plan Manager role failover:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task, select the Plan Manager role (🔧) and click **Resources**.
- 3 Under the Servers list, click **Add an item** (+) and select a server where Plan Manager Server has been installed.
- 4 After a failover occurs, if you want the primary server to take control of the role once it is restored, select the **Force execution on highest priority server** option.

By default, the role remains on the secondary server after a failover occurs to minimize system disruptions.

- 5 Configure the Plan Manager database.

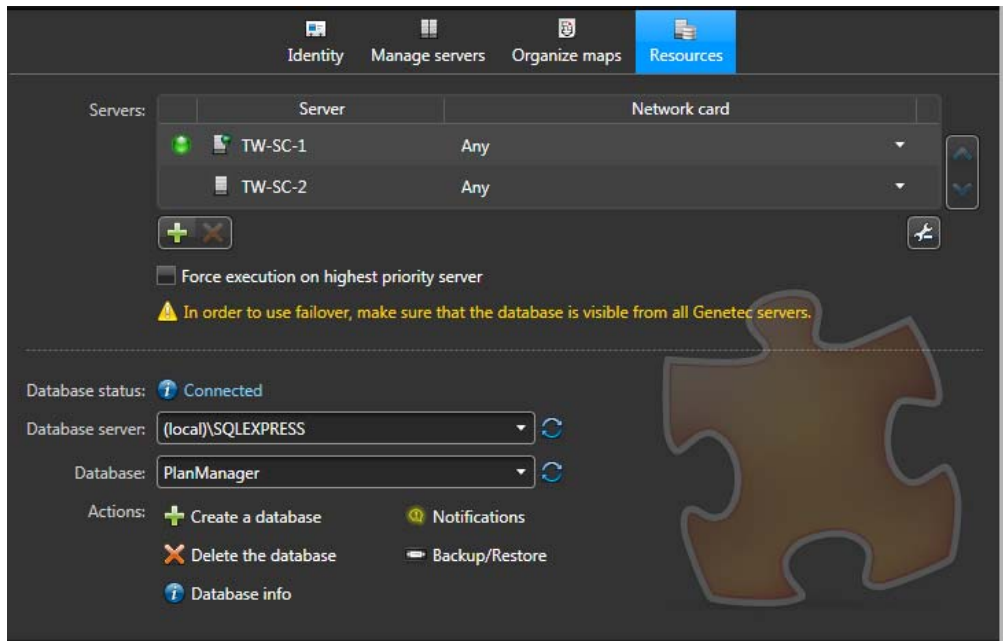
If this role hosts the Data Server, make sure the database server is located on a remote server. If not, you must backup the existing database and restore it on the remote database. See ["Backing up the map database"](#) on page 81.

If this role does not host the Data Server, you do not need to be concerned with the database settings. The database will not be used.

- 6 Make sure the map folder is accessible from all the standby servers you configured.
 - a Move the map folder to a location that is accessible by all standby servers.
 - b Click the **Manage servers** tab.
 - c Enter the new path in the **Map folder** field.
 - d Click **Save and restart servers**.

What you should know about Plan Manager role failover

You configure Plan Manager failover from the Plan Manager role *Resources* tab.



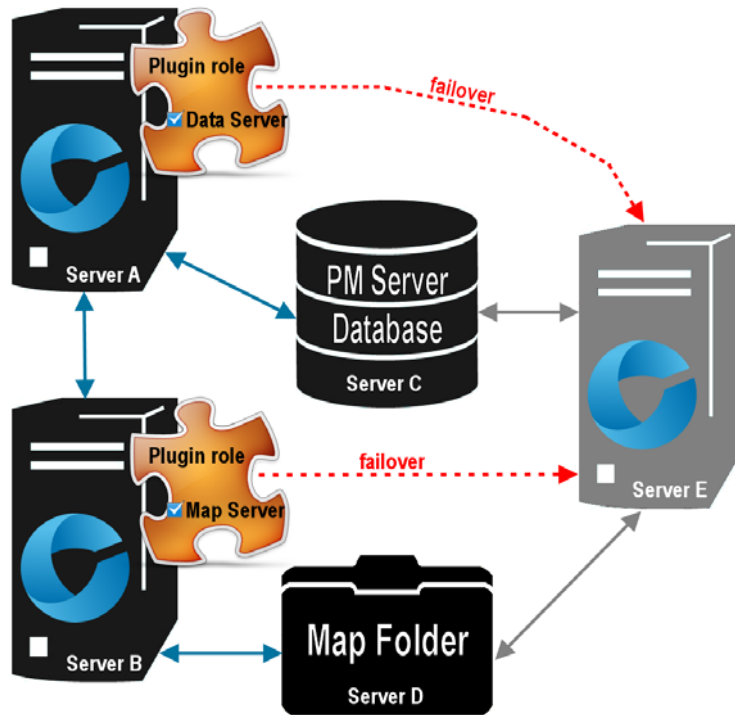
You must also ensure the following:

- If the Plan Manager role hosts the *Data Server*, your database server must be hosted on a server different than all standby servers for the role. For information on how to configure a remote database server, see “Connect roles to a remote database server” in the *Security Center Administrator Guide*.
- If the Plan Manager role hosts the *Map Server*, the *map folder* must be located on a shared network drive that all standby servers can access, both read and write.

Example

In the following example, the Data Server and the Map Server are assigned to two separate roles, each hosted on a different server (A and B). The Plan Manager database and the map folder are also hosted on separate servers (C and D). Server C and server D do not need to have Security Center installed.

Since it is unlikely to have both servers A and B to fail at the same time, a single server (E), is used as the standby for both Plan Manager roles. Server E must have access to the database server (C) and the map folder server (D).



Backing up the map database

To protect your map configuration, you must back up both the map database and the Security Center database. The former keeps the configuration of your map sources and map objects, and the latter keeps the configuration of your map hierarchy and the entities referenced by your map objects.

What you should know

You can back up the map database (alias Plan Manager database) from any Plan Manager role, not necessarily from the one hosting the Data Server. The Map Server refers to the Data Server to get the location of the map database. When you backup the map database, the map folder is also backed up at the same time.

To back up the map database:

- 1 Log on to Security Center with Config Tool.
- 2 Open the *Plugins* task, select any Plan Manager role (🔧) and click **Resources**.
- 3 Click **Backup/Restore** (📁).
- 4 In the *Backup/Restore* dialog box, enter the **Backup folder** and click **Backup now**.
A message indicating that the map folder is also going to be backed up appears.
See "[Files created by the map database backup](#)" on page 81.
- 5 Click **OK** to close the message box.
- 6 Click **Close** to close the *Database actions* message box.
- 7 Click **OK** to close the *Backup/Restore* dialog box.
- 8 Back up the Security Center database. See the *Security Center Administrator Guide*.

After you finish

To restore the map database, see "[Restoring the map database](#)" on page 82.

Files created by the map database backup

Three files are created in the specified backup folder:

- **MapFolder-<date>-<time>.zip**. The zipped map folder content. You can restore it as is to any new map folder.
- **MapFolderWithBackup.xml**. Contains the information pairing the backup file (.BAK) with the zipped map folder file (.ZIP).
- **<database name>_ManualBackup_<date>.bak**. The actual database backup file.

Restoring the map database

To restore your map configuration, you must first restore the Security Center database (if necessary), then restore the map database with the map folder.

Before you begin

If your map database backup file is zipped, extract the .BAK file from the zip file.

What you should know

You need all three files created during the backup to restore the Plan Manager database. See "[Backing up the map database](#)" on page 81.

To restore the map database:

- 1 If necessary, restore the Security Center Directory database first. For more information, see the *Security Center Administrator Guide*.
- 2 Log on to Security Center with Config Tool.
- 3 Open the *Plugins* task, select any Plan Manager role (🔧) and click **Resources**.
- 4 Click **Backup/Restore** (📁).
- 5 In the *Backup/Restore* dialog box, enter the **Restore file** and click **Restore now**.
IMPORTANT If you chose **Compress backup file** during backup, extract the backup file (.BAK) from the zip file before restoring it. You cannot restore the zip file.
- 6 Click **Close** to close the *Database actions* message box.
- 7 Click **OK** to close the *Backup/Restore* dialog box.

The map folder content (.zip) is restored to your current map folder configured for your Map Server. See "[Assigning server modules to the Plan Manager role](#)" on page 61.

Map object configuration

This section includes the following topics:

- ["Adding map objects to your maps"](#) on page 84
- ["Adjusting the icon size, position, and rotation angle"](#) on page 87
- ["Drawing polygons and polylines"](#) on page 90
- ["Configuring map object states"](#) on page 95
- ["Changing the map object image"](#) on page 99
- ["Linking macros to map objects"](#) on page 101
- ["Saving map object settings to templates"](#) on page 103
- ["Adding cameras to your maps"](#) on page 105
- ["Adding hotspots to your maps"](#) on page 107
- ["Adding walls to your maps"](#) on page 112
- ["Adding doors to your maps"](#) on page 114
- ["Adding map views to your favorites"](#) on page 116
- ["Adding map links to your maps"](#) on page 117
- ["Adding areas to your maps"](#) on page 120
- ["Adding LPR objects to your maps"](#) on page 122
- ["Adding I/O objects to your maps"](#) on page 125
- ["Adding points of interest to your maps"](#) on page 132
- ["Editing multiple map objects simultaneously"](#) on page 133

Adding map objects to your maps

You must add map objects to Plan Manager maps to make them interactive. Map objects allow Security Desk operators to monitor and control their Security Center system and to navigate through maps.

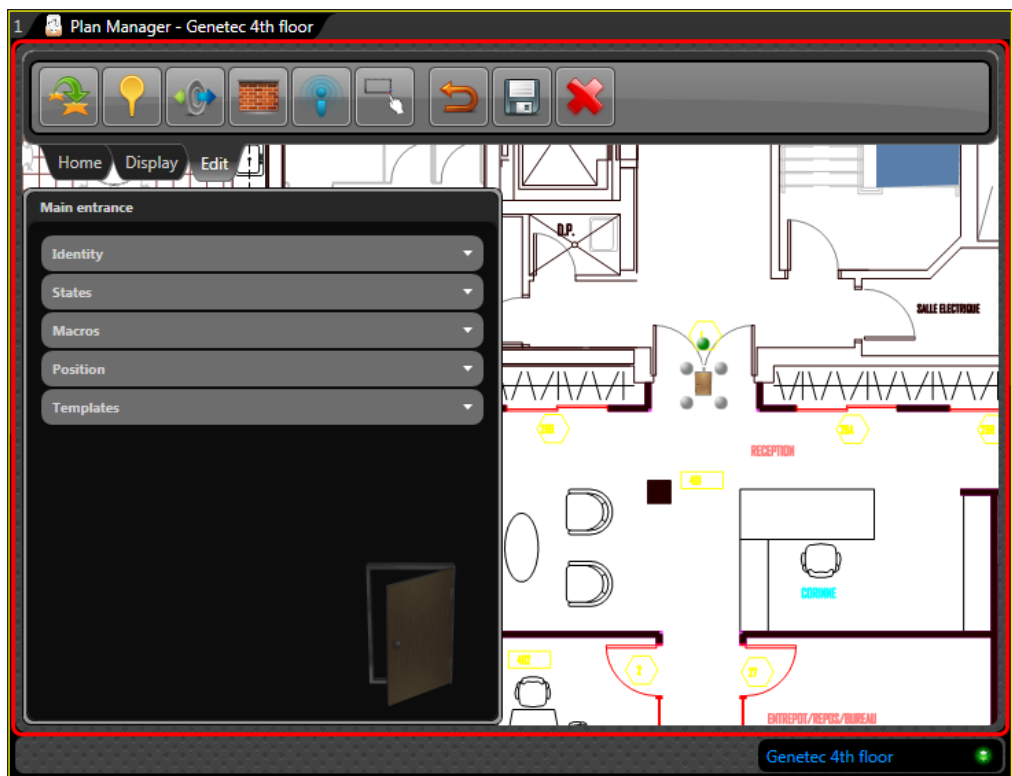
Before you begin

Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74.

What you should know

Map objects are associated to *maps*, not to *map sources*. If you publish the same map source under different map names, the objects you add to one map are only for that map. They will not appear on the other maps, even though they share the same source.


Maps are created in Config Tool, but map objects are created in Security Desk. You use Plan Manager workspace in *Edit mode* to add map objects. You know you are in Edit mode when you see a red border around your Plan Manager workspace.



For a complete list of map objects you can create, see "[Supported map objects](#)" on page 17.

To add a map object to your map:

- 1 Open the Plan Manager workspace. See "[Opening the Plan Manager workspace](#)" on page 3.
- 2 Navigate to the location on the map where you want to add the map object. See "[Ways to navigate through maps](#)" on page 19.
- 3 In the Plan Manager tile, select the Edit ribbon.
A thick red border appears around the Plan Manager workspace.
- 4 Do one of the following:
 - To represent a Security Center entity on the map:
From the Logical view, click the entity you want and drag it to the location you want it to appear on the map.
 - To add one of the exclusive Plan Manager objects to the map:
From the Edit ribbon, click the button corresponding to the map object you want, then click the location you want it to appear on the map.
- 5 Based on how the map object is represented on the map, do one of the following:
 - If the map object is represented by an icon (such as a camera or a door), adjust its size, position, and orientation on the map with the mouse. See "[Adjusting the icon size, position, and rotation angle](#)" on page 87.
 - If the map object is represented by a polygon (such as an area) or by a polyline (such as a wall), draw connected line segments on the map. See "[Drawing polygons and polylines](#)" on page 90.
- 6 In the left panel that appears, configure the map object properties.
The properties are grouped by categories. Click a group heading to open it.
The common property groups are:
 - *Identity*. Name and possibly other properties that describe the map object.
 - *Position*. Properties affecting the general appearance of the object on the map. See "[Adjusting the icon size, position, and rotation angle](#)" on page 87.
 - *States*. Sets of properties (image, image size, color, transparency, blink rate) representing each possible state of the map object. See "[Configuring map object states](#)" on page 95.
 - *Macros*. (Optional) Macros linked to the map object. In Pan mode, they appear in the right-click menu of the map object. See "[Linking macros to map objects](#)" on page 101.
 - *Template*. Current template selected for this map object. Templates help you ensure a consistency in the look and feel of your map objects. Save the current configuration of the map object in a template so it can be reapplied to other map objects of the same type. You can define multiple templates for a given type of map objects.

For more information, see the topics related to each specific object type.
- 7 From the Edit ribbon, click **Save changes** ().
If a *template* is currently applied to your map object, you'll be prompted with three choices:
 - *Cancel*. Do not save your changes.

- *Save object only.* Only save the changes to you current object without updating any template. If the map object is currently following a template, it will stop doing so.
- *Save template and object.* Save your changes to both the object and its template. Other objects on the map that follow the same template are updated as well.

For more information on using templates, see "[Saving map object settings to templates](#)" on page 103.

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the map object you just added.

Adjusting the icon size, position, and rotation angle

For map objects represented by icons (such as cameras and doors), you can adjust their sizes, positions, and rotation angle on the map with the mouse.

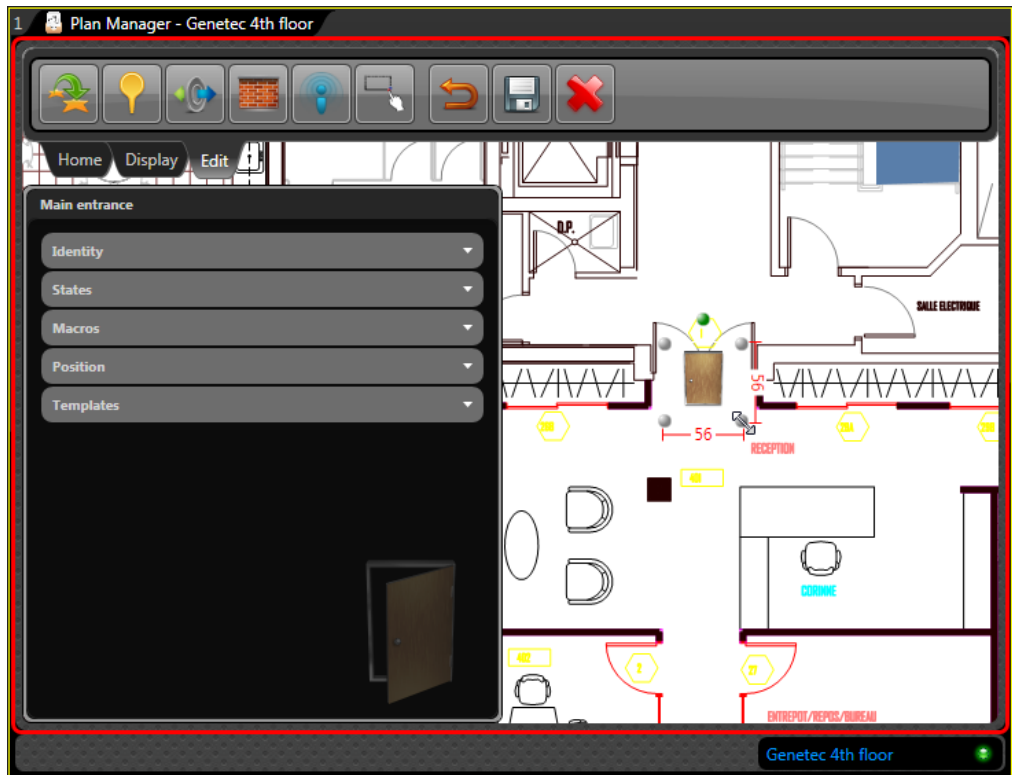
What you should know

The map objects that are represented by icons are: *fixed cameras*, *PTZ cameras*, *LPR cameras*, *doors*, *zones*, *I/O objects*, *hotspots*, and *points of interest*. For the full list of map objects you can create, see "[Supported map objects](#)" on page 17.

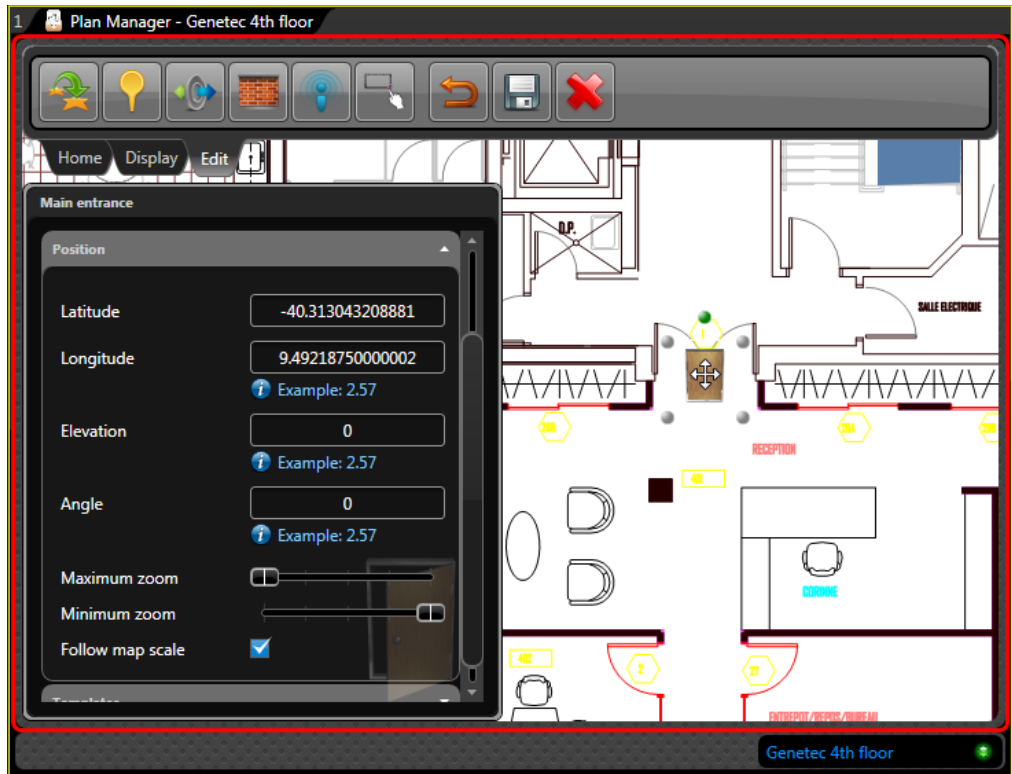
You can use different icons to represent different states of the map object (for example, *open* and *closed* doors). You can also adjust the icon size for each state individually if necessary. See "[Configuring map object states](#)" on page 95.

To adjust the map object icon on the map:

- 1 To resize the icon size, drag one of the grey handle at the four corners of the icon.
The dimensions in pixels appear in red. When resizing with the mouse, the proportion ratio of the image does not change.
- 2 To adjust the icon position, click the center of the icon and drag.




- 3 To rotate the icon, drag the green handle on top of the icon.
- 4 To change the zoom level of the map, rotate the mouse wheel.
- 5 Open the *Position* property group and set the properties that apply.



The common position properties are:

- *Latitude, Longitude.* Center coordinates of the icon on the map. Unless your map is georeferenced, use the mouse to adjust the icon position.
- *Angle.* Orientation angle (0 to 355 degrees) of the icon on the map. You can also grab the green handle to rotate the image.
- *Maximum zoom.* The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
- *Minimum zoom.* The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.
- *Follow map scale.* Indicates whether the icon size varies with the map scale (or zoom level). The current icon size and zoom level are used as reference.

NOTE Different properties may be required, depending on the object type.

- 6 From the Edit ribbon, click **Save changes** ().

After you finish

Continue with the procedure where you came from.

Drawing polygons and polylines


For map objects represented by polygons (such as areas) or polylines (such as walls), you need to draw the connected line segments on the map.

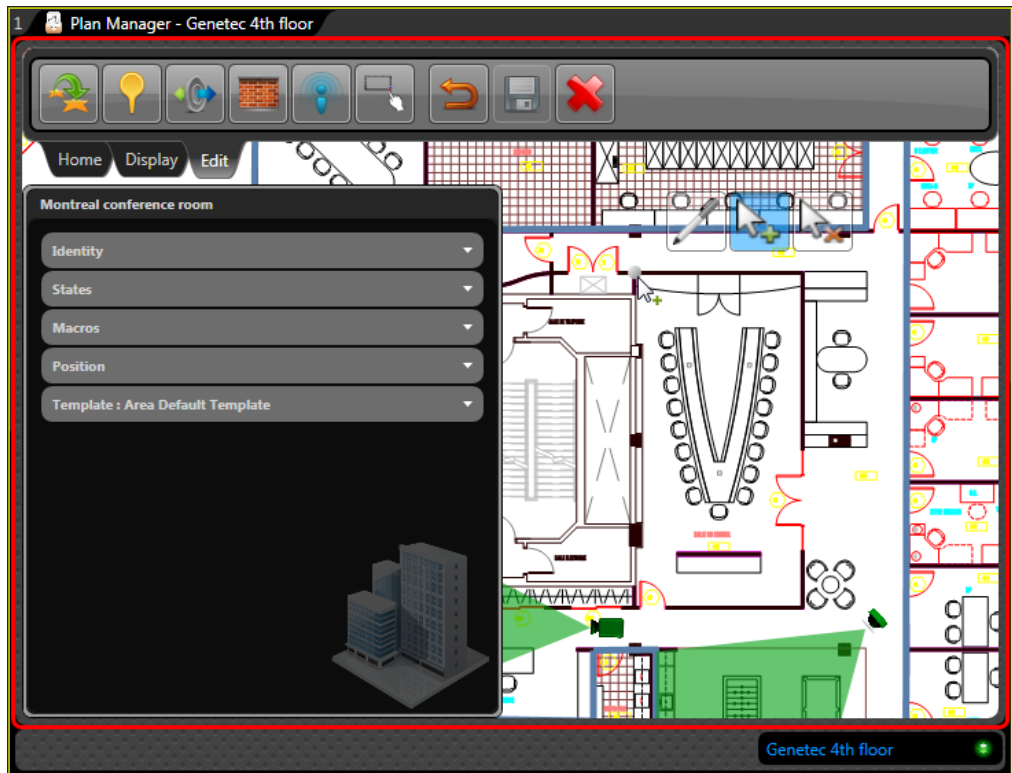
What you should know

The map objects represented by polygons are: *areas*, *intrusion detection areas*, and *map links*. The map objects represented by polylines are *walls*. You follow the same procedure to draw polygons and polylines. The only difference is that polygons are closed shapes, so the first and last dot are always connected. To close an area with a polyline, you need to add the last dot at the location of the first one.

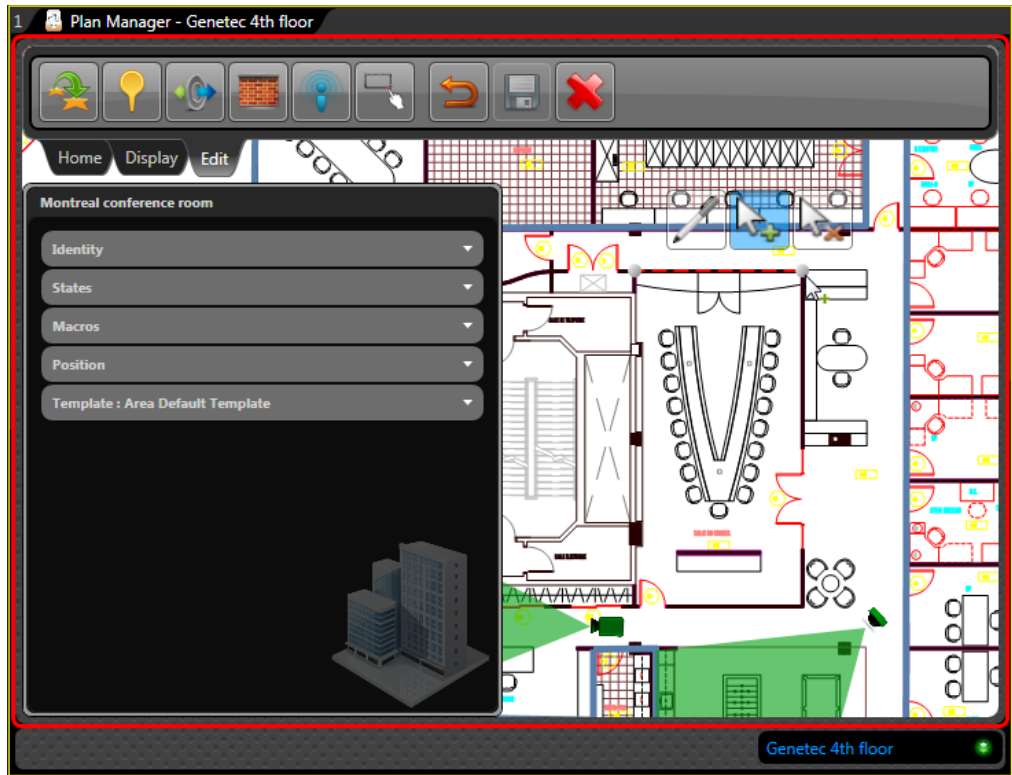
NOTE The following screen captures illustrate the drawing of a polygon.

To draw a polygon on the map:



- 1 In the Plan Manager tile in Edit mode, click , and then click the location on the map where you want the first corner of your polygon to appear. A grey dot appears where you clicked.



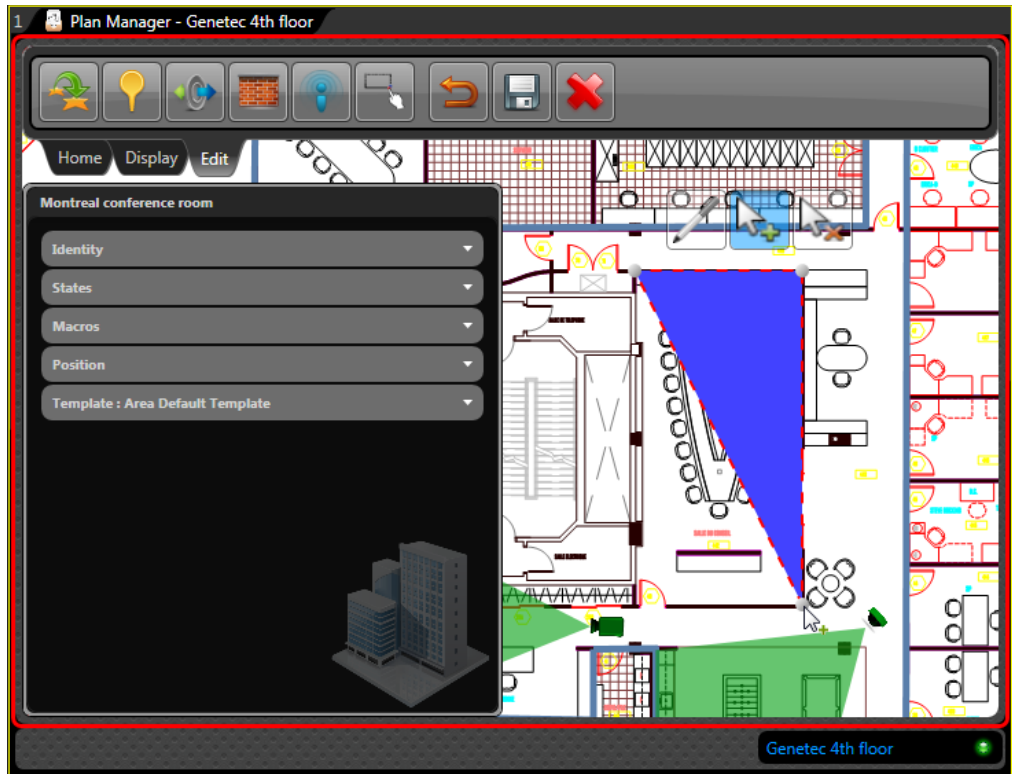
- 2 Click the map again to add the second corner of the polygon you want to draw.
A second dot appears where you clicked.



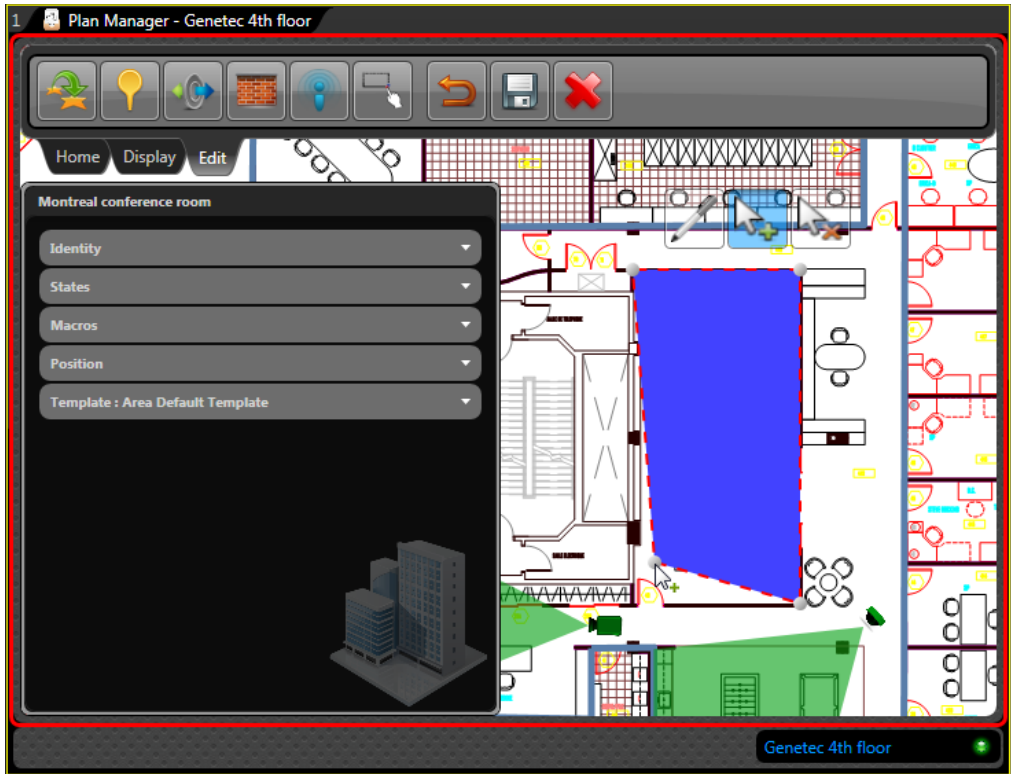
IMPORTANT You can add as many dots as necessary to define the polygon. Once you start making dots around the perimeter, you cannot go back and insert a dot between existing dots. If you need to go back and add dots between already existing dots, you must delete all the dots that were inserted after that point.


- a Click  and then click the existing dots to delete them.
- b Click  and then click on the map where you want to insert the new dot.
- c Click on the map to continue adding dots around the perimeter.

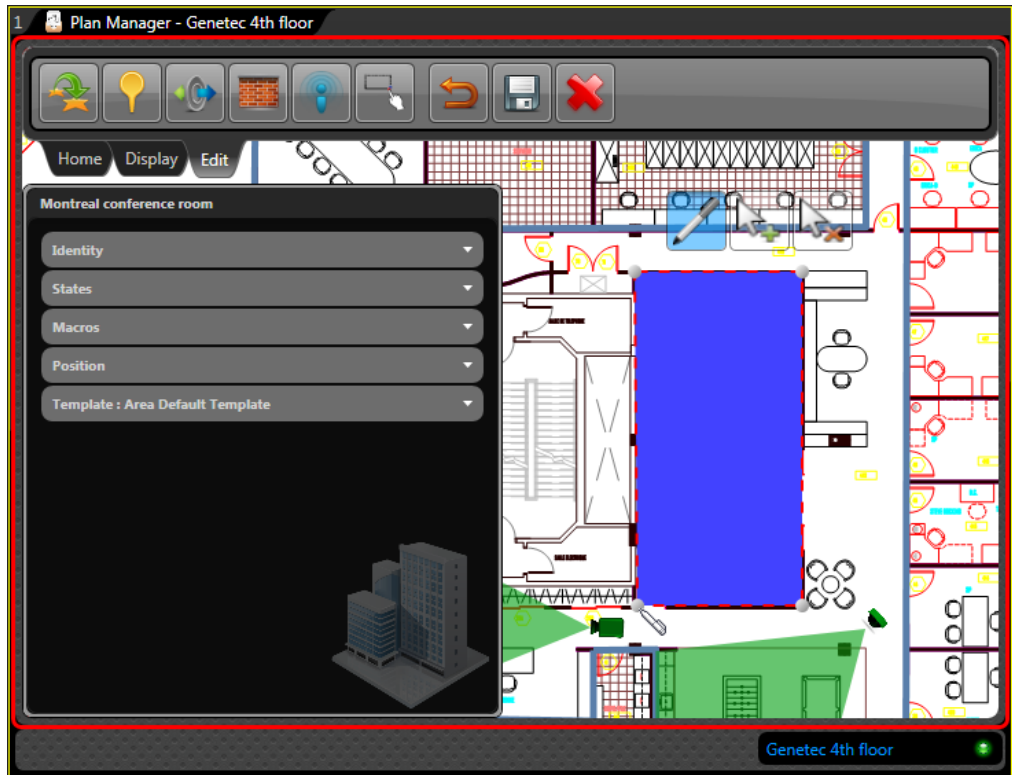
- Click on the map again to add the third corner of the polygon you want to draw. A colored area appears. You need at least three dots to define a polygon.




- Click the map to add the fourth corner of the polygon. Most areas are rectangular in shape.



If you made a mistake, click  and then drag the corner to the correct position.



5 From the Edit ribbon, click **Save changes** ()

After you finish

Continue with the procedure where you came from.

Configuring map object states

Configure how the map object appears on the map by configuring the map object states.

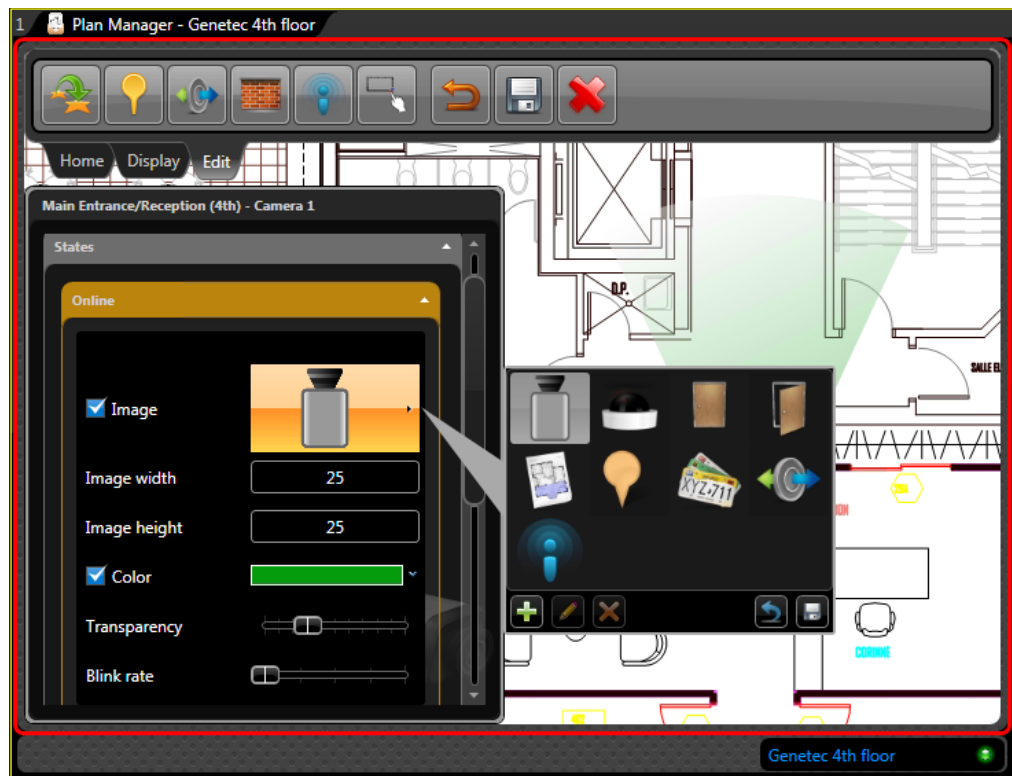
What you should know

The state of the map object usually follows the state of the Security Center entity it represents. The standard states for most map objects are *Online*, *Offline*, and *Alarm*. Each state is defined by six display properties: *Image*, *Width*, *Height*, *Color*, *Transparency*, and *Blink rate*.

To configure a map object state:

- 1 In the property panel, open the *States* property group.
- 2 Click the state you want to configure.

The following screen capture shows the *Online* state for a fixed camera.



- 3 Select the image corresponding to the selected state.

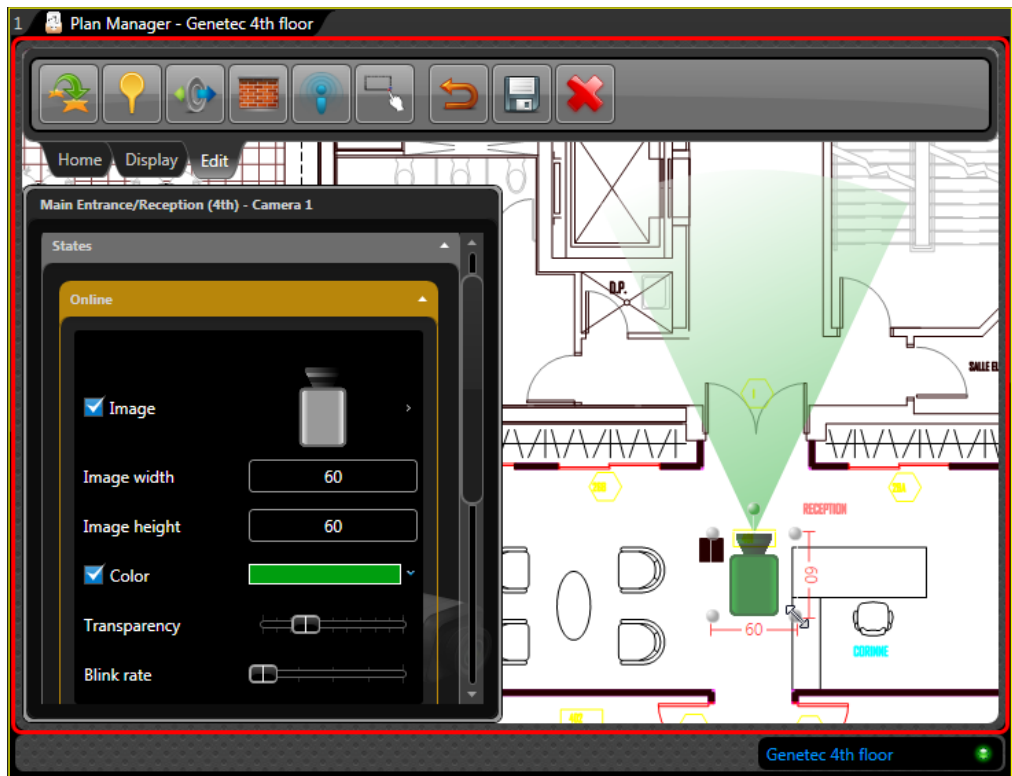
You can use different images to represent different object states. Clear the **Image** option if you do not want any image. When no image is defined for a given state, the map object keeps the image of the previous state it was in.

To change the image, click the image preview and select a different image from the image library browser. The image library is stored in the Plan Manager database. If none of the existing image is suitable, you can add new ones to your image library. See "[Adding new images to your Plan Manager image library](#)" on page 100.

4 Adjust the image size.

NOTE Changing the image size here only affects the size of the image for the current state. To change the image size for all the states at once, close the *States* property group and and change the image size on the map. It might be necessary to change the image size for an individual state when it uses a different image than the others.

The following screen capture shows the example of a fixed camera.



NOTE The orientation of the image always applies to all states.

5 Select the color corresponding to the selected state.

The color is applied to the non-transparent area of the image. Often, the change of state is only indicated by a change of color. For example, the default color used for the *Offline* state is red.

6 Select the transparency (0 to 1) corresponding to the selected state.

The transparency applies to the non-transparent area of the image. The value 0 means completely opaque, and 1 means completely transparent.

- 7 Select the blink rate (0 to 2) corresponding to the selected area.

The value indicates the number of times the image blinks per second. A blinking image is useful to attract attention. By default, the *Alarm* state uses a blink rate of 0.6.

- 8 From the Edit ribbon, click **Save changes** (💾).

After you finish

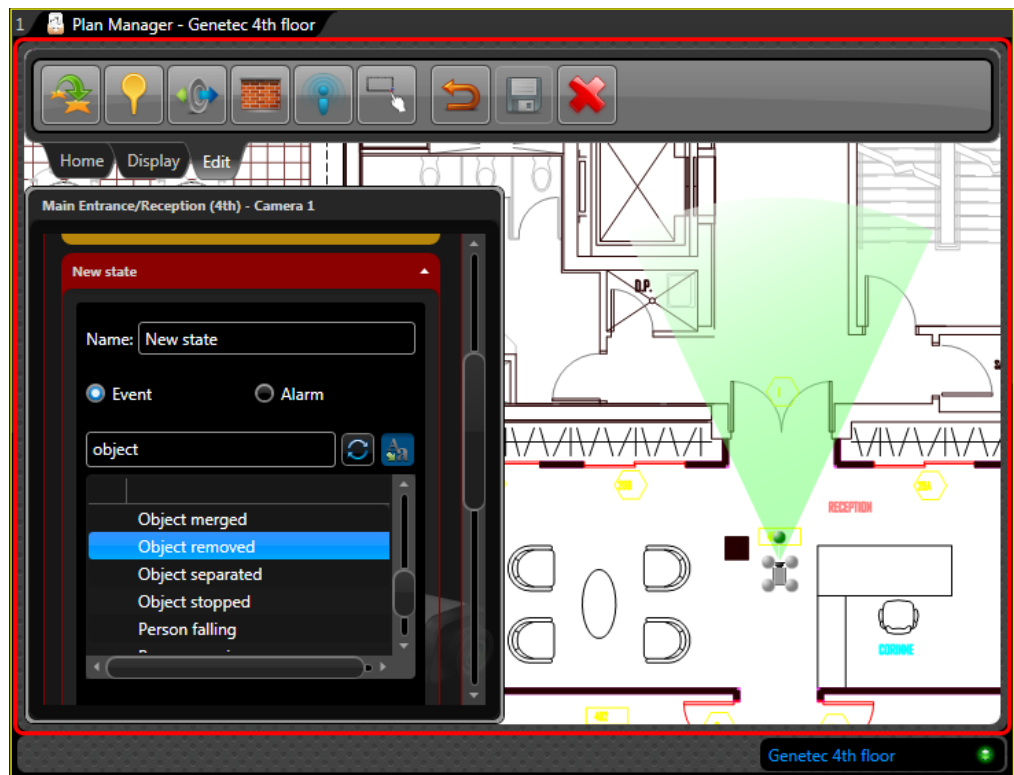
Add custom states if necessary. See "[Adding a custom state](#)" on page 97) or resume the procedure you came from.




Adding a custom state

You can add custom states to a map object to monitor specific events or alarms.

To add a custom state:

- 1 At the bottom of state list, click **Add** (+).
- 2 Click the **New state** that appears.



- 3 Enter the name for the new state.
- 4 Do one of the following:
 - Select **Event** to link this state to an event.
 - Select **Alarm** to link this state to an alarm.The events or alarms available in your Security Center system are listed.
- 5 Enter a text in the search field above the list and click  to filter it.
For events, click **Change event display name** () to alternate the display between the long and short display names.
- 6 Select the desired event or alarm.
- 7 Configure the rest of the state properties (image, image size, color, transparency, blink rate).
- 8 From the Edit ribbon, click **Save changes** ().

After you finish

Resume with "[Configuring map object states](#)" on page 95.

Changing the map object image

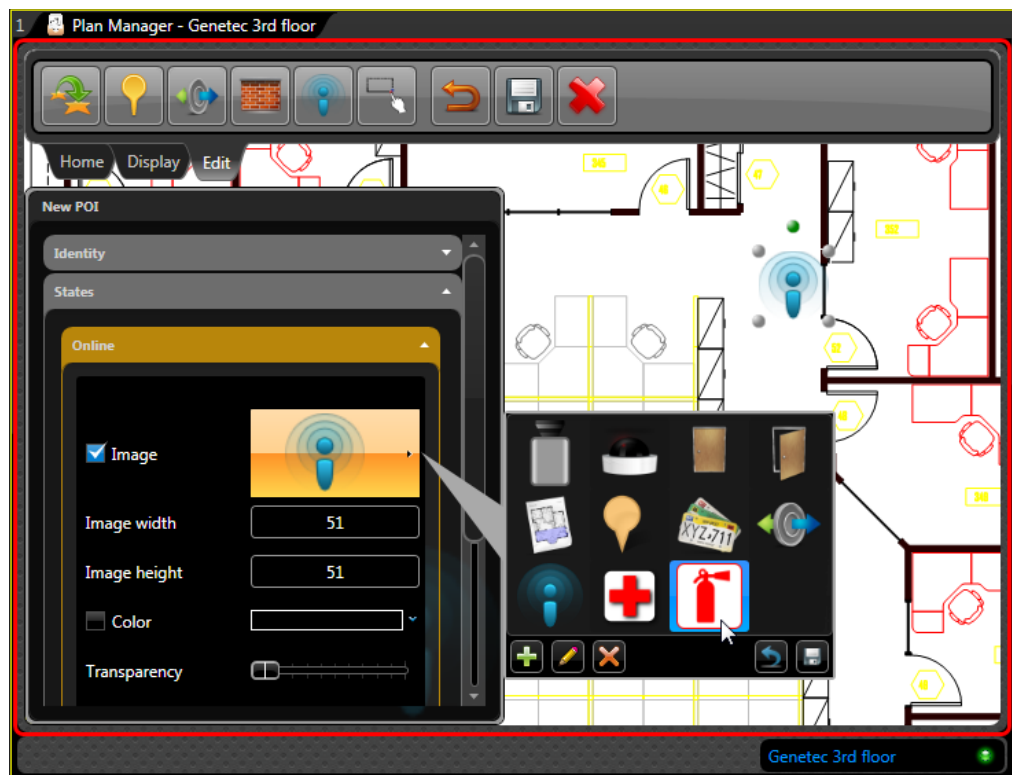
You can change the image representing a map object by changing the images associated to the map object states.


What you should know

In most cases, the default image displayed for the map object is the one associated to the *Online* state. If the map object has more than one state, you may have to change the images associated to all the states to keep a consistent look.

To change the image associated to a map object state:

- 1 In the *States* property group, and select the state you want to modify.
- 2 Select **Image** and click the image preview.
The list of images currently found in your Plan Manager image library appears.
- 3 Select the image you want, or if you don't see any suitable image, add a new one. See ["Adding new images to your Plan Manager image library"](#) on page 100.



- 4 At the bottom of the image list, click .



Adding new images to your Plan Manager image library

If you cannot find a suitable image to represent your map object, you can add new ones to your Plan Manager image library.

What you should know

The image library is stored in the Plan Manager database. You can add any image file to it. For better result, use PNG files with a transparent background.

To add a new image to your image library:

- 1 In the *States* property group, select a state.
- 2 Select **Image** and click the image preview.
The list of images currently found in your Plan Manager image library appears.
- 3 At the bottom of the image list, click .
- 4 In the browser window that appears, select the image file you want and click **OK**.
The new image appears in the list.
- 5 At the bottom of the image list, click .

The new image is now saved in your image library. It is now available for any map object.

Linking macros to map objects

You can add macros to the right-click menu of a map object by linking them to the map object.

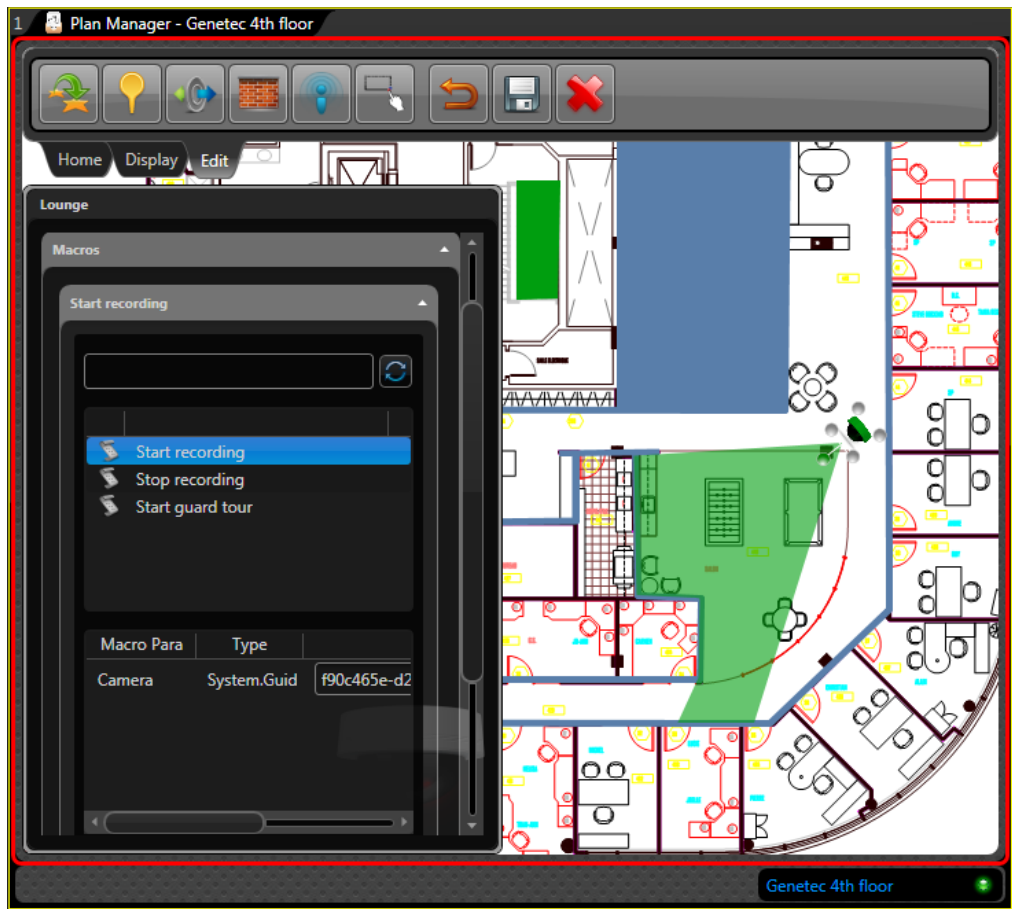
To link a macro to a map object:

- 1 In the configuration panel to the left, open the **Macros** property group.
- 2 At the bottom of the macro list (could be empty), click **Add (+)**.
- 3 Click the **New macro** that appears.

The macros available in your Security Center system are listed.

- 4 Select a macro from the list.

The list of input parameters for the selected macro appears.



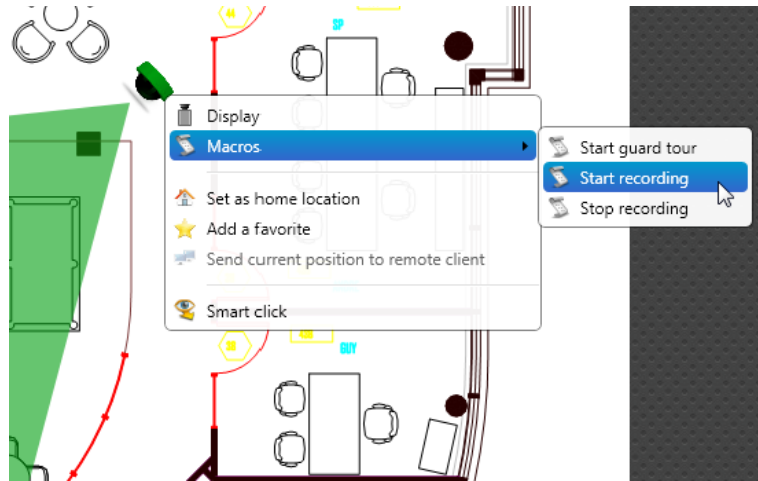
- 5 Bind the variables to the input parameters.

6 From the Edit ribbon, click **Save changes** (💾).

A new section called *Macros* is added to the right-click menu of the map object, and the macro you just linked, is listed in the *Macros* sub-menu. See "[Example of a camera with linked macros](#)" on page 102.

Example of a camera with linked macros

In this example, the macro Start recording has been linked to a PTZ camera on the map. The camera ID is bound to the macro as argument. When a Security Desk operator right-clicks the camera icon on the map, he gets the command Start recording in the Macros sub-menu.



For more information on creating macros and linking them to map objects, contact your Genetec representative.

Saving map object settings to templates

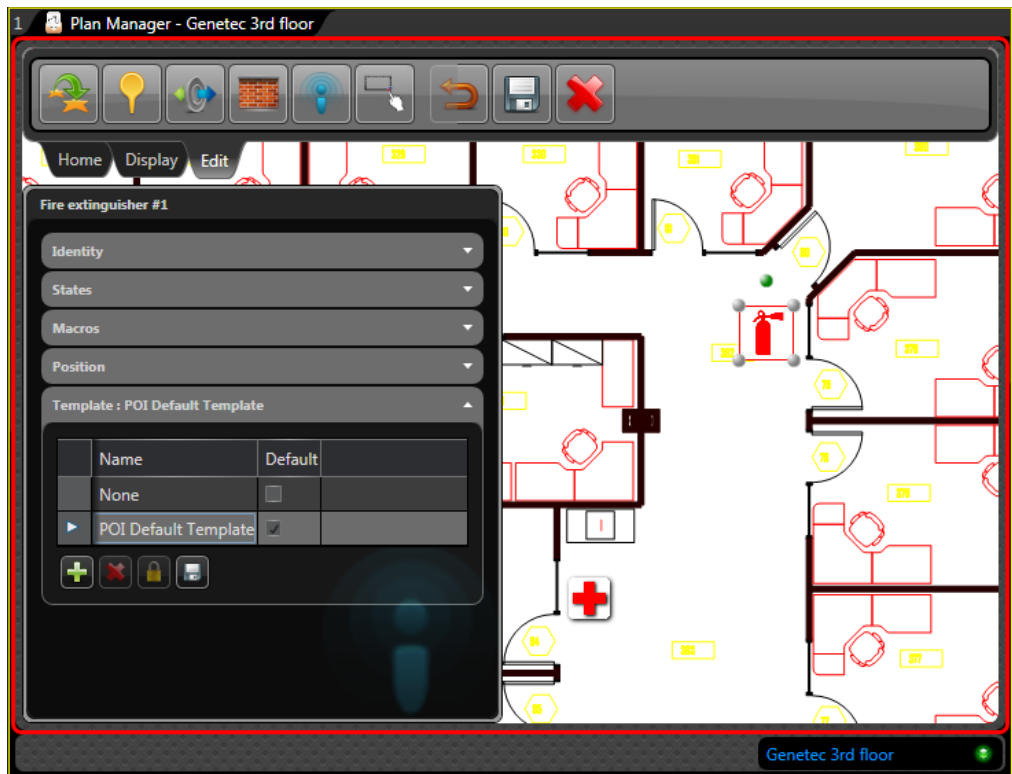
You can save your current map object settings (states, position, macros, and so on) to a template so these same settings can be applied to other map objects of the same type.

What you should know

Almost all settings that are not specific to a particular map object can be saved to a template. Every map object type comes with a factory installed template. You can modify this template, or create new ones. You can create as many templates as you want for a given map object type.





To save your current settings to a template:

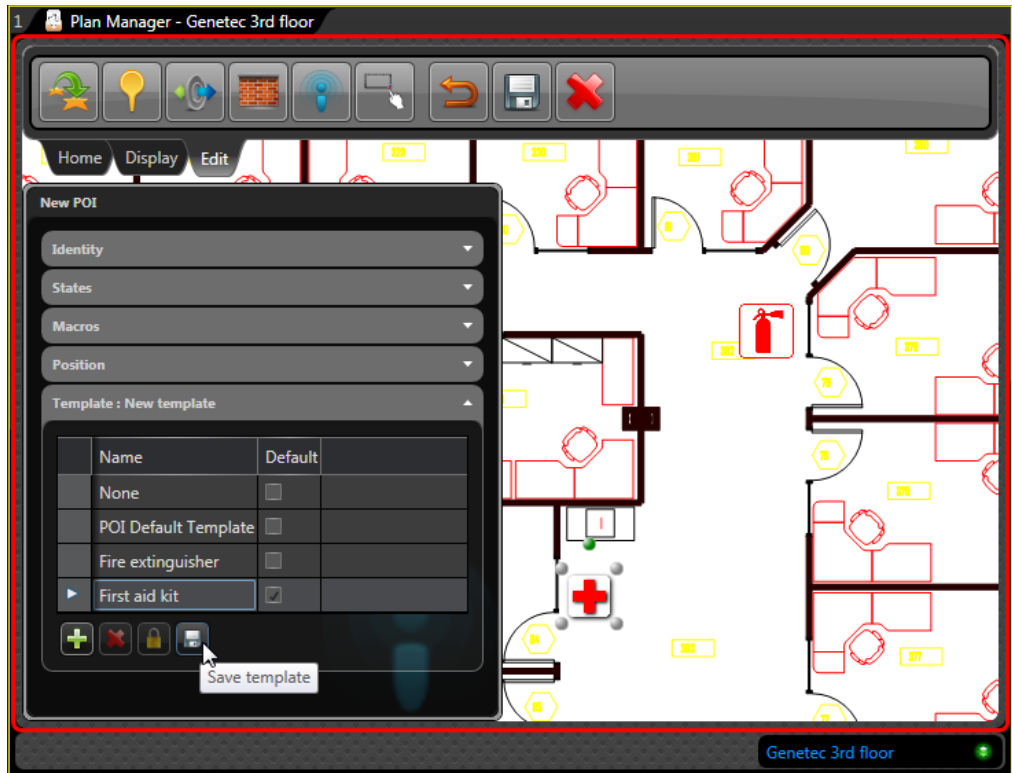
- 1 Open the *Templates* property group.





The currently defined templates are listed.


The template marked by an arrow is the template that is your *currently template*. The checkmark in the **Default** column indicates which template is the default. The *default template* is the one that is applied automatically when new map objects are created.

- 2 To save your current settings to the current template, click .
- If you have other objects on the map that use the same template, they will all be updated at once. If your current template is *None*, then your changes only affect the current map object.
- 3 To change your current template, select a different template in the list.
- 4 To set your current template as the default, click .
- 5 To add a new template, click , enter a name and click .



- 6 To rename the current template, click name twice, enter the new name, and then click .
- 7 To delete the current template, click .

After you finish

From the Edit ribbon, click **Save changes** (.

Adding cameras to your maps

You can add cameras to your maps to allow Security Desk operators monitor live video, manage alarms, and control PTZ cameras from maps.

Before you begin


Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74. You must also have camera entities in your Security Center system.

What you should know

You can have a more realistic representation of the FOVs of your cameras by adding the obstacles that block the FOVs of your cameras to the maps. See "[Adding walls to your maps](#)" on page 112.

To add a camera to your map:

- 1 Open Plan Manager workspace and switch to Edit mode.
For generic instructions, see "[Adding map objects to your maps](#)" on page 84.
- 2 From the Logical view, select the camera you want to add, and drag it to where you want it to be on the map.
The camera properties appear in the left panel.
- 3 Open the *Identity* property group.
Select the **Use Security Center name** option to use the Security Center entity name as the object name, or clear the option and enter the name of your choice.
(PTZ only) Select the **Support position feedback** option to indicate that the PTZ camera supports *position feedback*. Cameras supporting this feature can tell Plan Manager their current PTZ settings and can receive PTZ commands from Plan Manager. This means you can control those cameras PTZ by dragging their FOVs on the map. If you clear this option, the FOV takes the shape of a disk instead of that of a cone.
- 4 Adjust the camera icon on the map.
For fixed cameras, drag the FOV to the direction the camera is pointing. For generic instructions, see "[Adjusting the icon size, position, and rotation angle](#)" on page 87.
- 5 Open the *Position* property group and make changes as necessary.
The camera position properties are:
 - *Latitude, Longitude*. Center coordinates of the icon on the map. Unless your map is georeferenced, use the mouse to adjust the icon position.
 - *Elevation*. Distance (in meters) of the camera from the ground. When you change this value, it automatically adjusts the value of *Distance*.
 - *Pan*. Orientation angle (0 to 355 degrees) of the camera icon on the map. This value cannot be set manually for PTZ cameras. For fixed cameras, grab the FOV (colored cone) to rotate the camera.

- *Hfov*. Horizontal field of view (0 to 355 degrees) of the camera. Controls how wide the FOV (colored cone) appears on the map.
 - *Tilt*. Tilt angle (in degrees) of the camera. 90 means the camera is pointing perpendicular to the ground. This value cannot be set manually for PTZ cameras. For fixed cameras, changing this value automatically changes the value of *Distance*.
 - *Distance*. Actual distance covered by the camera's field of view. If you need to adjust it, always do it after you have adjusted *Elevation* and *Tilt*.
 - *Maximum distance*. Maximum displayed distance of the FOV (colored cone) on the map. This is not the actual distance covered by the camera. Its purpose is to limit the length of the displayed FOV on the map.
 - *Maximum zoom*. The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
 - *Minimum zoom*. The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.
 - *Display FOV*. Option allowing to show or hide the FOV on the map.
 - *Follow map scale*. Indicates whether the icon size varies with the map scale (or zoom level). The current icon size and zoom level are used as reference.
- 6 (Optional) Open the *States* property group and make changes if necessary.
For generic instructions, see "[Configuring map object states](#)" on page 95.
 - 7 (Optional) Open the *Macros* property group and link the desired macros to this camera.
For generic instructions, see "[Linking macros to map objects](#)" on page 101.
 - 8 From the Edit ribbon, click **Save changes** (.

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the camera you just added.

Adding hotspots to your maps

You can add a hotspot to mark a location on your map that requires special attention or close monitoring, so that when a Security Desk operator double-clicks a hotspot, it displays all associated cameras on the canvas.


Before you begin

The cameras you intend to associate to the hotspot must first be added to the map. See "[Adding cameras to your maps](#)" on page 105.

What you should know

You should consider using the *Smart camera selection* feature if all your PTZ cameras support the *position feedback* feature. See "[Smart mode](#)" on page 6. If your PTZ cameras are not capable of returning their positions, then using hotspots is a good alternative, because you it allows you to configure your PTZ cameras to turn to a known preset position when the hotspot is activated.

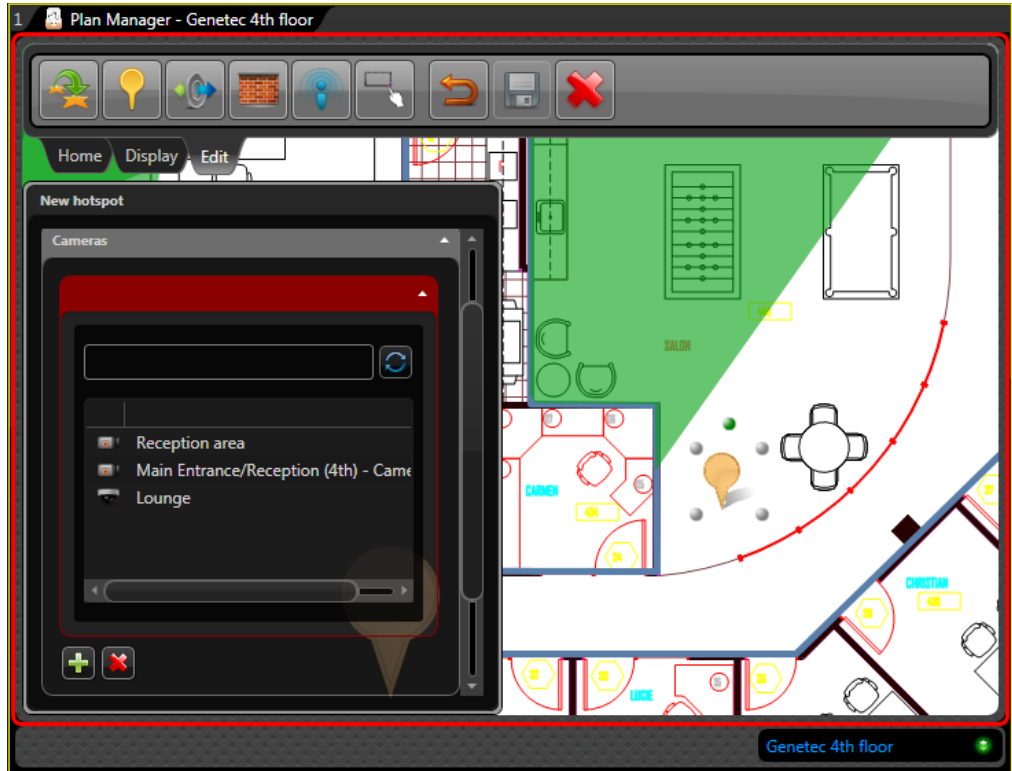
To add a hotspot to your map:

- 1 Open Plan Manager workspace and navigate to the location on the map where you want to add the hotspot, and then switch to Edit mode.
- 2 From the Edit ribbon, click **Add a hotspot** (), then a location on the map.
The hotspot properties appear in the left panel.
- 3 Adjust the size and position and the hotspot icon on the map. See "[Adjusting the icon size, position, and rotation angle](#)" on page 87.
- 4 Open the *Identity* property group and configure the hotspot properties.
 - *Display name*. Name of this hotspot.
 - *Link this map link to alarms*. If selected, the hotspot takes on the *alarm* state when one of its associated cameras is linked to an active alarm.
- 5 Open the *Position* property group and make changes as necessary.

The hotspot position properties are:

- *Latitude, Longitude*. Center coordinates of the icon on the map. Unless your map is georeferenced, use the mouse to adjust the icon position.
- *Angle*. Orientation angle (0 to 355 degrees) of the door icon on the map.
- *Maximum zoom*. The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
- *Minimum zoom*. The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.

- *Follow map scale*. Indicates whether the icon size varies with the map scale (or zoom level). The current icon size and zoom level are used as reference.
- 6 Open the *Cameras* property group.
 - 7 Under the camera list, click Add (+).
Only the cameras found on your current map are listed.



- To associate a fixed camera, simply select it from the list.
 - To associate a PTZ camera, select it and configure the position it should turn to when the hotspot is double-clicked. See "[Configuring PTZ cameras for the hotspot](#)" on page 109.
 - Repeat as needed.
- 8 (Optional) Open the *States* property group and make changes if necessary.
For generic instructions, see "[Configuring map object states](#)" on page 95.
 - 9 (Optional) Open the *Macros* property group and link the desired macros to this door.
For generic instructions, see "[Linking macros to map objects](#)" on page 101.
 - 10 From the Edit ribbon, click **Save changes** (💾).

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the hotspot you just added.

Configuring PTZ cameras for the hotspot

You need to configure the PTZ cameras associated to the hotspot in order for them to turn automatically towards the hotspot when the hotspot is double-clicked.

Before you begin

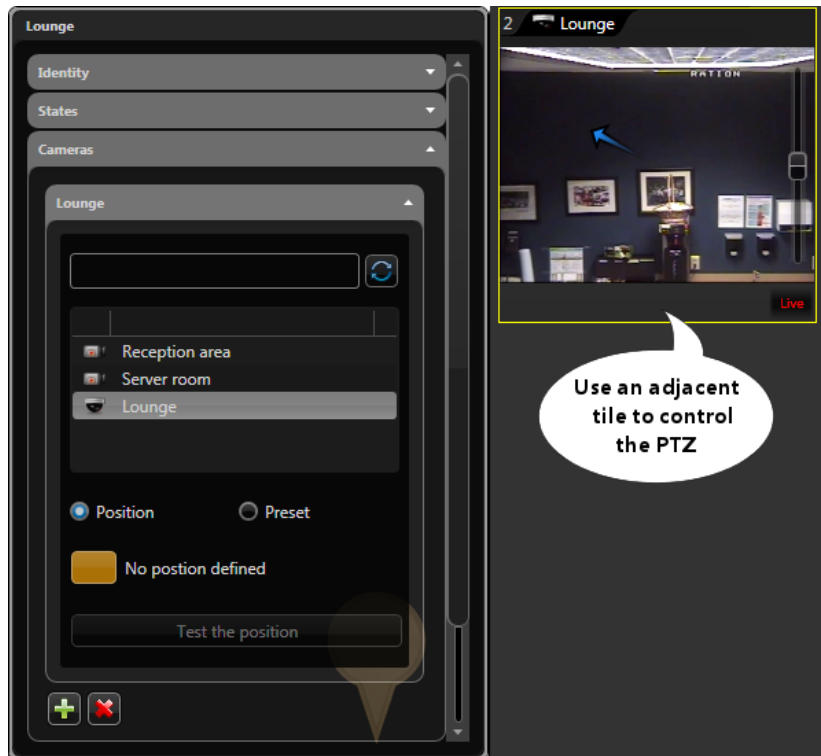
Display the PTZ camera you are configuring in an adjacent tile so you can check and control its PTZ while you are configuring it for the hotspot.

What you should know

There are two ways you can configure the PTZ: (1) by adjusting it manually, or (2) by selecting an existing PTZ preset. The manual adjustment only works with PTZ cameras that support *position feedback*.

To adjust the PTZ position manually:

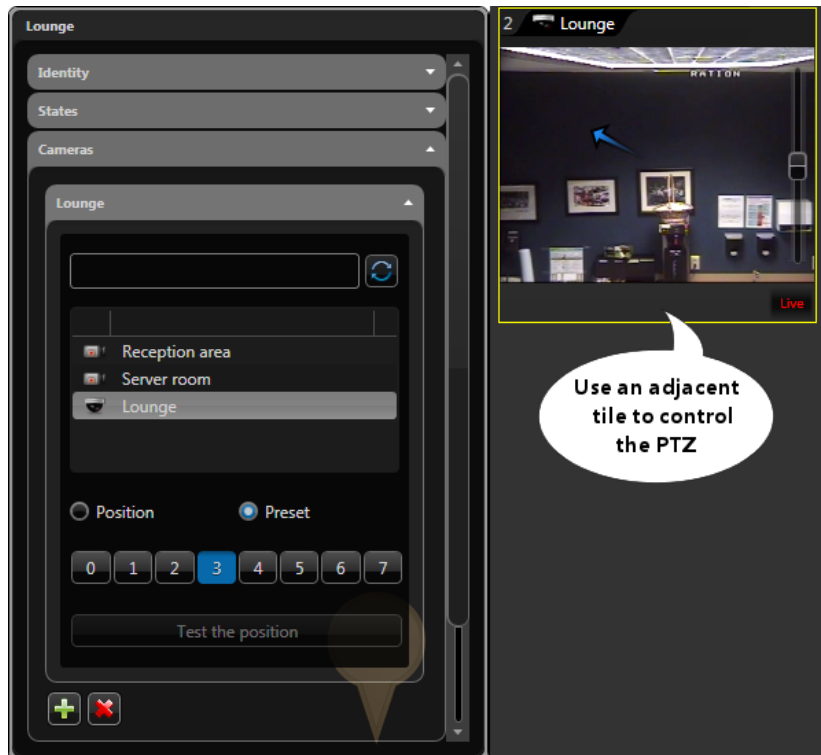
- 1 Under the camera list, click **Position**.




- 2 Under the **Position** button, click the orange button.
The button turns red.
- 3 Turn the cameras to the desired position for the hotspot using the adjacent tile
- 4 Press the red button when you are finished.
The button turns green.
- 5 Move the PTZ to a different position.
- 6 Click **Test the position**.
The PTZ returns to the configured position. This is the position the PTZ changes to when the hotspot is double-clicked on the map.
- 7 If the position is correct, click **Save changes** (📁). If it is not correct, repeat the procedure.

To use an existing PTZ preset:

- 1 Under the camera list, click **Preset** and then select one of the preset buttons below.



- 2 Move the PTZ to a different position.
- 3 Click **Test the position**.
The PTZ goes back to the selected preset position.

- 4 If the position is not what you want, try a different preset or define a new one with the PTZ widget found in the Dashboard.
- 5 If the position is correct, click **Save changes** ().

Adding walls to your maps

You can add walls to your maps to represent obstacles that block the FOVs of your cameras.



Before you begin


Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74.

What you should know

Walls are a necessary part of the smart camera selection feature, where you select cameras based on whether or not they can “see” the location you click on the map. See "[Smart mode](#)" on page 6.

To add a wall:

- 1 Open Plan Manager workspace and switch to Edit mode.
Make sure you zoom out enough to see the whole area the wall is going to cover on the map.
- 2 From the Edit ribbon, click **Add a wall** () , then click once on the map.
The wall properties appear in the left panel.
- 3 Click on the map the starting point of the wall.
A grey dot appears on the map.
- 4 Click on the map the point the first straight section of the wall ends.
A second grey dot appears with a thick red line linking them. This is the first section of your wall.
- 5 Continue the same process until all the linked sections of your wall appear on the map.
For more information, see "[Drawing polygons and polylines](#)" on page 90.
- 6 If you want to define a closed area with your wall, do the following:
 - a add one last dot near the starting point of the wall.
You cannot place the new dot on an existing dot because Plan Manager takes it as if you want to select the existing dot for the purpose of moving it.
 - b Click the pen () to switch to polyline edit mode.
 - c Click the last dot you added and drag it over the starting point of your wall.
You just successfully defined a closed area with the wall.
- 7 Open the *Position* property group and make changes as necessary.
The wall position properties are:
 - *Thickness*. Number of pixels (default=5) representing the wall on the map. By default, the walls are transparent in *Pan mode*.
 - *Maximum zoom*. The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.

- *Minimum zoom.* The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.
- 8 (Optional) Open the *States* property group and make changes if necessary.
The *Online* state controls the transparency of the wall. By default, it is set to 1, meaning it is completely transparent.
NOTE Setting the walls to be transparent is not the same as not showing them. See "[Display ribbon](#)" on page 7. When the walls are hidden, they stop blocking the camera FOVs.
For generic instructions, see "[Configuring map object states](#)" on page 95.
 - 9 From the Edit ribbon, click **Save changes** ()

After you finish

Switch to Pan mode, and verify that all your camera FOVs are blocked as they should be.

Adding doors to your maps

You can add doors to your maps to allow Security Desk operators monitor and control doors from maps.

Before you begin

Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74. You must also have door entities in your Security Center system.

To add a door to your map:

- 1 Open Plan Manager workspace and switch to Edit mode.

For generic instructions, see "[Adding map objects to your maps](#)" on page 84.

- 2 From the Logical view, select the door you want to add, and drag it to where you want it to be on the map.

The door properties appear in the left panel.

- 3 Open the *Identity* property group.

Select the **Use Security Center name** option to use the Security Center entity name as the object name, or clear the option and enter the name of your choice.

- 4 Adjust the size and position and the door icon on the map. See "[Adjusting the icon size, position, and rotation angle](#)" on page 87.

- 5 Open the *Position* property group and make changes as necessary.

The door position properties are:

- *Latitude, Longitude.* Center coordinates of the icon on the map. Unless your map is georeferenced, use the mouse to adjust the icon position.
- *Angle.* Orientation angle (0 to 355 degrees) of the door icon on the map.
- *Maximum zoom.* The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
- *Minimum zoom.* The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.
- *Follow map scale.* Indicates whether the icon size varies with the map scale (or zoom level). The current icon size and zoom level are used as reference.

- 6 (Optional) Open the *States* property group and make changes as necessary.

The standard door states are:


- *Online.* Closed door image; no color.
- *Offline.* Closed door image; red color. When a door is offline, we can't tell whether it is open or closed.

- *Opened.* Open door image; no color. This state can be combined with others.
- *Closed.* Closed door image; no color. The closed door image is to revert the door image to closed after the door has been opened and closed.
- *Locked.* No image; white color. A door can be opened or closed, and still be locked. The white color is necessary to revert the door color back to normal after it has been unlocked and locked.
- *Unlocked.* No image; green color. A door can be open or closed, and yet unlocked.
- *Alarm.* Closed door image, blinking red color. When there is an alarm on the door, it does not matter whether it is open or closed.

For generic instructions, see "[Configuring map object states](#)" on page 95.

7 (Optional) Open the *Macros* property group and link the desired macros to this door.

For generic instructions, see "[Linking macros to map objects](#)" on page 101.

8 From the Edit ribbon, click **Save changes** (.

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the door you just added.

Adding map views to your favorites

You can save your current map view to your list of favorites.

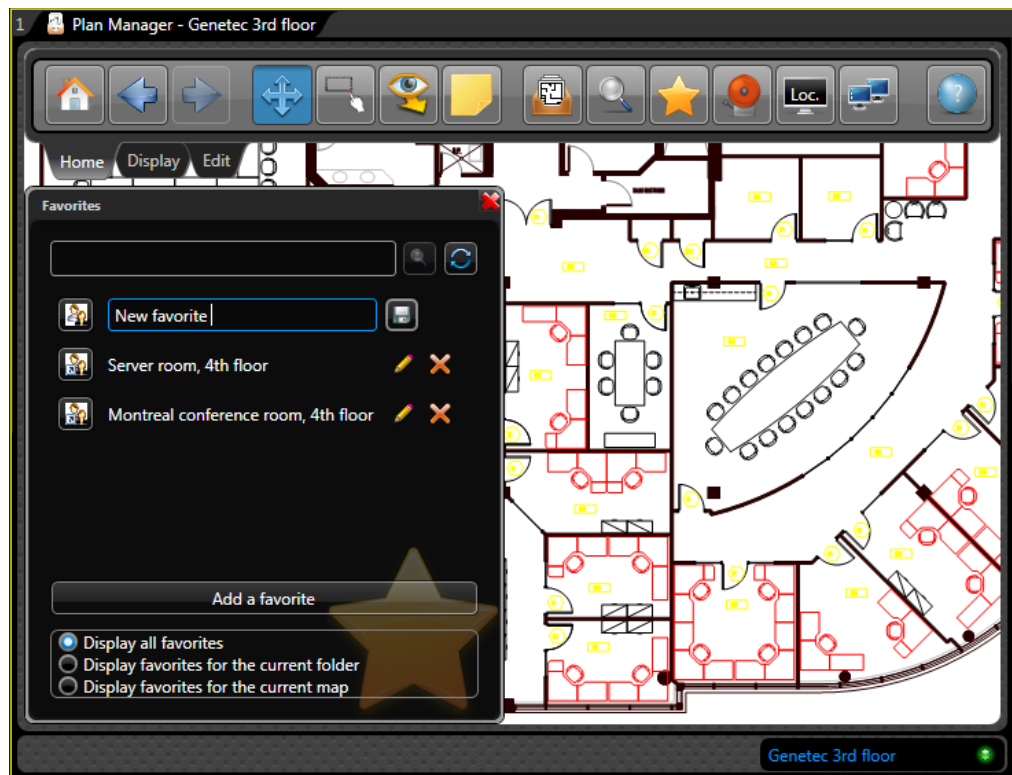
What you should know

Favorites are created to ease the access to frequently used map views. Both *areas* and *map links* can link to favorites. See "Adding map links to your maps" on page 117.

To add a map view to your favorites:

- 1 Be sure you are in *Pan mode*. If not, select the *Home ribbon*.
- 2 Right-click your current map view and select **Add a favorite**.

The *Favorites panel* appears on the left.



- 3 Enter the name of the favorite and click Save (💾).
- 4 Click the button in front of the favorite name to toggle between public and private favorite. A public favorite is visible to all users. A private favorite is only visible to you.

Adding map links to your maps

You can add map links to create colored polygons on your maps that Security Desk operators can double-click to jump to different map views.


Before you begin

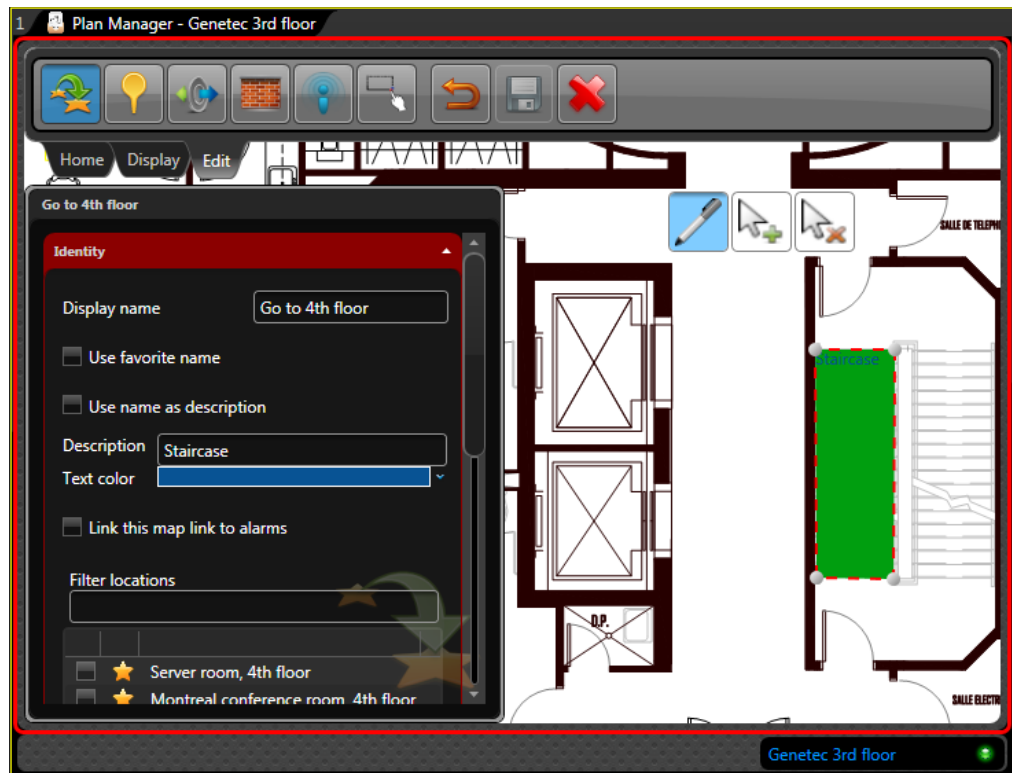
Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74.

What you should know

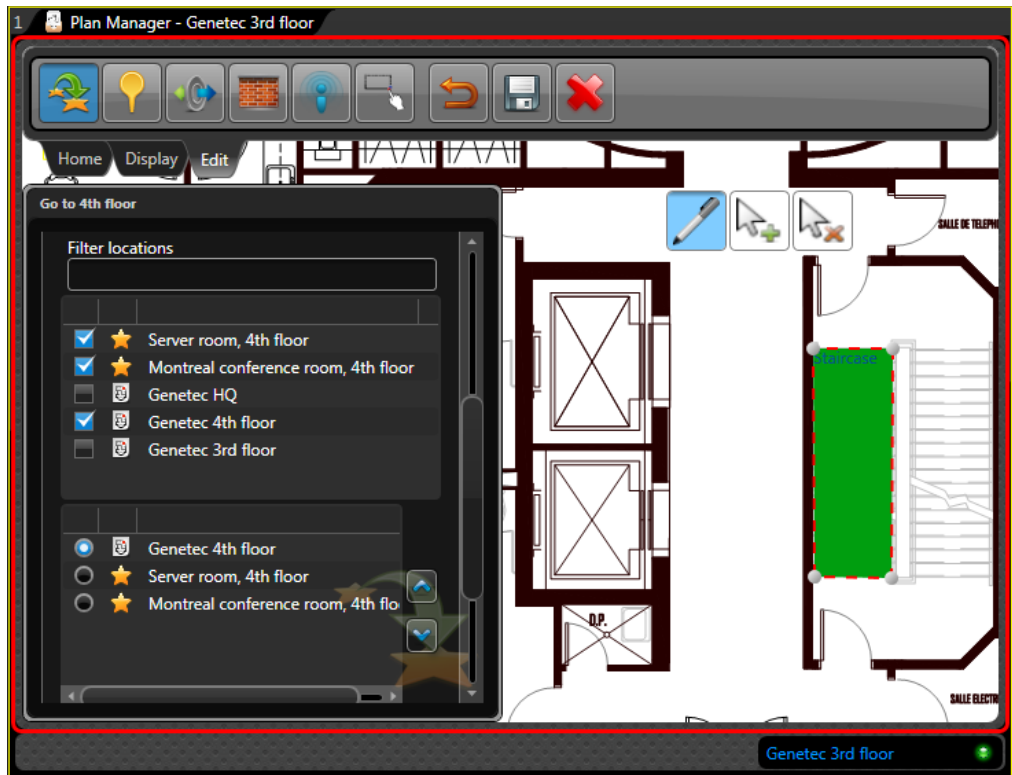
Both *areas* and *map links* can be linked to map views. The difference is that you need an area entity in order to create an area object on your map, but you don't for a map link.

To add a map link to your map:

- 1 Open Plan Manager workspace and switch to Edit mode.
Make sure you zoom out enough to see the whole area the wall is going to cover on the map.
- 2 From the Edit ribbon, click **Add a map link** () , then click once on the map.
The map link properties appear in the left panel.
- 3 Draw the desired polygon. See "[Drawing polygons and polylines](#)" on page 90.




- 4 Open the *Identity* property group and configure the map link properties.
 - *Display name*. Name of this map link.
 - *Use favorite name*. Copies the name of the *default map view* to the display name.
 - *Use name as description*. Copies the display name to the description.
 - *Description*. Map link description displayed over the map link object.
 - *Text color*. Map link description text color.
 - *Link this map link to alarms*. If selected, the map link takes on the *alarm* state when its default map view displays an active alarm.
 - *Filter locations*. Search filter for the list of available locations (map views) you can link to. A map view is either a favorite. See "[Adding map views to your favorites](#)" on page 116) or the default view of a published map.
- 5 Select the map views you want to be able to jump to with this map link.



The selected map views appear in a separate list. The one that is selected is the *default map view*. It is the map view you jump to when you double-click the map link in *Pan mode*. The rest are *alternate map views* that are accessible from the right-click menu.

- 6 Open the *States* property group, and select the *Online* state to configure the color and transparency of the map link. See "[Configuring map object states](#)" on page 95.

- 7 Open the *Position* property group, and configure the range of map scales within which this map link is visible on the map.
 - *Maximum zoom*. The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
 - *Minimum zoom*. The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.
- 8 (Optional) Open the *Macros* property group and link the desired macros to this map link. For generic instructions, see "[Linking macros to map objects](#)" on page 101.
- 9 From the Edit ribbon, click **Save changes** ()

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the map link you just added. See "[Switching map views using areas and map links](#)" on page 20.

Adding areas to your maps

You can add areas to your maps to allow Security Desk operators check people counts, show people presence, issue recursive commands on entities contained in an area, and jump to different map views on double-click.

Before you begin


Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74. You must also have area entities in your Security Center system.

What you should know

Both *areas* and *map links* can be linked to map views. The difference is that you need an area entity in order to create an area object on your map, but you don't for a map link.

To add an area to your map:

- 1 Open Plan Manager workspace and switch to Edit mode.
Make sure you zoom out enough to see the entire area the corresponding to the area entity on the map.
- 2 From the Logical view, select the area you want to add, and drag it to the Plan Manager tile.
The area properties appear in the left panel.
- 3 Draw a polygon to trace the contour of the area. See "[Drawing polygons and polylines](#)" on page 90.
- 4 Open the *Identity* property group and configure the area properties.
 - *Display name*. Name of the area object.
 - *Use Security Center name*. Uses the name of the area entity as object name.
 - *Filter locations*. Search filter for the list of available locations (map views) you can link to. A map view is either a favorite. See "[Adding map views to your favorites](#)" on page 116) or the default view of a published map.
- 5 Select the map views you want to be able to jump to with this area.
The selected map views appear in a separate list. The one that is selected is the *default map view*. It is the map view you jump to when you double-click the area in *Pan mode*. The rest are *alternate map views* that are accessible from the right-click menu.
NOTE You need to set the **Area behavior** to *Navigate* or *Display and navigate* in order to be able to use the map link feature on the area. See "[Plan Manager options](#)" on page 8.
- 6 (Optional) Open the *States* property group and make changes if necessary.
NOTE An area is in the alarm state when one of its member entities is linked to an active alarm in Security Center.
For generic instructions, see "[Configuring map object states](#)" on page 95.
- 7 Open the *Position* property group, and configure the range of map scales within which this area object is visible on the map.

- *Maximum zoom.* The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
 - *Minimum zoom.* The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.
- 8 (Optional) Open the *Macros* property group and link the desired macros to this map link. For generic instructions, see "[Linking macros to map objects](#)" on page 101.
 - 9 From the Edit ribbon, click **Save changes** ()

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the area object you just added.

Adding LPR objects to your maps

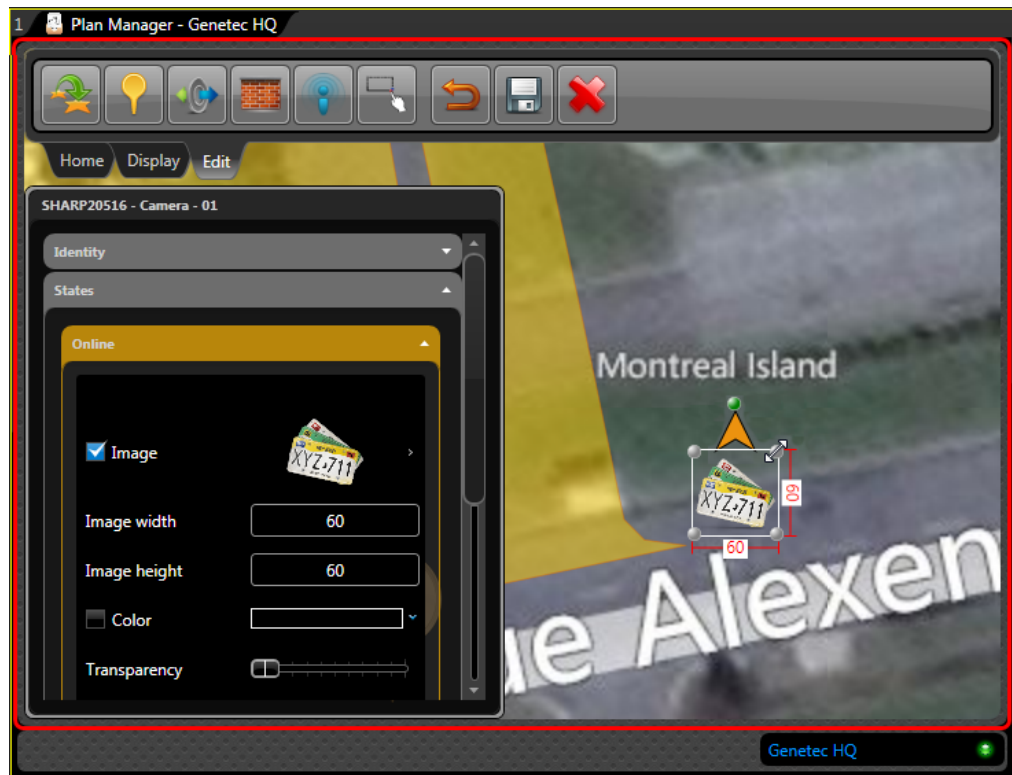
You can add LPR objects to your maps to allow Security Desk operators monitor reads and hits from a fixed LPR camera as well as view live video from the associated context camera.

Before you begin

The AutoVu LPR camera must be associated to a context camera before you can add it to your Plan Manager map.

To configure an LPR object:

- 1 Open Plan Manager workspace and switch to Edit mode.
For generic instructions, see ["Adding map objects to your maps"](#) on page 84.
- 2 From the Logical view, drag the context camera (📷) attached to the fixed LPR camera to the desired position on the map.
NOTE Do not drag the LPR unit (➡) or the LPR camera (📷) itself.
- 3 Adjust the size and position and the LPR object icon on the map. See ["Adjusting the icon size, position, and rotation angle"](#) on page 87.



The orange arrow indicates where the camera is pointing.

- (Optional) Open the *States* property group and make changes as necessary.

The standard LPR object states are:

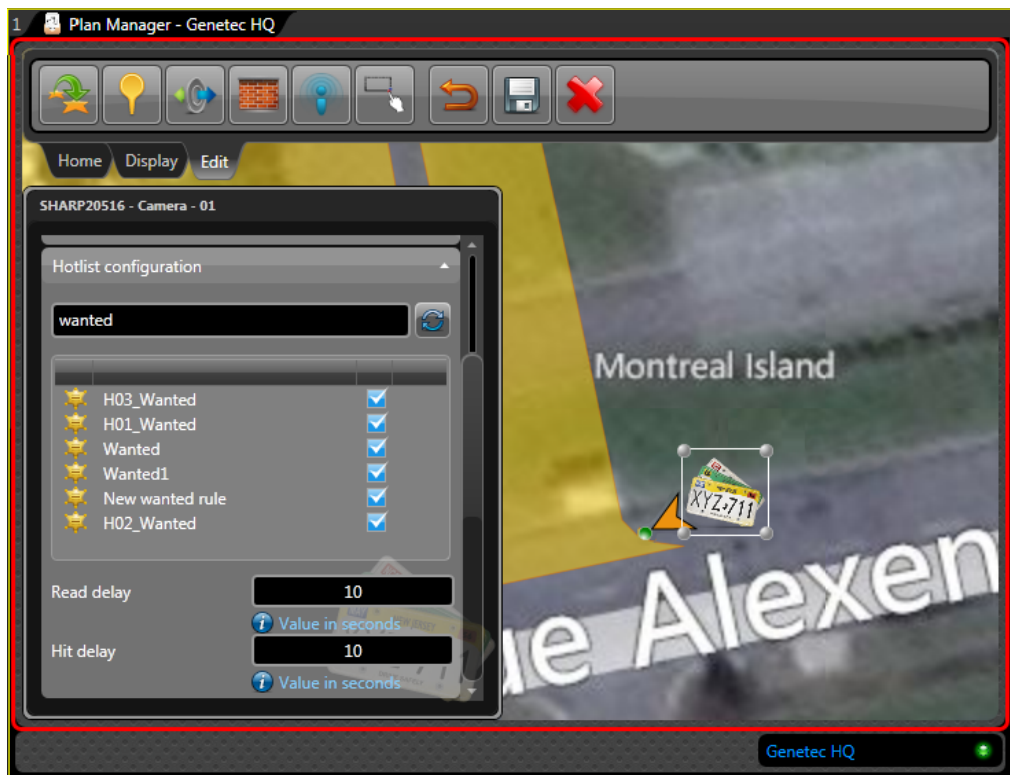
- *Online*. When the LPR camera is online. No color by default.
- *Offline*. When the LPR camera is offline. Red by default.
- *Read*. When the LPR camera just read a license plate. Green by default.
- *Hit*. When the license plate read just matched an entry in a hotlist. Orange by default.

For generic instructions, see "[Configuring map object states](#)" on page 95.

- (Optional) Open the *Macros* property group and link the desired macros to this door.

For generic instructions, see "[Linking macros to map objects](#)" on page 101.


- Open the *Hotlist configuration* property group, and select the hotlists you want use to generate hits.



NOTE If you do not select any hotlist, the LPR object will not generate any hits.

- Set the values of the **Read** and **Hit** delays.
 - *Read delay*. Number of seconds the LPR object remains in the *Read* state after a license plate is read (default=10).

- *Hit delay.* Number of seconds the LPR object remains in the *Hit* state after a read is matched to a selected hotlist (default=10).

8 From the Edit ribbon, click **Save changes** ()

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the LPR object you just added.

Adding I/O objects to your maps

You can add I/O objects to your maps to allow Security Desk operators monitor the inputs and control the outputs of a Security Center entity.

Before you begin

Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74.


What you should know

The Security Center entities that can be linked to an I/O object are doors, intrusion detection areas, zones, and cameras.

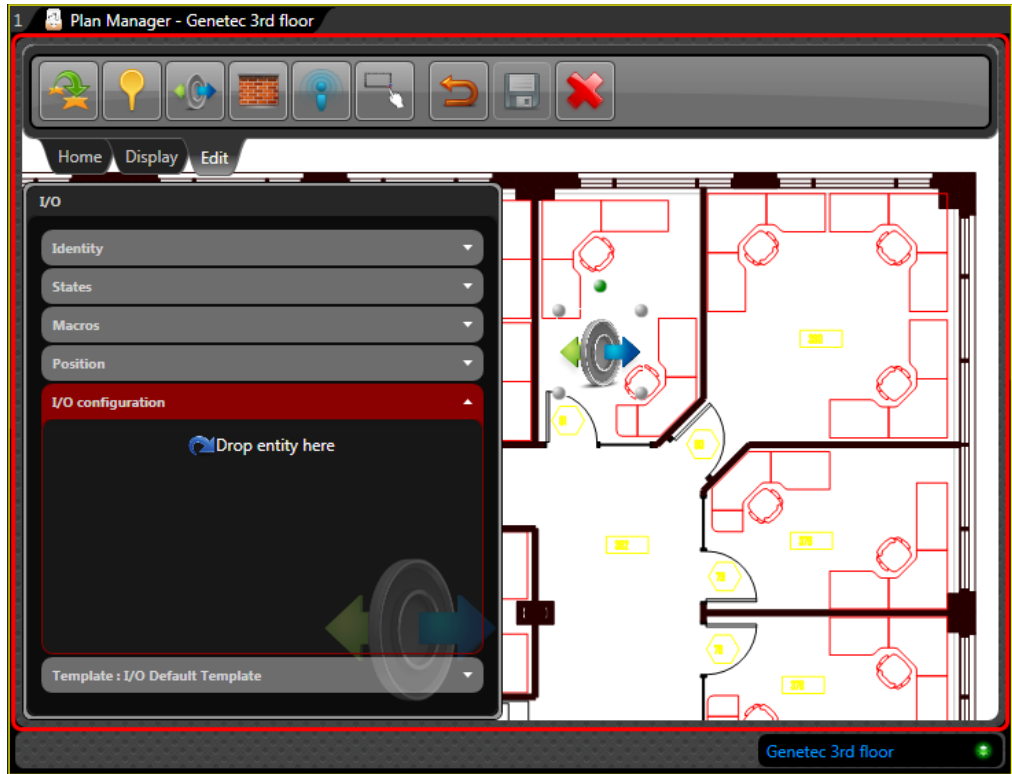
IMPORTANT An I/O object must be linked to at least one input or one output to be valid.

TIP An I/O object linked to multiple inputs can be “exploded” (blown up) into multiple I/O objects, each linked to one input from the original object. See "[Dividing an I/O object according to how many inputs it represents](#)" on page 129. The typical use of this feature is to monitor the individual inputs associated to a *zone* on the map.

To add an I/O object to your map:

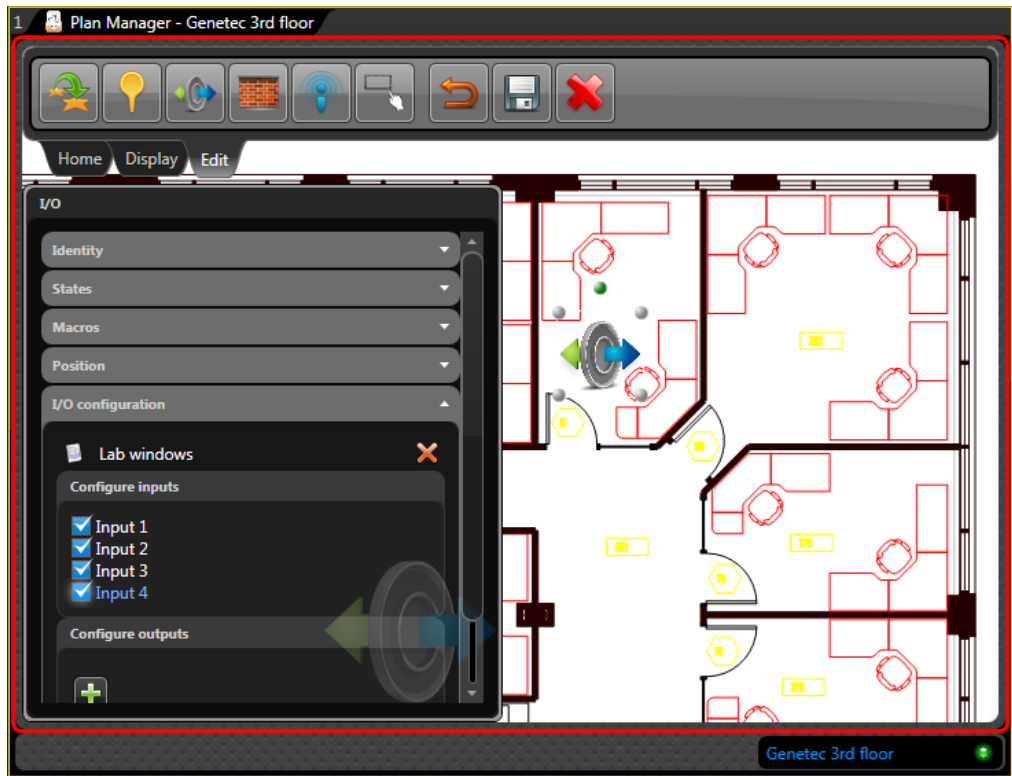
- 1 Open Plan Manager workspace and navigate to the location on the map where you want to add the I/O object, and then switch to Edit mode.
- 2 From the Edit ribbon, click **Add an I/O object** () , then a location on the map.
The I/O object properties appear in the left panel.
- 3 Adjust the size and position and the I/O object icon on the map. See "[Adjusting the icon size, position, and rotation angle](#)" on page 87.
- 4 Open the *Identity* property group and enter the **Display name**.

- 5 Open the *I/O configuration* property group.



- 6 From the Logical view, drag the entity you want to represent with this I/O object to the area where it is written **Drop entity here**.

- 7 Click the entity name and select the inputs you want to monitor with this I/O object.



- 8 (Optional) Under **Configure outputs**, click **+** to add a new output command.


The first output associated to the entity you just dropped in appears.

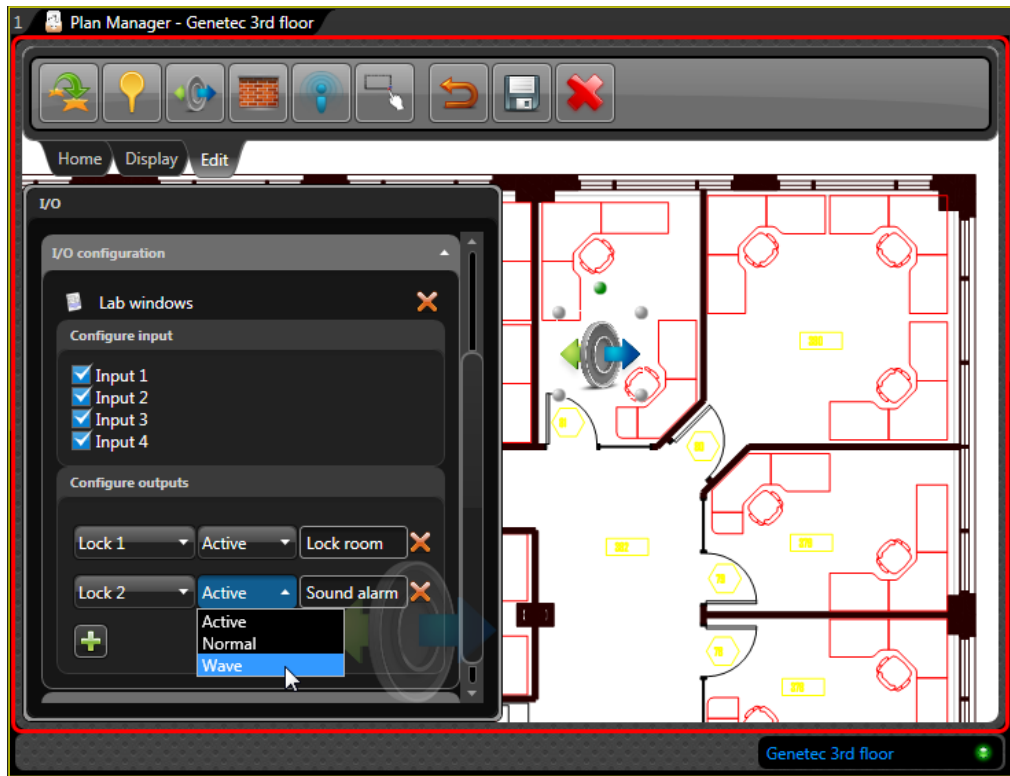
Configure the output command as follows:

- a Click the first drop-down list and select the *output*.
- b Click the second drop-down list and select the *output behavior*.

The default values are: *Active* and *Normal*. If you have more output behaviors defined in Security Center, you'll see them all.

- c In the text field, enter the name of the output command that should appear in the right-click menu of this I/O object.

- 9 (Optional) Click  again to configure additional output commands.



- 10 (Optional) Open the *States* property group and make changes as necessary.

The standard I/O object states are:

- *Active*. I/O object image; blinking red. The I/O object is considered *active* as long as one of the configured inputs is active.
- *Inactive*. I/O object image; no color. The I/O object is considered *inactive* if all of the configured inputs are active.
- *Offline*. I/O object image; red color. The I/O object is considered offline if any of its linked entity is offline.

For generic instructions, see "[Configuring map object states](#)" on page 95.

- 11 Open the *Position* property group and make changes as necessary.


The I/O object position properties are:

- *Latitude, Longitude*. Center coordinates of the icon on the map. Unless your map is georeferenced, use the mouse to adjust the icon position.
- *Angle*. Orientation angle (0 to 355 degrees) of the door icon on the map.

- *Maximum zoom.* The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
- *Minimum zoom.* The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.

12 (Optional) Open the *Macros* property group and link the desired macros to this I/O object.

For generic instructions, see "[Linking macros to map objects](#)" on page 101.

13 From the Edit ribbon, click **Save changes** ()

After you finish

Switch to Pan mode (click the *Home ribbon*) and try out the I/O object you just added. If you wish to locations of the individual inputs on the map, split the multi-input I/O object into multiple single-input I/O objects (see "[Dividing an I/O object according to how many inputs it represents](#)" on page 129).

Dividing an I/O object according to how many inputs it represents

You can divide an I/O object linked to multiple inputs into multiple I/O objects, each linked to one input from the original object.

Before you begin

You must first create an I/O object that's linked to multiple inputs. See "[Adding I/O objects to your maps](#)" on page 125.

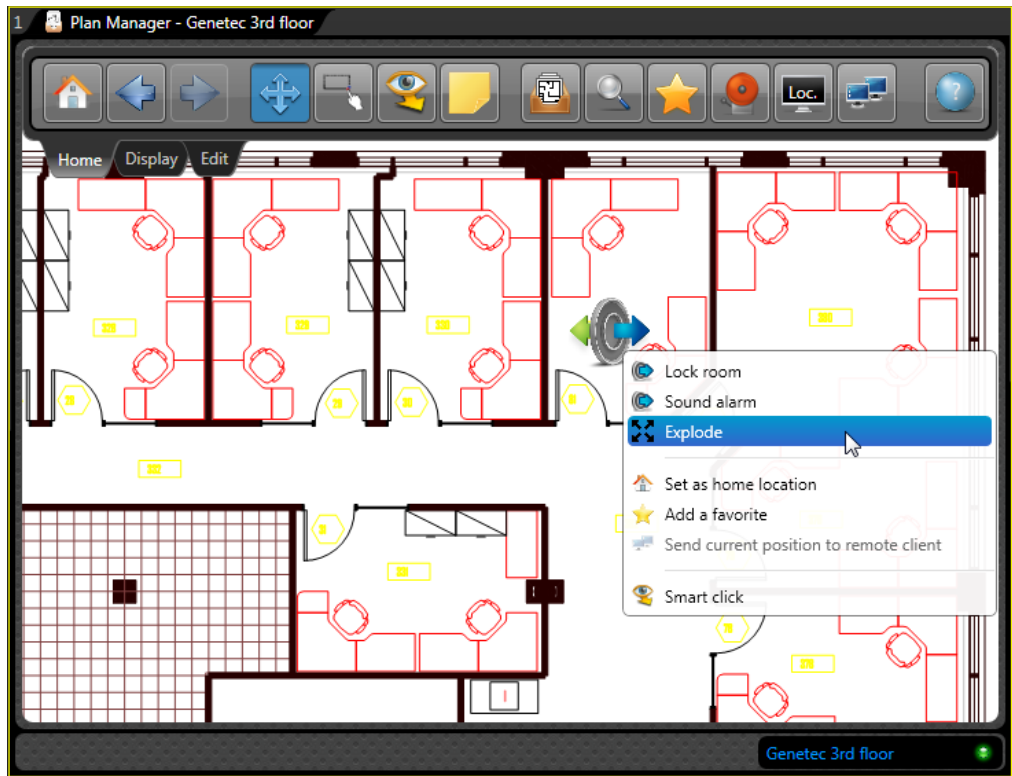
What you should know

One typical application of this feature is to use an I/O object to represent a *zone* on your map. Once created, you can divide this I/O object into as many new I/O objects as there are inputs linked to the original one. Then, using the single-input I/O objects that are created, you can mark the locations of the inputs they represent on your map.

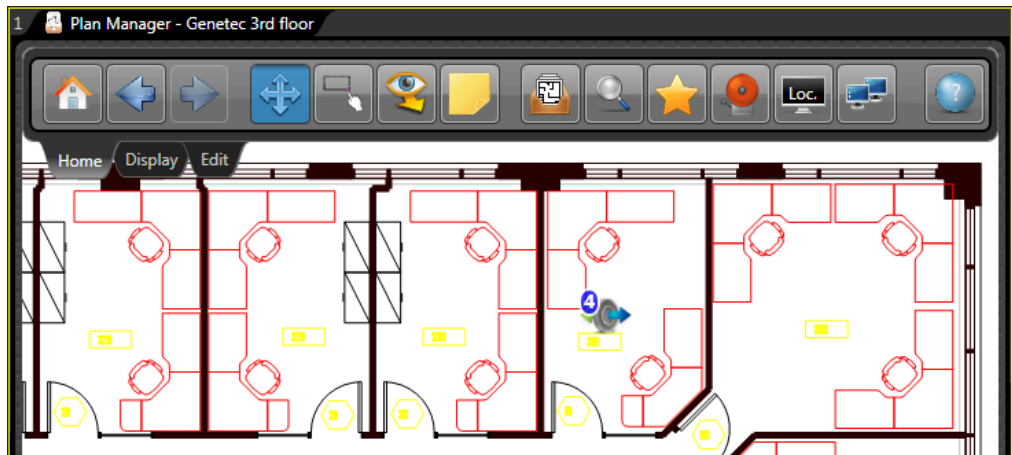
To divide an I/O object:

- 1 Switch to Pan mode (click the *Home ribbon*).

2 Right-click the I/O object and select **Explode**.



It may take a while for Plan Manager to process this operation. In the end, you'll get as many I/O objects as there were inputs in your original object. The I/O objects may appear clustered if you are zoomed out.



- 3 Switch back to Edit mode.
The I/O objects will be all separated.
- 4 Move the individual I/O objects to their desired location.

After you finish

Switch to back to Pan mode and test the new I/O objects.

Adding points of interest to your maps

You can add points of interest (POIs) to mark locations of interest on the map. Unlike KML objects, POIs are not restricted to georeferenced maps.


Before you begin

Publish maps in the Logical view. See "[Publishing map sources](#)" on page 74.


What you should know

You do not have to use the default image for POI. You can add any transparent PNG files to the default image library of Plan Manager.

To add POI to your map:

- 1 Open Plan Manager workspace and navigate to the location on the map where you want to add the I/O object, and then switch to Edit mode.
- 2 From the Edit ribbon, click **Add a point of interest** () , then a location on the map.
The POI properties appear in the left panel.
- 3 Adjust the size and position and the point of interest icon on the map. See "[Adjusting the icon size, position, and rotation angle](#)" on page 87.
- 4 Open the *Identity* property group and enter the **Display name** and **Description** of the POI.
- 5 Open the *Position* property group and make changes as necessary.

The POI position properties are:

- *Latitude, Longitude.* Center coordinates of the icon on the map. Unless your map is georeferenced, use the mouse to adjust the icon position.
 - *Angle.* Orientation angle (0 to 355 degrees) of the door icon on the map.
 - *Maximum zoom.* The closest you can zoom in to the map and still see the map object. Zero (0) corresponds to the closest zoom. This parameter allows you to hide the map object when the user zooms in too close to the map.
 - *Minimum zoom.* The farthest you can zoom away from the map and still see the map object. The maximum value depends on the zoom level used to import the map source. This parameter allows you to hide the map object when the user zooms out too far away from the map.
 - *Follow map scale.* Indicates whether the icon size varies with the map scale (or zoom level). The current icon size and zoom level are used as reference.
- 6 Open the *States* property group and make changes as necessary.
You may want to change the image representing the POI if you have a more suitable one. See "[Changing the map object image](#)" on page 99.
 - 7 (Optional) Open the *Macros* property group and link the desired macros to this POI.
For generic instructions, see "[Linking macros to map objects](#)" on page 101.
 - 8 From the Edit ribbon, click **Save changes** ().

Editing multiple map objects simultaneously

You can ensure a consistent behavior between all map objects of a given type by editing their common attributes (states) simultaneously.


What you should know

A better way to ensure look and feel consistency among map objects of the same type is to use templates. See "[Saving map object settings to templates](#)" on page 103.

To edit multiple map objects simultaneously:

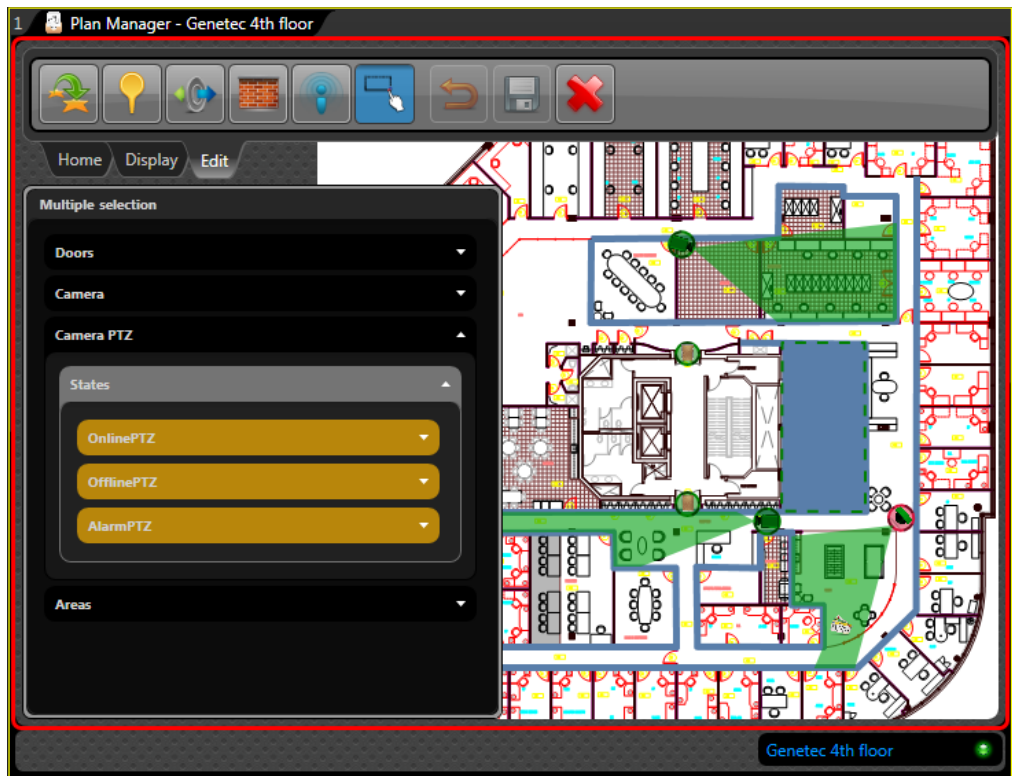
- 1 Open Plan Manager workspace and switch to Edit mode.

Make sure you zoom out enough to see all the map objects you want to edit.


- 2 From the Edit ribbon, click **Lasso mode** ().

- 3 Draw a rectangle around the map objects you want to edit simultaneously.

The common properties that you can edit simultaneously appear in the left panel, grouped by map object types. The selected map objects are highlighted in green.



- 4 Edit the properties as usual. See "[Configuring map object states](#)" on page 95.

5 From the Edit ribbon, click **Save changes** ().

All selected map objects of the same type now share the same display behavior.

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Where to find product documentation

You can find our product documentation in the following locations:

- **Installation package.** The documentation is available in the *Documentation* folder of the installation package. Some of the documents also have a direct download link to the latest version of the document.
- **Genetec Technical Assistance Portal (GTAP).** The latest version of the documentation is available from the GTAP [Documents](#) page. Note, you'll need a username and password to log on to GTAP.
- **Help.** Security Center client and web-based applications include help, which explain how the product works and provide instructions on how to use the product features. Patroller and the Sharp Portal also include context-sensitive help for each screen. To access the help, click Help, press F1, or tap the ? (question mark) in the different client applications.

Technical support

Genetec Technical Assistance Center (GTAC) is committed to providing its worldwide clientele with the best technical support services available. As a Genetec customer, you have access to the Genetec Technical Assistance Portal (GTAP), where you can find information and search for answers to your product questions.

- **Genetec Technical Assistance Portal (GTAP).** GTAP is a support website that provides in-depth support information, such as FAQs, knowledge base articles, user guides, supported device lists, training videos, product tools, and much more.

Prior to contacting GTAC or opening a support case, it is important to look at this website for potential fixes, workarounds, or known issues. You can log in to GTAP or sign up at <https://gtap.genetec.com>.

- **Genetec Technical Assistance Center (GTAC).** If you cannot find your answers on GTAP, you can open a support case online at <https://gtap.genetec.com>. For GTAC's contact information in your region, see the Contact page at <https://gtap.genetec.com>.

NOTE Before contacting GTAC, please have your System ID (available from the About button in your client application) and your SMA contract number (if applicable) ready.

- **Licensing.**
 - For license activations or resets, please contact GTAC at <https://gtap.genetec.com>.
 - For issues with license content or part numbers, or concerns about an order, please contact Genetec Customer Service at customerservice@genetec.com, or call 1-866-684-8006 (option #3).
 - If you require a demo license or have questions regarding pricing, please contact Genetec Sales at sales@genetec.com, or call 1-866-684-8006 (option #2).

Additional resources

If you require additional resources other than the Genetec Technical Assistance Center, the following is available to you:

- **GTAP Forum.** The Forum is an easy to use message board that allows clients and Genetec staff to communicate with each other and discuss a variety of topics, ranging from technical questions to technology tips. You can log in or sign up at <https://gtapforum.genetec.com>.
- **Technical training.** In a professional classroom environment or from the convenience of your own office, our qualified trainers can guide you through system design, installation, operation, and troubleshooting. Technical training services are offered for all products and for customers with a varied level of technical experience, and can be customized to meet your specific needs and objectives. For more information, go to <http://www.genetec.com/Services>.