



Set-up Guide Enterprise

Purpose

This guide is intended for Project Managers tasked with setting up MazeMap at their campus/building. The guide describes required deliverables from the Project Manager to MazeMap in order to complete the MazeMap setup.

The purpose of this guide is also to provide the Project Manager with a realistic overview of the workload involved in the MazeMap setup, as well as assure that the setup project runs as smoothly as possible.

This guide covers all MazeMap modules, and some of the paragraphs may not be relevant for you. For a list of the modules to be installed at your site, please see the MazeMap purchase contract.

Customer delivery checklists

Indoor Maps

- Read through requirements as described in [1. Indoor Maps](#)
- Send **DWG/DXF Floorplans** to MazeMap
- Send **Floorplan/Building Manifest** to MazeMap

Map Editor access

- Read through the description in [2. Access to Map Editor](#)
- Send MazeMap the email addresses of the people who will be administrators of the MazeMap content

POI database

- Follow the points relevant for you in [3. Establishing the POI database](#)

Indoor Paths

- Read through description in [4. Establishing paths](#)
- Send MazeMap the email addresses of the person who will be responsible for verifying the generated paths

Indoor Positioning

- Read through description in [5. Indoor Positioning Integration](#)
- Buy and set up a **Cisco MSE**
- Set up an API User account for MazeMap on the MSE
- Set up a **"LIPI" Server** at your (customers) site.
- Set up user account for MazeMap with root access on lipi server
- Send MazeMap username and password for LIPI server
- Open for network traffic from Wireless Clients to LIPI server port 443
- Open for network traffic from LIPI server to Cisco MSE on port 443
- Open for network traffic from lipiadmin.mazepos.com to LIPI server on port 22 (SSH)
- Open for network traffic from LIPI server to puppet.mazepos.com on port 8140
- Send MazeMap the public IP address of the LIPI server
- Send MazeMap the private address IP of the LIPI Server
- Send MazeMap the IP address of the MSE
- Send MazeMap a username and password for the **MSE API**
- Send MazeMap the public address(es) of **Wireless Clients**

1. Indoor Maps

In order for maps* to be set up, floorplans must be sent to the MazeMap delivery team for validation and import.

- Floorplans must be in .DWG or .DXF format.
- Ideally, floorplans will also contain unique room names that may be used to identify a room unambiguously across imports.
- In addition to the floorplans themselves, a manifest must be included that gives the street address and floor number of each floorplan. This is not necessary if this information is obvious from the floor plan filenames. The manifest should also include the names of the buildings (not addresses). If you would like more than one campus, the manifest should specify campus names, and which buildings that are included in each campus

*Maps in this context refer to the maps without the human readable room names. In other words, just the walls, stairs, doors and other visual elements.

2. Access to Map Editor

After the maps are set up, we will provide user access to our online Map Editor, so that the customer will be able to add custom POIs, and customize the data.

In order for us to set up user access to the online Map Editor, the customer or reseller must

- Send the emails of the people who will act as administrators for MazeMap POI data at the customer site to delivery@mazemap.com

3. Establishing the POI database

Establishing the POI database from a file

In order for the POI database to be set up, an excel or CSV file mapping POI names to technical room name must be provided to the MazeMap delivery team. It is possible and encouraged to define room types in this document.

In order for us to set up user access to the online Map Editor, the customer or reseller must

- Send the resulting file to delivery@mazemap.com

| | A | B | C |
|---|---------------------|---------------------|-------------|
| 1 | Technical room name | POI name | Type |
| 2 | 321.04.223 | Student information | information |
| 3 | 311.03.123 | WC | toilet |
| 4 | 587.04.123 | The Magnet | cafeteria |

Illustration 1: Example POI spreadsheet list

Establishing the POI database from Lydia integration

If the customer has Lydia, we can create the POI database from Lydia given that:

- The firewall is open from MazeMap's server fm-integration.mazemap.com to the Lydia API server on port 443
- An API user is set up for us in Lydia
- Lydia server is at least version 5.4
- Rooms in floorplans must contain Lydia codes (this is usually the case when a customer has Lydia)

Any questions regarding this integration, can be addressed to delivery@mazemap.com

Establishing the POI database from other sources

If you are interested in creating and/or synchronizing your POI database from a source not mentioned in this document, please contact delivery@mazemap.com

4. Establishing paths

Once maps have been established, the MazeMap team will generate a draft version of the paths based on the floorplans.

The customer and reseller must then verify that these paths correspond to the actual pathways at the customer site, and report any discrepancies back to the MazeMap delivery team.

- The customer must specify contact information to the person responsible for verifying the paths, and send this information to delivery@mazemap.com

5. Indoor Positioning Integration

Establishing the POI database from Lydia integration

In order for MazeMap to integrate with the on-site CMX/MSE solution, the following requirements must be met:

- A LIPI (Local IP Interface) server must be set up at the customer site.
 - The server must run either Ubuntu LTS or Debian server
 - The customer or reseller must establish and maintain the hardware (or virtual machine) and operating system
 - The MazeMap team must be given ssh access with root access on the LIPI
 - The LIPI server software has a low RAM, CPU and HD footprint, and only requires a very basic server in terms of performance
- The firewalls at the customer site must be configured to allow the traffic flow seen in Illustration 2. Note that traffic from WiFi clients must not be NAT'ed before reaching the LIPI server
- The Customer must have a functioning Cisco MSE with the Context Aware Service enabled
- The customer must have sufficient MSE licenses for the number of access points in the network (MazeMap only requires «Base Location Services License»)
- Maps for all customer floors must be added to the Cisco Prime configuration, and georeferenced with at least 3 GPS markers per floor
- All maps must be scaled correctly
- All access points must be correctly placed in the floor maps in Cisco Prime
- An API user account must be set up for MazeMap on the Cisco MSE

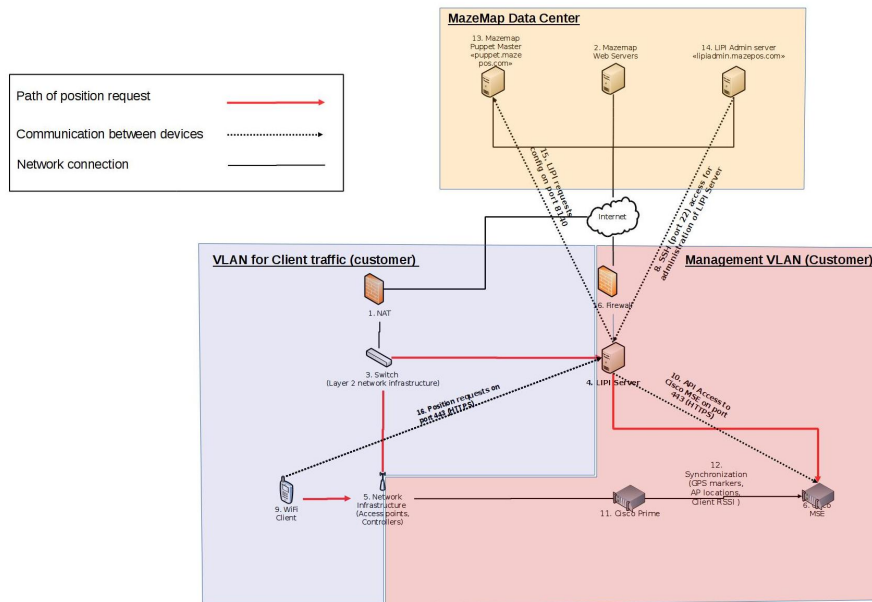


Illustration 2: Position Request Traffic Flow

Configuring the LIPI server

In order for MazeMap to configure the LIPI, the following information must be sent to the Delivery Manager at delivery@mazemap.com:

- Public IP address for the LIPI server (if it is behind a NAT, send the public IP of the NAT)
- Private IP address of the LIPI server
- SSH username and Password
- IP address of MSE
- The public IP address range of WiFi Clients (usually a NAT device with a single public IP address)

Any questions regarding this integration, can be addressed to

delivery@mazemap.com

Integration with other Indoor positioning solution

If you are interested in integrating MazeMap with a Indoor positioning solution other than Cisco CMX/MSE, please contact delivery@mazemap.com