

Setting up Location Sharing

Overview

The ability to send a location share, whether static or live, is available without any additional configuration.

However, when *receiving* a location share, in order to display it on a map, the client must have access to a tile server. If it does not, the location will be displayed as text with coordinates.

By default, location sharing uses a MapTiler instance and API key that is sourced and paid for by Element. This is provided free, primarily for personal EMS users and those on Matrix.org.

If no alternate tileserver is configured either on the HomeServer or client then the mobile and desktop applications will fall back to Element's MapTiler instance. Self-hosted instances of Element Web will not fall back, and will show an error message.

Using Element's MapTiler instance

Customers should be advised that our MapTiler instance is not intended for commercial use, it does not come with any uptime or support SLA, we are not under any contractual obligation to provide it or continue to provide it, and for the most robust privacy customers should either source their own cloud-based tileserver or self-host one on-premises.

However, if they wish to use our instance with Element Web for testing, demonstration or POC purposes, they can configure the `map_style_url` by adding extra configurations in the advanced section of the Element Web page in the installer:

```
{
  "map_style_url": "https://api.maptiler.com/maps/streets/style.json?key=fU3vIMsMn4Jb6dnEIFsx"
}
```

Using a different tileserver

If the customer sources an alternate tileserver, whether from MapTiler or elsewhere, you should enter the tileserver URL in the `extra_client` section of the Well-Known Delegation Integration accessed from the Integrations page in the Installer:

```
{  
  ... other info ...  
  "m.tile_server": {  
    "map_style_url": "http://mytileserver.example.com/style.json"  
  }  
}
```

Self-hosting a tileserver

Customers can also host their own tileserver if they wish to dedicate the resources to doing so. Detailed information on how to do so is available [here](#).

Changing permissions for live location sharing

By default live location sharing is restricted to moderators of rooms. In direct messages, both participants are admins by default so this isn't a problem. However this does impact public and private rooms. To change the default permissions for new rooms the following Synapse additional configuration should be set

```
default_power_level_content_override:  
  private_chat:  
    events:  
      "m.beacon_info": 0  
      "org.matrix.msc3672.beacon_info": 0  
      "m.room.name": 50  
      "m.room.power_levels": 100  
      "m.room.history_visibility": 100  
      "m.room.canonical_alias": 50  
      "m.room.avatar": 50  
      "m.room.tombstone": 100  
      "m.room.server_acl": 100
```

"m.room.encryption": 100

Not strictly necessary as this is used for direct messages, however if additional users are later invited into the room they won't be administrators

trusted_private_chat:

events:

"m.beacon_info": 0

"org.matrix.msc3672.beacon_info": 0

"m.room.name": 50

"m.room.power_levels": 100

"m.room.history_visibility": 100

"m.room.canonical_alias": 50

"m.room.avatar": 50

"m.room.tombstone": 100

"m.room.server_acl": 100

"m.room.encryption": 100

public_chat:

events:

"m.beacon_info": 0

"org.matrix.msc3672.beacon_info": 0

"m.room.name": 50

"m.room.power_levels": 100

"m.room.history_visibility": 100

"m.room.canonical_alias": 50

"m.room.avatar": 50

"m.room.tombstone": 100

"m.room.server_acl": 100

"m.room.encryption": 100

Revision #1

Created 4 June 2025 09:18:21 by Kieran Mitchell Lane

Updated 4 June 2025 09:18:22 by Kieran Mitchell Lane