

How to Import/Export CSV files of MeshDB data

The data in MeshDB is best viewed using the tooling available at db.nycmesh.net:

- Admin Panel: <https://db.nycmesh.net/admin>
- Legacy Query form: <https://forms.nycmesh.net/query>
- SQL Explorer: <https://db.nycmesh.net/explorer/play/>

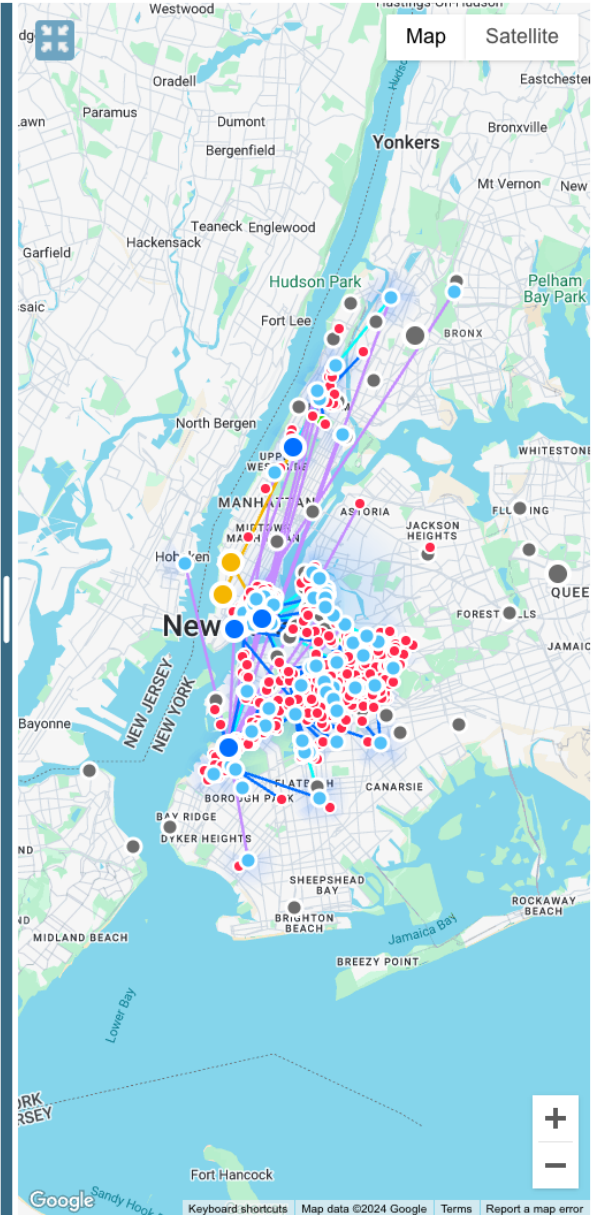
However, for some applications these resources may not provide all of the required query and filtering functionality. In these cases, users may want to export meshDB data for direct editing/analysis in spreadsheet editors or other local tools. This page summarizes the options available to do that.

CSV Export in MeshDB Format

To export individual MeshDB tables in the format used by MeshDB, such as the `Members` table, first open the [MeshDB Admin Panel](#). Next select the table of interest, `Members` in this case:

Welcome to MeshDB Admin Portal

AUTHENTICATION AND AUTHORIZATION		
Groups		View
Users	+ Add	Change
AUTH TOKEN		
Tokens	+ Add	Change
WEBHOOKS		
Webhook Targets	+ Add	Change
DJANGO FLAGS		
Flag states		View
MESHAPI		
Access points	+ Add	Change
Buildings	+ Add	Change
Devices	+ Add	Change
Installs	+ Add	Change
LOSEs	+ Add	Change
Links	+ Add	Change
Members	+ Add	Change
Nodes	+ Add	Change
Sectors	+ Add	Change
SQL EXPLORER		
Database connections		View
Explorer values		View
Queries		View



On the next page, select "Export" to enter the export dialog:

Select member to change

IMPORT EXPORT ADD MEMBER +

Search

Action: Go 0 of 100 selected

<input type="checkbox"/>	MEMBER	NAME	PRIMARY EMAIL ADDRESS	STRIPE EMAIL ADDRESS	PHONE NUMBER
<input type="checkbox"/>	Suzie Fakename	Suzie Fakename	noreply+test-user-lirGwASb@nycmesh.net	-	+1 585-475-7075
<input type="checkbox"/>	Suzie Fakename	Suzie Fakename	noreply+test-user-rydfWccM@nycmesh.net	-	+1 585-475-7075
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<input type="checkbox"/>	Suzie Fakename	Suzie Fakename	noreply+test-user-pADRhIsk@nycmesh.net	-	+1 585-475-7075

Finally, select "csv" as the output format, click "SUBMIT", and the data will be downloaded:

Export

Resource:
MemberResource

This exporter will export the following fields:

☒ Id:

☒ Name:

☒ Primary Email Address:

☒ Stripe Email Address:

☒ Additional Email Addresses:

☒ Phone Number:

☒ Additional Phone Numbers:

☒ Slack Handle:

☒ Notes:

Format:

SUBMIT


Since we chose to export the data in MeshDB format, it does not include related columns such as install number or node number. These other columns would need to be downloaded separately from their respective tables and joined together with the `id` column on the member table. This is not trivial, so for common cases, like looking up a member's install by their email address, we provide CSV exports that combine these tables automatically, see below.

CSV Export in Legacy Spreadsheet Format

For convenience and compatibility with legacy scripts and workflows, MeshDB provides a CSV export capability which approximates the columns available in the "New node form responses" spreadsheet

The CSV exports provided in this section are an approximation of the legacy spreadsheet, but are not a perfect recreation. In particular, the notes fields do not match 1:1 with the original spreadsheet due to the way that the notes are parsed, split, and automatically created during the spreadsheet import process. Some smaller details like the exact install used for the `X-` pointer on NN re-use may also vary a bit. This query should not be used to replace the contents of the existing spreadsheet wholesale without careful consideration

To access this capability, use the following links, or navigate via the SQL Explorer homepage:



New QueryPlaygroundLogsFavorites

Recently Run by You

Query	Last Run	CSV
Export Legacy Spreadsheet Links Tab	10/21/2024 11:34 p.m.	↓
Export Legacy Spreadsheet Installs/Nodes Tab	10/21/2024 11:25 p.m.	↓
Export Legacy Spreadsheet Sectors Tab	10/21/2024 12:49 a.m.	↓
Email from NN	10/10/2024 1:51 p.m.	↓
Member objects with no associated install	10/09/2024 11:48 a.m.	↓

All Queries

Search

Query	Created	CSV	Play	Delete	Favorite	Last Run	Run Count	Connection
Email from NN	10/09/24 by johnb	↓	↗	🗑	♥	10/22/24	36	readonly
Export Legacy Spreadsheet Installs/Nodes Tab	10/21/24 by andrewd	↓	↗	🗑	♥	10/21/24	11	readonly
Export Legacy Spreadsheet Links Tab	10/21/24 by andrewd	↓	↗	🗑	♥	10/21/24	37	readonly
Export Legacy Spreadsheet Sectors Tab	10/21/24 by andrewd	↓	↗	🗑	♥	10/21/24	3	readonly
Member objects with no associated install	10/09/24 by andrewd	↓	↗	🗑	♥	10/09/24	14	readonly
Nodes near existing node	09/29/24 by jameso	↓	↗	🗑	♥	10/09/24	7	readonly

Powered by SQL Explorer. Rendered at 10/22/2024 12:03 a.m.

These queries can also be accessed by the following direct links:

- [Export Legacy Spreadsheet Installs/Nodes Tab](#)
- [Export Legacy Spreadsheet Links Tab](#)

- [Export Legacy Spreadsheet Sectors Tab](#)

Use the "Download" button and select "CSV" as the type:

The screenshot shows the SQL Explorer interface. The title is "Export Legacy Spreadsheet Installs/Nodes Tab". The description states: "Creates a view of the entire meshDB dataset, which is approximately equal in composition to the legacy spreadsheet's first sheet. Not a perfect recreation, in particular the notes are very different than their originals, but the key data should be very close". The SQL query is as follows:

```
1 SELECT * FROM (
2 SELECT
3   coalesce(to_char(request_date, 'MM/DD/YYYY HH24:MI:SS'), '') as "Timestamp",
4   concat(
5     coalesce(street_address || ', ', ' '),
6     coalesce(city || ', ', ' '),
7     coalesce(state || ', ', ' '),
8     zip_code
9   ) as "Location",
10  coalesce(unit, '') as "Apartment number",
11  coalesce(meshapi_member.name, '') as "Name",
12  coalesce(primary_email_address, '') as "Email",
13  coalesce(stripe_email_address, '') as "Stripe Email",
14  array_to_string(additional_email_addresses, ', ') as "2nd profile email",
15  coalesce(phone_number, '') as "Phone",
16  '' as "Neighborhood",
17  CASE
18    WHEN roof_access = true THEN 'I have Rooftop access'
19    ELSE ''
20  END as "Rooftop Access",
21  '' as "ZIP",
22  coalesce(referral, '') as "Referral",
```

The "Download..." button is highlighted, and the "CSV" option is selected from the dropdown menu. The "Schema" panel on the right lists the following tables and their fields:

- meshapi_accesspoint**
 - latitude: FloatField
 - longitude: FloatField
 - altitude: FloatField
 - device_ptr_id: UUIDField
- meshapi_building**
 - bin: IntegerField
 - street_address: CharField
 - city: CharField
 - state: CharField
 - zip_code: CharField
 - address_truth_sources: Unknown
 - latitude: FloatField
 - longitude: FloatField
 - altitude: FloatField
 - notes: TextField
 - panoramas: Unknown
 - id: UUIDField
 - primary_node_id: UUIDField
- meshapi_building_nodes**
 - id: BigAutoField
 - building_id: UUIDField
 - node_id: UUIDField
- meshapi_device**
 - CharField

CSV Import in MeshDB Format

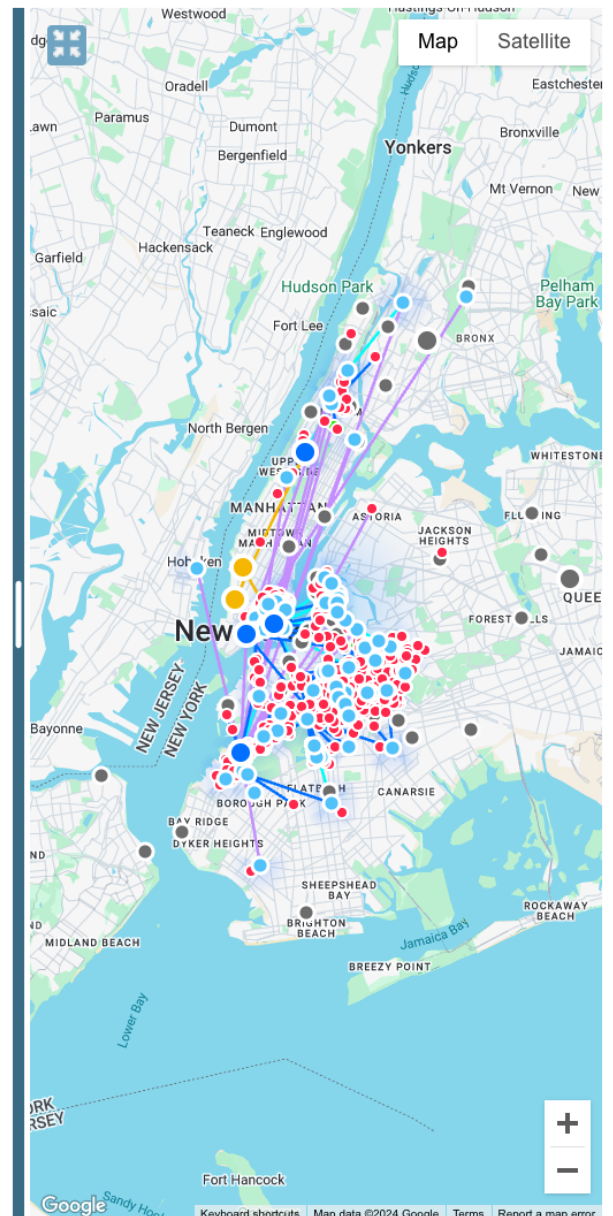
These instructions cover the general process for importing a CSV into MeshDB, for a bulk import of partner data for example. For creating many installs in a large building, there is a [more specific guide here](#)

Editing large quantities of MeshDB data using CSV import can unintentionally have a large impact on the quality of MeshDB data. Though edits using this feature are supported, this process should primarily be used for imports of new data, rather than edits to existing data. For bulk edits to existing data, a [Django Migration](#) in the source code should probably be used instead

To import data to individual MeshDB tables in the format used by MeshDB, such as the `Members` table, first open the [MeshDB Admin Panel](#). Next select the table of interest, `Members` in this case:

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LOSes	+ Add	Change
Links	+ Add	Change
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Nodes	+ Add	Change
Sectors	+ Add	Change
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Database connections		View
Explorer values		View
Queries		View



On the next page, select "Import" to enter the import dialog

Select member to change

IMPORTEXPORTADD MEMBER +

Q

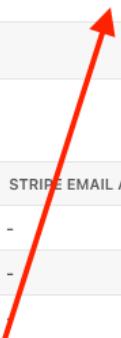
Search

Action:

Go

0 of 100 selected

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In the import dialog, select the CSV file you would like to import from (likely an edited export created using the instructions above):

Import

This importer will import the following fields: id, name, primary_email_address, stripe_email_address, additional_email_addresses, phone_number, additional_phone_numbers, slack_handle, notes

Resource:

MemberResource

File to import:

Choose File

Member-2024-10-22.csv

Format:

csv

SUBMIT

On the following screen, confirm the accuracy of the data, including that the rows are showing as either "Update" or "Create" as expected based on the desired editing:

Import

Below is a preview of data to be imported. If you are satisfied with the results, click 'Confirm import'

CONFIRM IMPORT

Preview

	ID	NAME	PRIMARY_EMAIL_ADDRESS	STRIPE_EMAIL_ADDRESS	ADDITIONAL_EMAIL_ADDRESSES	PHONE_NUMBER	ADDITIONAL_PHONE_NUMBERS	SLAC
Update	00000000-0000-0000-0000-000000000003	Kevin	[REDACTED]			[REDACTED]		
Update	00000000-0000-0000-0000-000000000004	Tommy	[REDACTED]			[REDACTED]		
Update	00000000-0000-0000-0000-000000000005	DBA	[REDACTED]			[REDACTED]		
Update	00000000-0000-0000-0000-000000000006	[REDACTED]	[REDACTED]			[REDACTED]		
Update	00000000-0000-0000-0000-000000000007	NYC Mesh	contact@nycmesh.net					

