

1. How does one answer the 1st question with the search field?

You can use the NOMAD search bar to find indexed quantities. As you begin typing, all available and searchable sets (with their paths in the NOMAD metainfo) appear in the advanced menu below the search bar. Continue typing to refine the results and select the desired set.

For the example presented in the tutorial (search for Boron Nitride):

- Type "Boron" and select *results.material.material_name = Boron*.
- Type 'Nitrogen' and select *results.material.material_name = Nitrogen*.

Alternatively, you can directly enter the element paths in the search field:

- *results.material.elements = B*
- *results.material.elements = N*

2. For the histogram customisation is it possible to check anywhere what can be put in as an x axis value?

[The NOMAD Metainfo](#) is the source for all quantities. The simplest method would be to start typing, then NOMAD will display the possible quantities within the edit window of the histogram widget.

3. Can one easily create predefined dashboards like this or does this have to be programmed into NOMAD?

You can add search items from any filter tab to create your own search interface. All you have to do is open the desired filter category from the left side panel and click on a small plus button to the right of the search item. However, this is not persistent. To have a persistent option, you would ideally rely on a combination of the plugin mechanism and the Oasis instance.

4. How easy is it to add new dashboards in case I operate an OASIS? Is it as easy as adding the YAML file somewhere?

Not as simple as that. For full-featured and customized dashboards or full-featured search applications, you would ideally add plugins to your Oasis. This allows you to include custom schemas and definitions, as well as modify the left filter panel and columns.

If you are interested in defining a custom dashboard/app in an Oasis, you can find more information here: <https://nomad-lab.eu/prod/v1/docs/howto/plugins/apps.html>

5. Is it possible to upload raw data on behalf of other users as NOMAD Oasis admin, the user names should appear as authors?

Yes, this is possible as an Admin. You must use the NOMAD command line interface. Ownership of the upload can be changed with the NOMAD admin uploads chown command: <https://nomad-lab.eu/prod/v1/docs/reference/cli.html#nomad-admin-uploads-chown>

6. Is it possible to add a bunch of users as "group"?

User groups can be created in NOMAD to share their uploads with multiple users. Currently this can only be done by using the NOMAD API. In the current production version of NOMAD it is not possible to create and manage groups via the graphical user interface.

Using the API you can:

- Create a new group.
- Add users to the group.
- Grant a group access to an upload.
- Delete a group.

Once a group has been created and granted access to an upload via the API, you can see it listed in the *Edit upload members* menu of the upload in the graphical user interface. Here you can change the role settings or remove the access.

See this link for more details: <https://nomad-lab.eu/prod/v1/api/v1/extensions/docs#/groups>

7. Which release do you need for groups?

Groups API is available from NOMAD version 1.3.7 onwards.

Possibility for adding groups to an upload in the GUI is available from version 1.3.7 onwards, but you have to enable it specifically in the `nomad.yaml` configuration file:

```
services:  
upload_members_group_search_enabled: true
```

8. Is there a file size restriction?

A single upload cannot exceed 32 GB in size. This also means that a single file within an upload has the same limit.

If you reach this limit while using NOMAD, please see this [page](#) on strategies for working with large amounts of data.

9. Do access control lists and group memberships have just an 'actual' value or also some kind of audit trail (who had access at what timespan)?

At the moment we do not have a mechanism for tracking a group's timeline, so you cannot use the GUI to check when someone has been added or removed.

10. Is there an automated way to upload datasets from a measuring pc?

Currently you can use APIs as a path between devices. Another option would be to try [NOMAD CAMELS](#).

11. Why is it not possible to edit or cancel the uploads?

Once an upload has been published, it will no longer be possible to edit it, as we will treat it as a finished piece of work. However, we have a special option for you if you want to make it visible to everyone and still work on it. Inside the upload you can tick the box 'Enabling this will allow all users, including guests who don't have an account, to view the upload before it is published' (it's part of the 3rd step in the creation process). This will allow everyone to see your data and you can still edit them.

12. Can you publish from Oasis to public NOMAD?

In a NOMAD Oasis installation, uploads have a 6th step in the upload process called "Publish to central NOMAD".

Note that publishing to central NOMAD currently means that the raw files are simply sent to the central NOMAD server and re-processed. If the data contains elements that are not compatible with the central version (e.g. schemas), you won't be able to fully reproduce the same entries. At the moment, your data must be compatible with the central server in order to be processed correctly. We are working on alternatives to send all the necessary definitions along with the data.

13. This is specific for XPS data. Is there a list available of what other file formats / methods can be imported (e.g. NMR, microscopy, etc)?

Yes, you can find a list of available NeXus file readers on [this page](#). Each reader links to the GitHub repository where you can find more information about supported file formats.

14. Is there an official process if one happens to accidentally publish data? i.e. how could one have data removed?

The best way is to send a request to our support email: support@nomad-lab.eu

To make it as easy as possible, please send a message from the email address you used to register with NOMAD and include the upload identifier. We will then take care of it.

15. Can you maybe directly show a DOI entry in NOMAD. How does it look like? Any special naming convention?

The naming convention for DOI of the datasets takes the following format:

10.17172/NOMAD/YYYY.MM.DD-<unique-identifier>

- *10.17172/NOMAD/*: the is the prefix assigned to NOMAD datasets.
- *YYYY.MM.DD*: The date when the DOI is assigned.
- *<unique-identifier>*: a unique id generated to identify datasets generated on the same day.

Here are a couple of examples from NOMAD:

- **TCNE on Cu111 elementary transitions**: <https://dx.doi.org/10.17172/NOMAD/2021.10.07-1>
- **Perovskite Solar Cell Database Project**: <https://dx.doi.org/10.17172/NOMAD/2024.09.24-1>

16. Maybe one additional question about "authors": Do you also support "ORCID" as metadata? As plain "real name" is error prone if you search for a specific author.

At the moment, we do not link people to their ORCID accounts.

17. The DOI seems only to redirect and do not provide publication information (author, title, etc)?

The DOI redirects to the dataset page in NOMAD, but handles metadata as we use DataCite as DOI provider. i.e. <https://commons.datacite.org/?query=10.17172%2FNOMAD%2F2024.09.24-1>

We are planning to enhance this in the near future and provide better and more metadata.

18. Does the material_id get created in the upload or it should be fetched from somewhere?

The material_id is created on the fly in NOMAD upon parsing, and it is used to aggregate materials for similar systems.

19. Where can we find the link to the "Document your research"?

https://fairmat-nfdi.github.io/FAIRmat-tutorial-16/T16_6/T16_6_document_your_research.html

20. How does one decide what is a section? Are there any guidelines?

In the context of YAML schemas, a "section" typically refers to a distinct block or part of the data structure that can be instantiated separately in NOMAD.

If the .archive.yaml file has three sections, you can instantiate only one section every single time. So it is similar to having three different schemas in terms of instantiating.

Deciding what constitutes a section depends on how you want to organize the data in your electronic lab notebook (ELN) and schema files. There are no strict, universal guidelines, but sections should logically group related information.

21. Where can one find existing schemas and what structure they have (to decide if I want to inherit)?

You can check the following links:

- <https://fairmat-nfdi.github.io/nomad-measurements/> (NOMAD plugin)
- <https://fairmat-nfdi.github.io/nomad-material-processing/> (NOMAD plugin)
- https://github.com/FAIRmat-NFDI/AreaA-data_modeling_and_schemas (YAML schema)

We have not yet merged the functionality for searching NOMAD plugins into our production installations. Once this is implemented, users will be able to search for plugins developed both by us and by external contributors. You can currently access this feature on our [test Oasis installation](#).

Note that in NOMAD plugins, the schemas are typically defined in Python, not in YAML as presented in the tutorial

22. Is there a way to add units to quantities parsed with the tabular parser?

The units are not automatically read from the file. They are manually given as annotation (e.g., ``unit: nm``), and assigned to the values which were read by the tabular parser. However, the GUI allows you to select your favorite unit to display. For this, select UNIT from top right of GUI pages, select your dimension, and select your desired unit to be displayed.