An Editor for Research Object Cates to empower FAIR data sharing

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NovaCrate is a web-based editor for Research Object Crates, allowing users to **inspect**, **edit**, **visualize**, and **validate** their data and metadata.

NovaCrate
RESEARCH OBJECT CRATE EDITOR

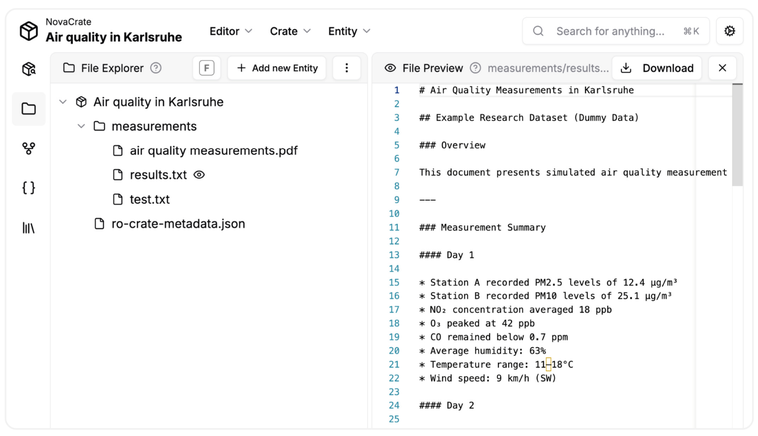
Import / Export: ZIP, ELN, JSON-LD ↔ Research Object Crate

Research Object Crate is a packaging format **combining Metadata** (JSON-LD) **and Data** (in any format) into **one FAIR artifact** (ZIP/ELN).

View / Edit

View / Edit

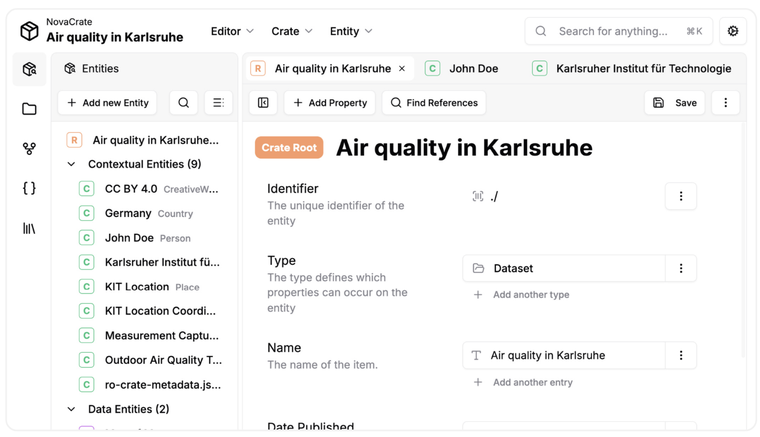
Data



File Explorer

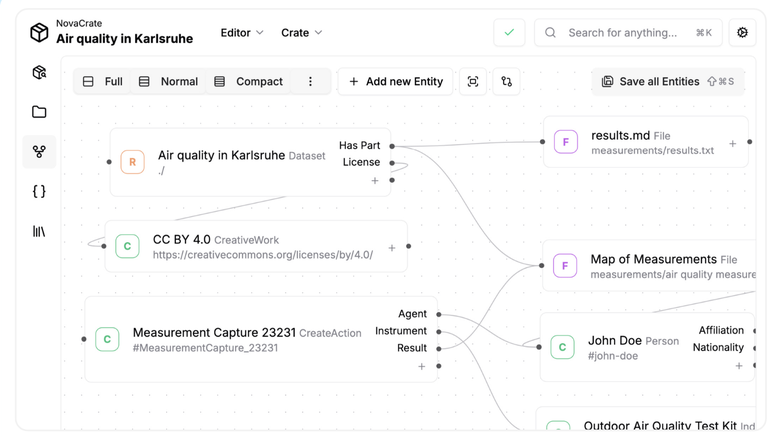
The file explorer allows **interacting with the data** contents of the RO-Crate. It displays a **tree-view** of the included files and folders and allows **previewing** common file formats in-editor. It is also possible to **add, rename, move, and delete** files or folders. The file explorer shows which metadata entities are linked to which files and thus allows **quick navigation** to the entity editor.

Metadata



Entity Editor

This is the **central element** of NovaCrate. It enables users to **view and edit the metadata** entities encoded in the RO-Crate. It includes a **live validation** against the RO-Crate specification. The entity editor is used to **describe the data** stored in the RO-Crate, the RO-Crate itself, as well as any related **authors**, **organizations**, instruments, places, and anything else you want to describe.



Graph View

This view displays all metadata entities as nodes in a graph, where each node is connected by the relationships between the metadata entities. The graph allows **visualizing relationships** encoded in the **linked-data** references of the RO-Crate and makes it easy to **facilitate reuse** of existing metadata entities. The graph view can be **directly manipulated** to change the relationships of the metadata entities.

Findability (F)

By allowing users to **describe** their metadata, their research data, and their RO-Crate **in rich detail**, NovaCrate empowers users to **create findable RO-Crates** that can instantly **signify their value** to researchers. NovaCrate empowers users to make use of **unique identifiers** (such as **ORCID**, **ROR**, **DOI**) when describing researchers, organizations, or any other contextual entity.

Accessibility (A)

RO-Crates are inherently accessible in terms of the FAIR principles, and NovaCrate provides multiple different ways of **presenting** the data and metadata captured in an RO-Crate to **boost accessibility** of the format **for humans**. Furthermore, NovaCrate helps the user to create **specification-conformant RO-Crates** to further ensure accessibility according to the FAIR principles.

Interoperability (I)

NovaCrate can be **extended with any vocabulary** given in the JSON-LD or TTF format, enabling **Interoperability** with RO-Crates from many domains. RO-Crates have already been established as an **exchange format** for Electronic Lab Notebooks (**ELN**), and NovaCrate can import and export ELNs that are packaged as RO-Crates in the ELN file format.

Reusability (R)

NovaCrate empowers its users to create **high-quality RO-Crates** by providing **live validation** of the metadata encoded in the RO-Crate and by empowering users to **include rich metadata** about the data stored in the RO-Crate. NovaCrate allows directly opening any pre-existing RO-Crate to **extract data or metadata** encoded within, or to **reuse** it as a template for a new RO-Crate.

Try NovaCrate now!
No Installation required

NovaCrate on GitHub

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