



Contribution ID: 37

Type: **Tutorial or Skill-Up**

## Webby FDOs with RO-Crates and Signposting

*Tuesday 25 February 2025 10:30 (1h 30m)*

While the FAIR principles provide some guidelines for research artifacts to be findable, accessible, interoperable and reusable, the FAIR Digital Objects (FDOs) add layers so implementations are more machine-actionable, e.g., guidelines for identifiers, typing and operations. Using web-based technologies makes it easier for researchers to implement FAIR and FDO guidelines as it reuses technologies already familiar to them.

In this 1.5-hour tutorial, we will introduce “webby FDOs”, a practical approach to FDOs using Research Object Crate (RO-Crate) and FAIR Signposting. RO-Crate is a lightweight method to package research outputs along with their metadata while FAIR Signposting provides a simple yet powerful approach to navigate FAIR aspects of the scholarly objects on the Web. Our tutorial will give a brief introduction to the FDO principles, and show how they have been implemented using HTTP, HTML and JSON. After the FDO introduction, we will briefly introduce JSON-LD and will show how to use it to expose software metadata with GitHub pages. We will then present RO-Crate and Signposting and will proceed to enrich the previously created GitHub pages with them. We will finish the session with a practical example of webby FDOs in production, using a Biodiversity use case from the context of Common European Data Spaces (Green Deal Data Space).

This session will follow an interactive walk-through with opportunities to discuss use cases and challenges. It aims to give the participants an overview of the technologies so they can go deeper into the hands-on exercises used during the session. Hands-on will include enough information for participants to follow them and apply them to their own (basic) use case. Brief knowledge of Web technology (HTTP, HTML, JSON) is an advantage, but not a requirement.

### I want to participate in the youngRSE prize

no

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**Track Classification:** Data and Software Management: software metadata