



Australian Research Data Commons

# Reusable

#FAIR101 #ARDCCtraining Webinar 8

PRESENTED BY

Matthias Liffers

# Code of Conduct

To ensure that everyone has a fulfilling learning opportunity, FAIR Data 101 is governed by a Code of Conduct.

You can view the Code at [tiny.cc/code-conduct](https://tiny.cc/code-conduct)

If you observe a breach of the Code of Conduct, please contact us using the form linked in the Code.

# Today's agenda

- A bit of provenance
- FAIR beyond data
  - Software
  - Training materials
- Where to from here?

R1.2: (Meta)data are associated with detailed provenance

We need to talk about spreadsheets



Data + Process = Data

# Your first API request

New to Jupyter notebooks? Try [Using Jupyter notebooks](#) for a quick introduction.

In this section we're going to learn how to send a request for information to the Trove API.

API requests are just like normal urls. However, instead of sending us back a web page, they deliver data in a form that computers can understand. We can then use that data in our own programs.

We're going to use the Python [Requests](#) module to handle our API queries, so let's import it now.

```
In [ ]: # Make the Requests module available
import requests
```

## Getting an API key

Any requests you make to the Trove API need to be authenticated with a 'key'. For non-commercial projects, you just fill out a simple form and your API key is generated instantly. Follow the instructions in the Trove Help to [obtain your own Trove API Key](#).

Once you've created a key, you can access it at any time on the 'For developers' tab of your Trove user profile.

Copy your API key now, and paste it in the cell below, between the quotes.

```
In [ ]: # This creates a variable called 'api_key', paste your key between the quotes
api_key = ''

# This displays a message with your key
print('Your API key is: {}'.format(api_key))
```



## Your first API

New to Jupyter notebook

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# THIS IS

# PROVENANCE

memegenerator.net



python™



OUT OF SORTS —

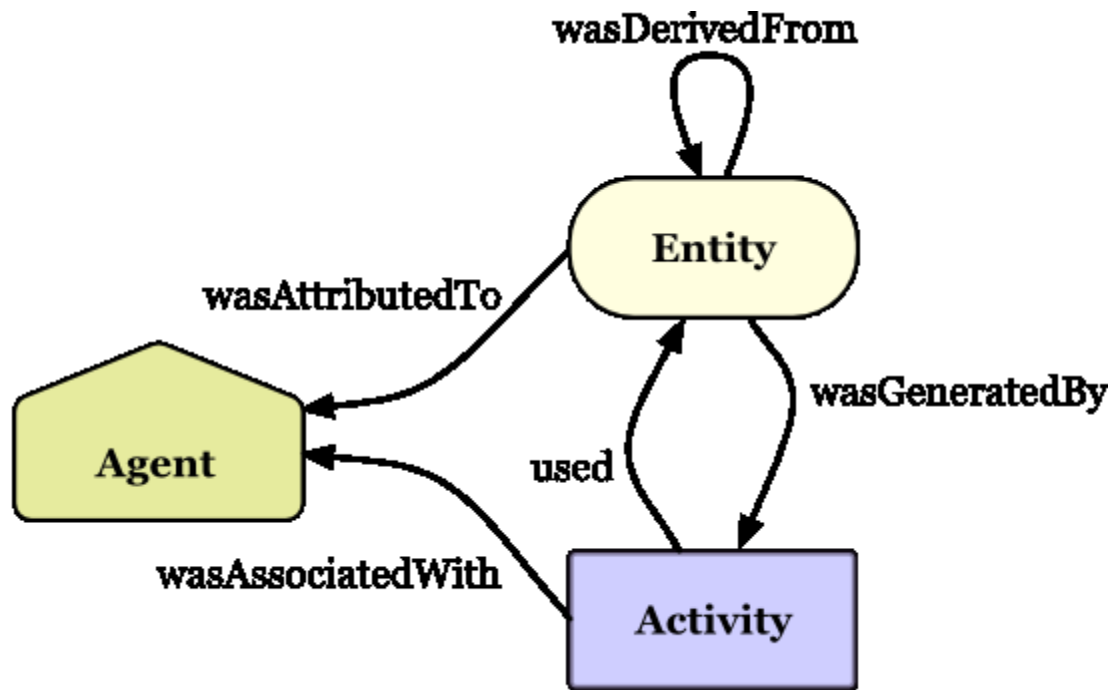
# Researchers find bug in Python script may have affected hundreds of studies

"Willoughby-Hoye" scripts used OS call that caused incorrect measurements on Linux, Mojave

SEAN GALLAGHER · 10/15/2019, 10:17 PM



# Going next level - PROV



# FAIR Software

“software is a special kind of data [...] However, there are also **several significant differences** between data and software as digital research objects”

- Lamprecht *et al.*

# Licensing



# Versioning

# FAIR Training material



# Is *FAIR Data 101* FAIR?

Where to from here?



Join the communities that agree on the standards!



WG

## FAIR 4 Research Software (FAIR4RS) WG

📁 Taxonomy:



Posts



Create Wiki  
index



Events



Repository



Outputs



Case  
Statements



Plenaries



Members

create new content ▾

Group Status: Not yet endorsed

Join Group

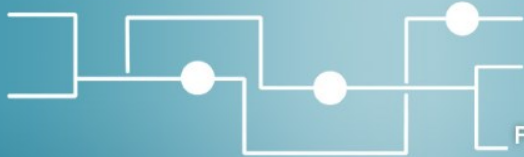
**Status:** In TAB review

**Chair (s):** Michelle Barker, Paula Andrea Martinez, Leyla Garcia, Daniel S. Katz, Neil Chue Hong

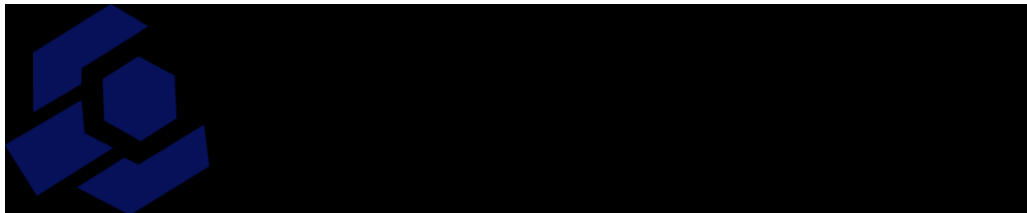
**Secretariat Liaison:** Stefanie Kethers

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One of the major challenges of data-driven research is to facilitate knowledge discovery by assisting humans and machines in their discovery of, access to, integration and analysis of data and their associated research objects, e.g., algorithms, software, and workflows. To address this, an initial effort to define a "DATA FAIRPORT" <sup>[1]</sup> began in 2014 at the Lorentz workshop and



Learn practical FAIR skills!





# What's next?

- Activities
- Community discussions
- Quiz
- Stickers!
- Bonus content: FAIR beyond data webinar with CAUL and AOASG
  - Monday 29 June at 10:00 AWST / 11:30 ACST / 12:00 AEST
  - Register at <https://ardc.edu.au/events/>



## CONTACT

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