



University
of Glasgow

The ietfdata Library

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IAB Workshop on Analyzing IETF Data (AID)
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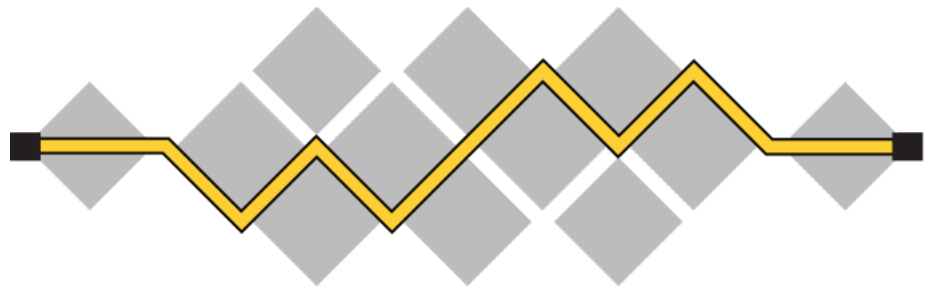


**Engineering and
Physical Sciences
Research Council**

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IETF Data

Datatracker

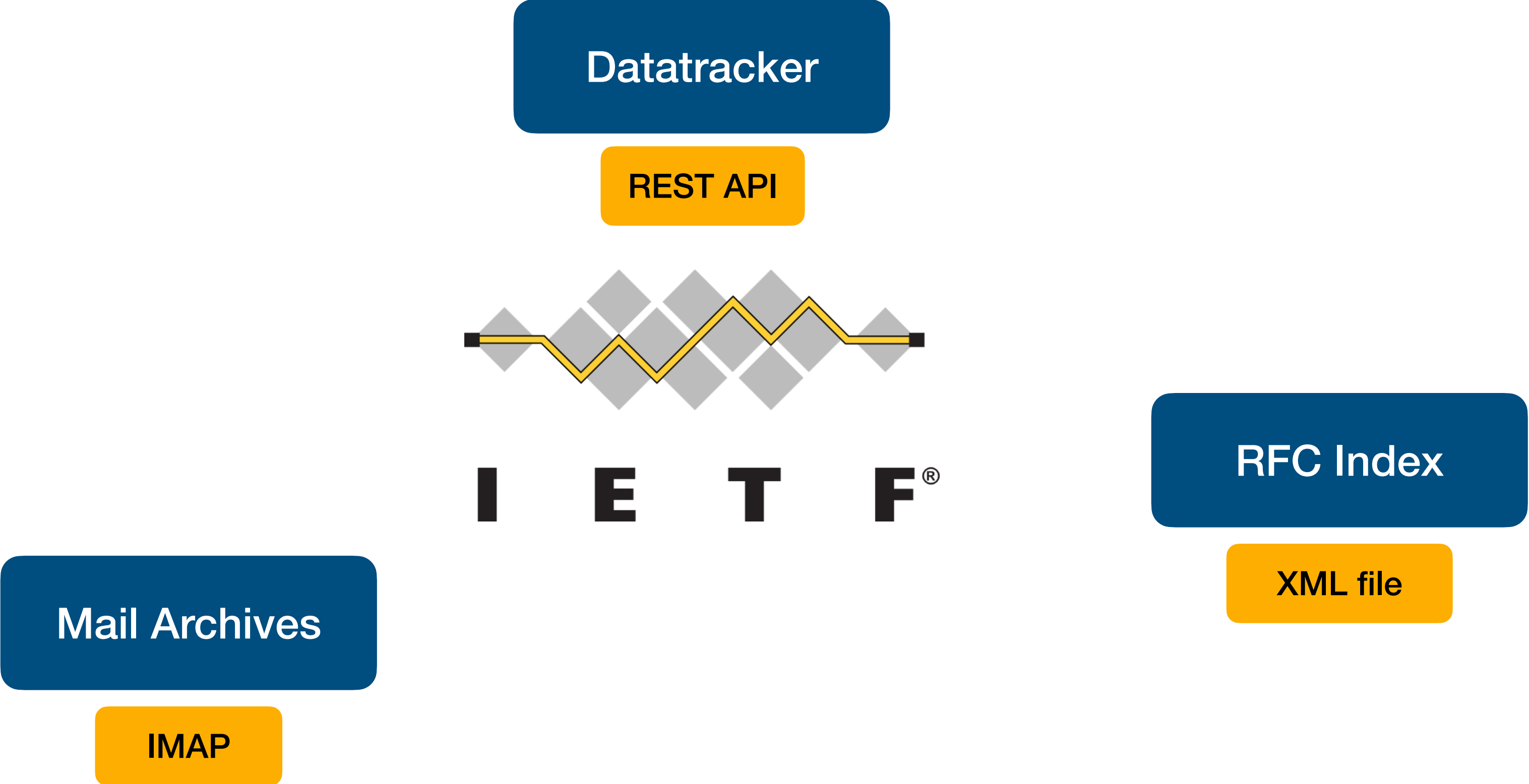


I E T F®

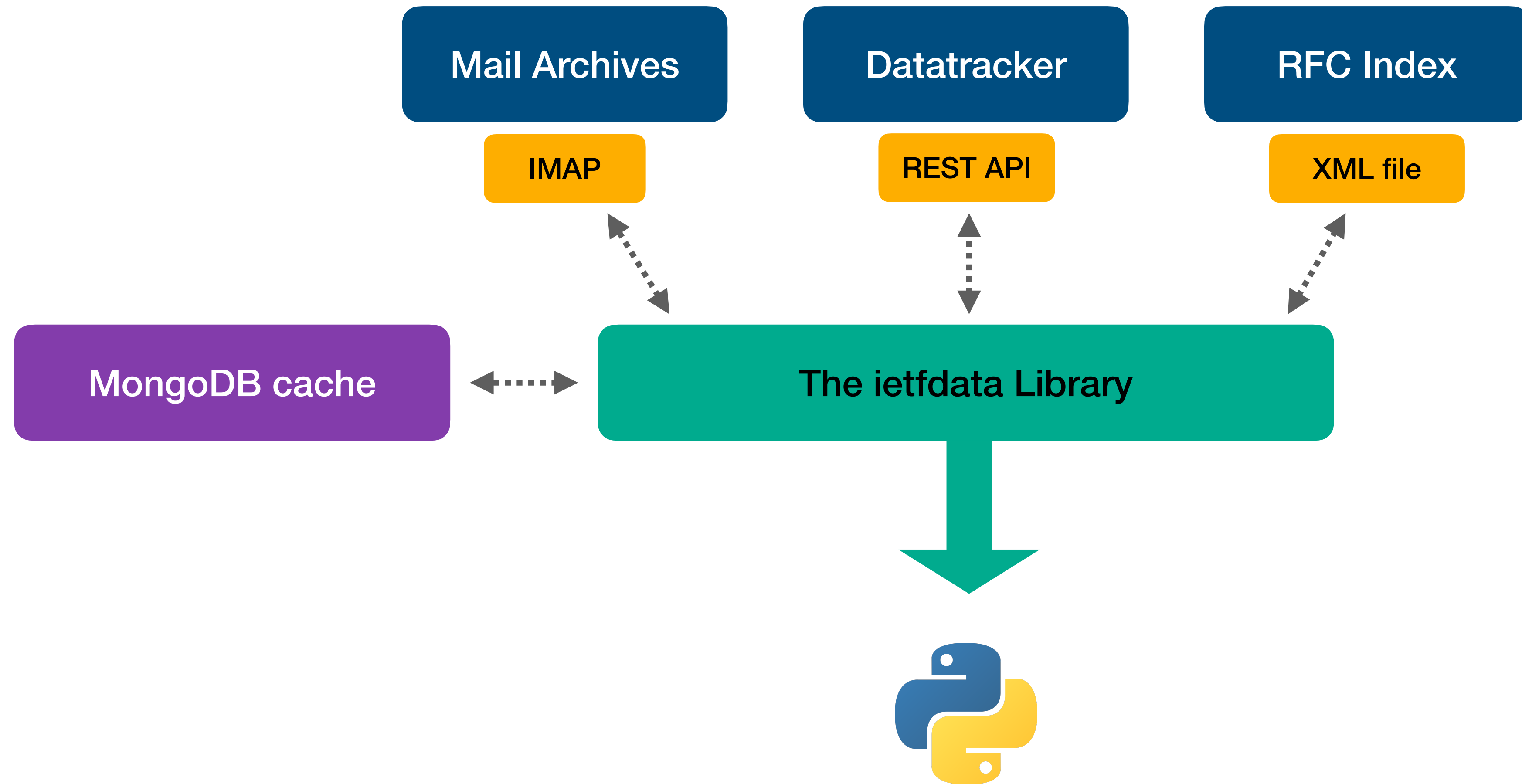
Mail Archives

RFC Index

IETF Data



The ietfdata Library



What data is available?

- Author list
- Stream
- IETF working group and area information, if appropriate
- Status (at publication, and current)
- Updates/obsoletes relationships between RFCs

RFC Index

Mail Archives

Datatracker

What data is available?

- IETF mailing lists, and mirrors, from around 1995
- Messages grouped by mailing list
- Library provides a thread abstraction

RFC Index

Mail Archives

Datatracker

What data is available?

- Documents
I-Ds, agendas, bluesheets, charters, minutes, recordings, ...
- Groups
Events, milestones, roles (chairs and ADs), URLs ...
- Intellectual property disclosures
- Mailing list subscriptions
- Meetings
Registrations, schedule, session details, ...
- People
Names, e-mail addresses, biographies, ...
- Reviews
Requests, reviews, assignments, review teams/directorates, ...

RFC Index

Mail Archives

Datatracker

Example: Meeting registrations

```
from ietfdata.datatracker import *

dt = DataTracker()

p = dt.person_from_email("sm@smcquistin.uk")
print("Name: {}".format(p.name))

for reg in dt.meeting_registrations(person=p):
    meeting = dt.meeting(reg.meeting)
    if dt.meeting_type(meeting.type) == dt.meeting_type_from_slug("ietf"):
        print(F"Registered for IETF {meeting.number} in {meeting.city}")
        print(F"  Name: {reg.first_name} {reg.last_name}")
        print(F"  Affiliation: {reg.affiliation}")
        print(F"  Email: {reg.email}")
```


Example: Meeting registrations

```
Name: Stephen McQuistin
Registered for IETF 94 in Yokohama
  Name: Stephen McQuistin
  Affiliation: University of Glasgow
  Email: sm@smcquistin.uk
Registered for IETF 96 in Berlin
  Name: Stephen McQuistin
  Affiliation: University of Glasgow
  Email: sm@smcquistin.uk
Registered for IETF 101 in London
  Name: Stephen McQuistin
  Affiliation: University of Glasgow
  Email: sm@smcquistin.uk
Registered for IETF 103 in Bangkok
  Name: Stephen McQuistin
  Affiliation: University of Glasgow
  Email: stephen.mcquistin@glasgow.ac.uk
Registered for IETF 105 in Montreal
  Name: Stephen McQuistin
  Affiliation: University of Glasgow
  Email: sm@smcquistin.uk
...
```

Example: Meeting registrations

Name: Stephen McQuistin
Registered for IETF 94 in Yokohama
Name: Stephen McQuistin
Affiliation: University of Glasgow
Email: sm@smcquistin.uk
Registered for IETF 96 in Berlin
Name: Stephen McQuistin
Affiliation: University of Glasgow
Email: sm@smcquistin.uk
Registered for IETF 101 in London
Name: Stephen McQuistin
Affiliation: University of Glasgow
Email: sm@smcquistin.uk
Registered for IETF 103 in Bangkok
Name: Stephen McQuistin
Affiliation: University of Glasgow
Email: stephen.mcquistin@glasgow.ac.uk
Registered for IETF 105 in Montreal
Name: Stephen McQuistin
Affiliation: University of Glasgow
Email: sm@smcquistin.uk
...

Finds registrations by person, even if a different e-mail address was used

Summary

- The ietfdata library provides a Python API for accessing email archives, the Datatracker, and the RFC Index
- Support for caching, to improve performance and reduce load on the IETF's infrastructure
- Available via PyPI, with code and examples on GitHub

Installation via PyPI:
`pip install ietfdata`

Code and examples:
<https://github.com/glasgow-ipl/ietfdata>

Examples

More at github.com/glasgow-ipl/ietfdata/tree/master/examples

Example: Bluesheets

```
from ietfdata.datatracker import *

dt = DataTracker()

bluesheets = dt.document_type_from_slug("bluesheets")
quic = dt.group_from_acronym("quic")

for doc in dt.documents(doctype = bluesheets, group = quic):
    print(doc.title)
    print(doc.url())
    print("")
```

Example: Organisational chart

```
from ietfdata.datatracker import *

dt = DataTracker()

def print_group(group : Group, level : int):
    for i in range(0, level):
        print("  ", end="")
    print(group.name)
    for g in dt.groups(parent = group, state = dt.group_state_from_slug("active")):
        print_group(g, level + 1)

print_group(dt.group_from_acronym("ietf"), 0)
print_group(dt.group_from_acronym("irtf"), 0)
```


Example: Group roles

```
from ietfdata.datatracker import *

dt = DataTracker()

def group_roles(group: Group):
    print(F"Group: {group.name}")
    for gr in dt.group_roles(group = group):
        e = dt.email(gr.email)
        p = dt.person(gr.person)
        rn = dt.role_name(gr.name)
        print(F"  {rn.name}: {p.name} <{e.address}>")
    print("")

for g in [dt.group_from_acronym("ietf"),
          dt.group_from_acronym("irtf"),
          dt.group_from_acronym("iesg"),
          dt.group_from_acronym("irsg"),
          dt.group_from_acronym("quic")]:
    group_roles(g)
```