



cottage labs

Invenio Notify

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Invenio Notify

Use-case:

- Display peer reviews and endorsements on records
- Request a peer-review from a registered service

Initially we're working with PCI (Peer Community in) and COAR to implement the Notify protocol.

For Zenodo via InvenioRDM



Notify Logo



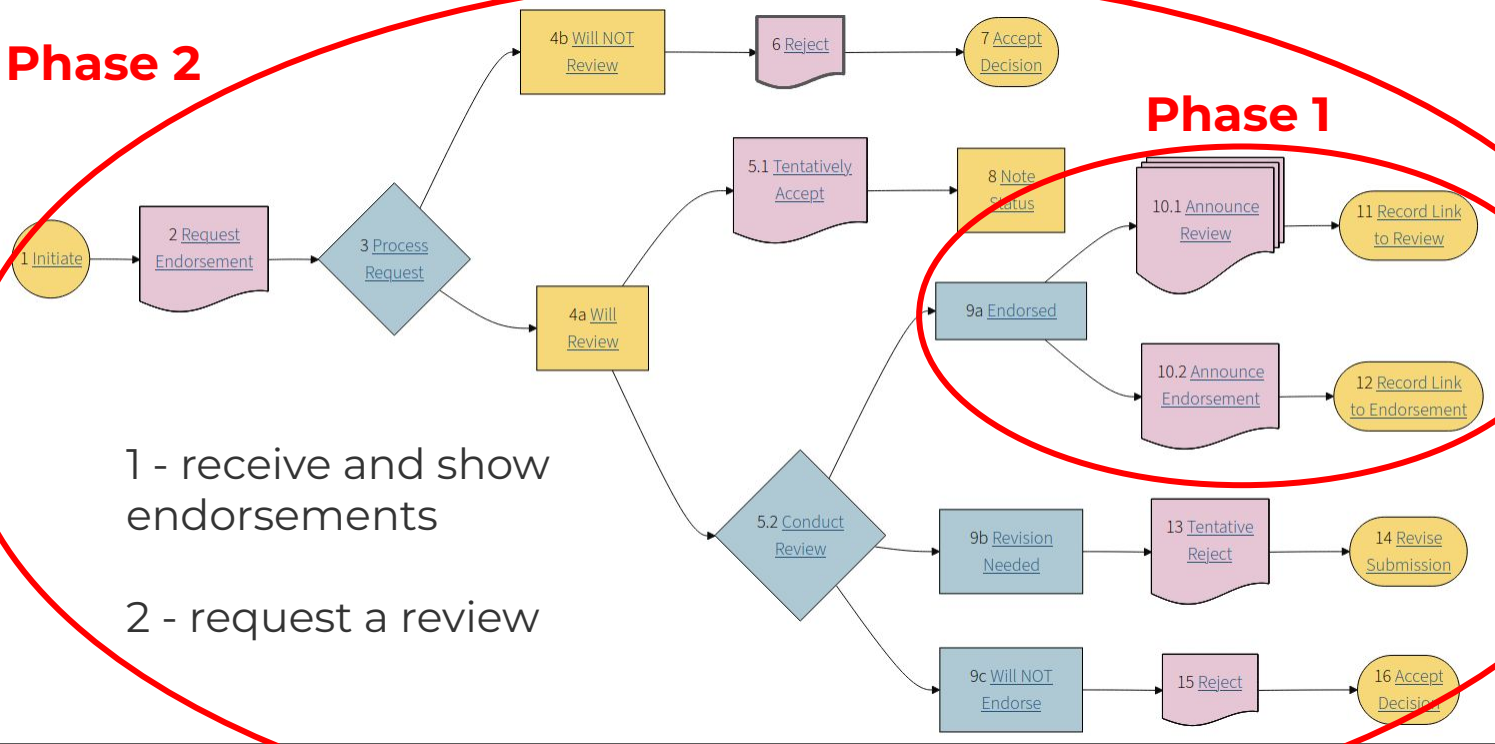
Background

- Python core library <https://github.com/coar-notify/coarnotifypy>
 - Cottage Labs has implemented this library to enable standards-compliance for any Python implementation
 - Ruby, PHP, JS libraries are also becoming available
- Developer Resources <https://coar-notify.net/> - collecting documentation, examples, and integrations in the catalogue

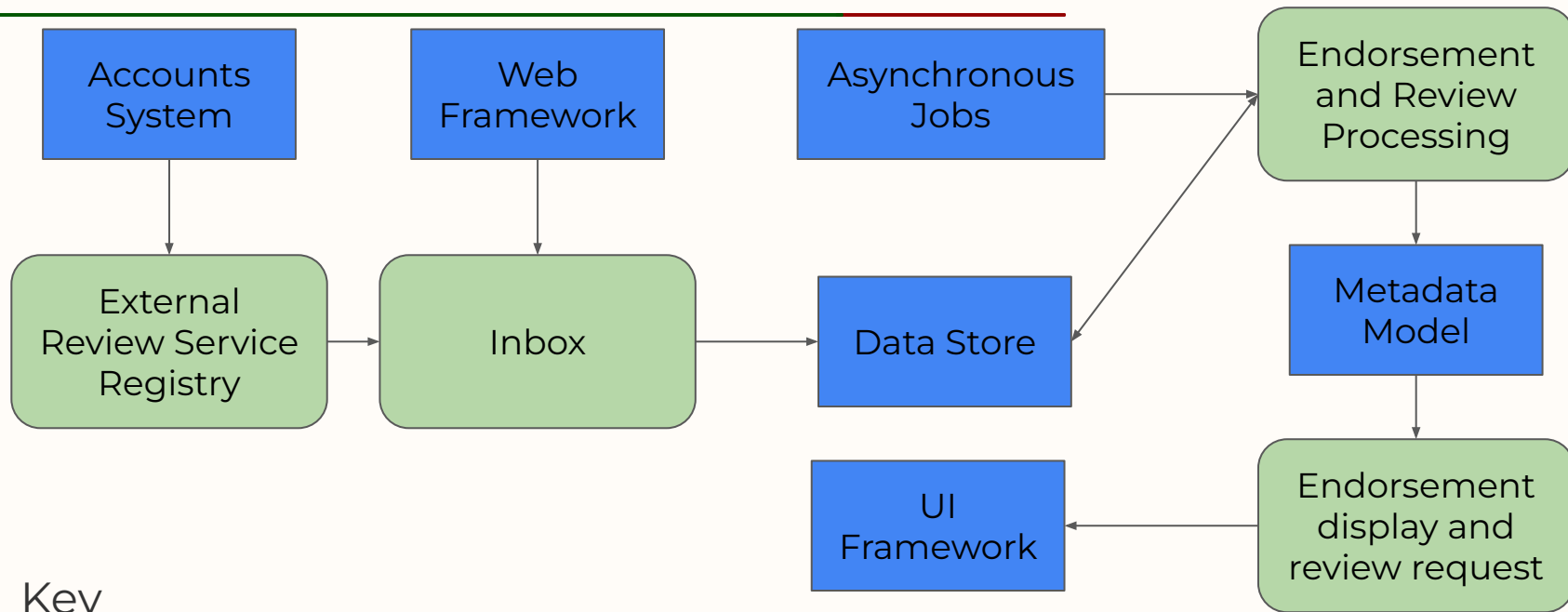


Supporting the PCI workflow

Phase 2



InvenioRDM Solution



Key

Existing Invenio Infrastructure

Added by the project



Inbox: outline

Written as an extension on v13, we had plenty of docs and examples of how to start out writing a new module.

The Notify Inbox offers a new REST endpoint to which COAR Notifications can be posted.

Authentication via a registered user & token:

- A local admin user is given a role to manage the inbox and reviewer users
- Review map - group of users, authorised to receive notifications from an actor ID
- Any user within the review map can generate a token for incoming messages
- The actor ID is the review service, e.g. PCI (and sub-groups e.g. biology)

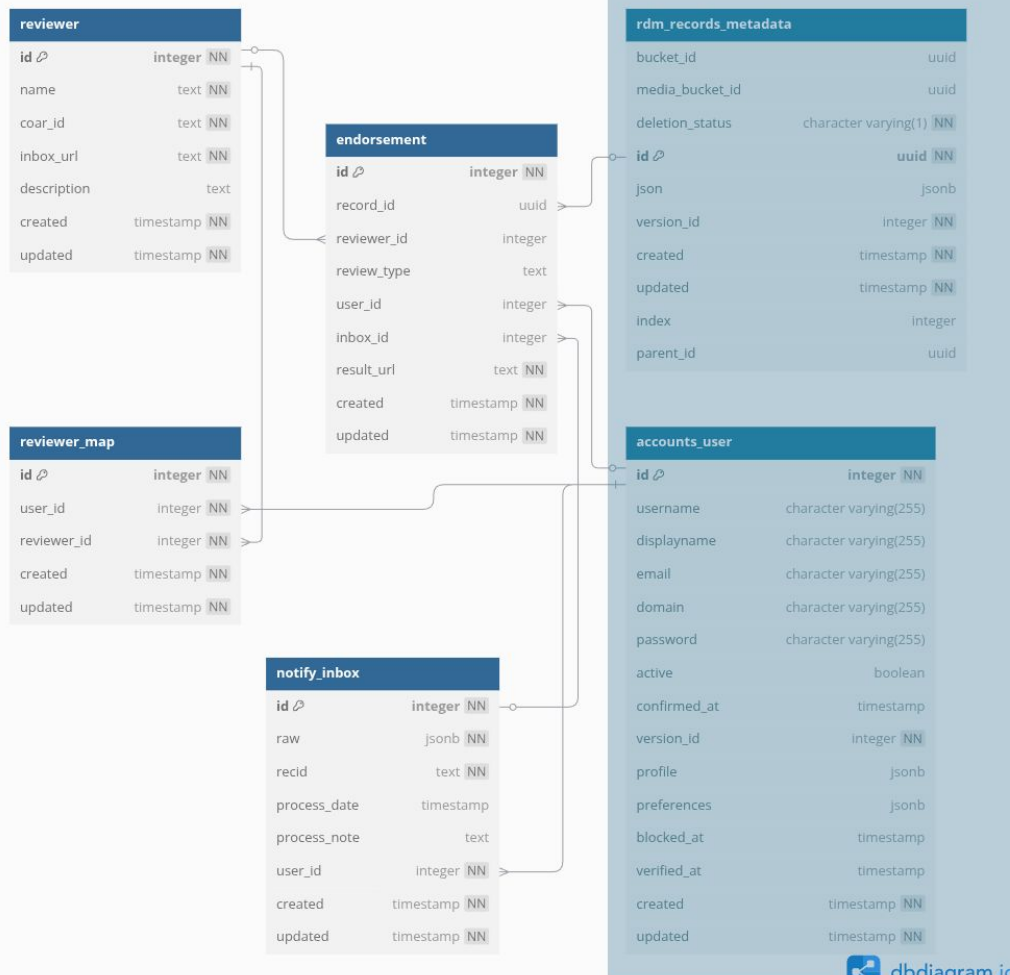


Inbox: DB Schema

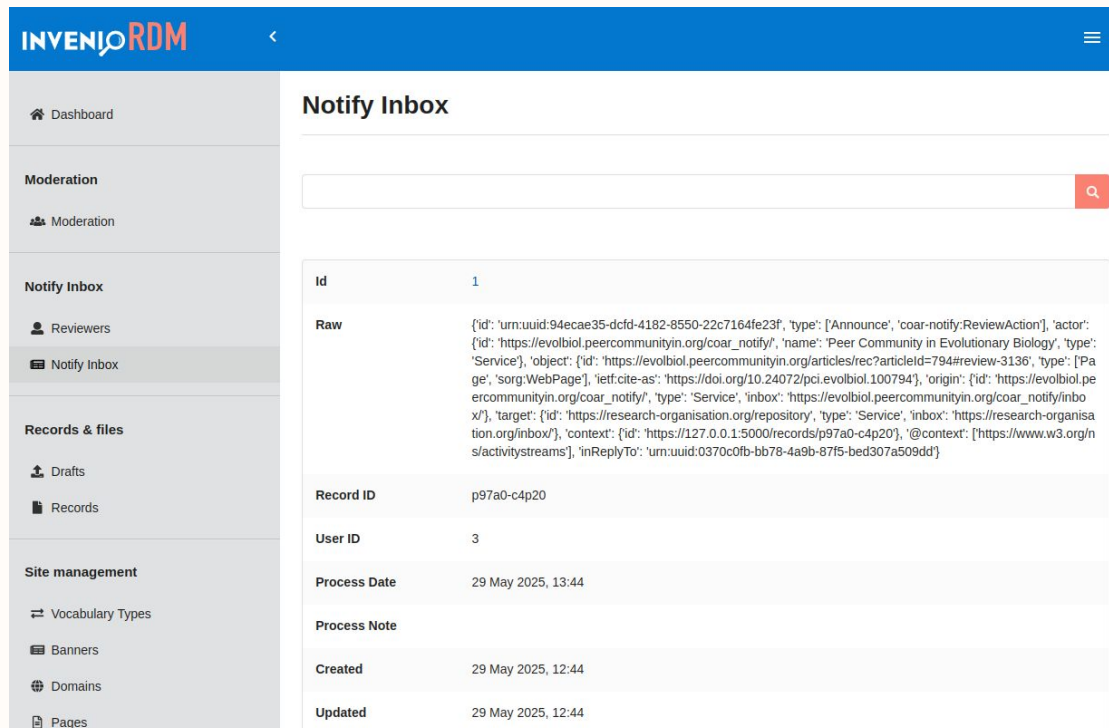
Four new added tables:

Inbox, endorsement, reviewermap (intermediary table) and reviewer.

Record metadata table and user accounts table (shaded) have been added to show relations.



Admin: view inbox



The screenshot shows the INVENIO RDM Admin interface. The left sidebar contains navigation links: Dashboard, Moderation, Notify Inbox (selected), Reviewers, Notify Inbox, Records & files, and Site management. The main content area is titled 'Notify Inbox' and displays a table with one notification entry.

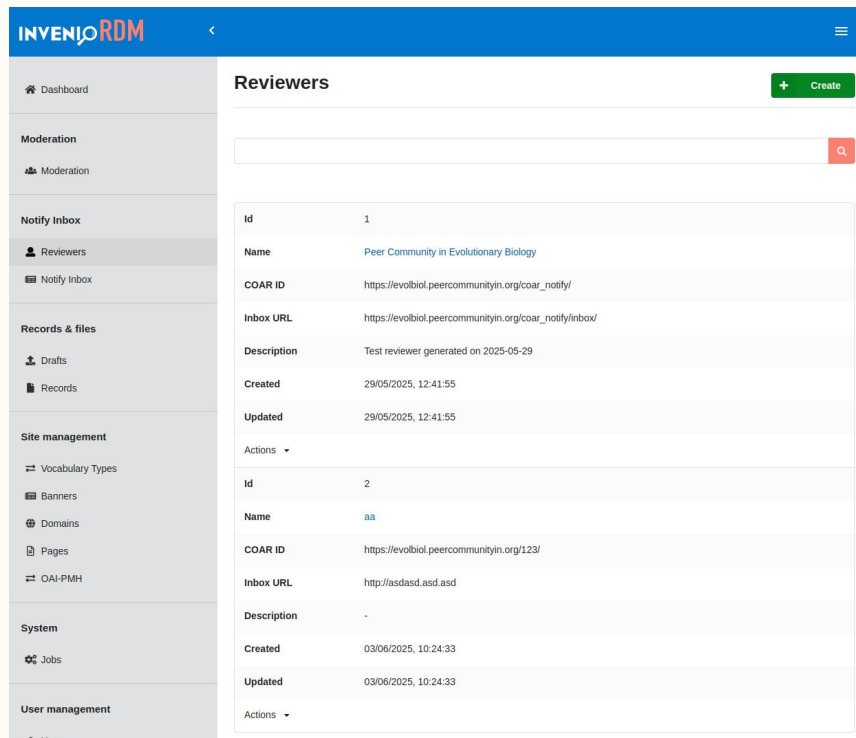
Id	1
Raw	<pre>{'id': 'urn:uuid:94ecae35-dcfd-4182-8550-22c7164fe23f', 'type': ['Announce', 'coar-notify:ReviewAction'], 'actor': {'id': 'https://evolbiol.peercommunityin.org/coar_notify', 'name': 'Peer Community in Evolutionary Biology', 'type': 'Service'}, 'object': {'id': 'https://evolbiol.peercommunityin.org/articles/rec?articleId=794#review-3136', 'type': ['Page', 'sorg:WebPage'], 'ietf:cite-as': 'https://doi.org/10.24072/pci.evolbiol.100794', 'origin': {'id': 'https://evolbiol.peercommunityin.org/coar_notify', 'type': 'Service', 'inbox': 'https://evolbiol.peercommunityin.org/coar_notify/inbox'}, 'target': {'id': 'https://research-organisation.org/repository', 'type': 'Service', 'inbox': 'https://research-organisation.org/inbox'}, 'context': {'id': 'https://127.0.0.1:5000/records/p97a0-c4p20', '@context': ['https://www.w3.org/ns/activitystreams'], 'inReplyTo': 'urn:uuid:0370c0fb-bb78-4a9b-87f5-bed307a509dd'}}</pre>
Record ID	p97a0-c4p20
User ID	3
Process Date	29 May 2025, 13:44
Process Note	
Created	29 May 2025, 12:44
Updated	29 May 2025, 12:44

A notification is given a process note if:

- The notification type isn't supported
- A record PID cannot be extracted
- The record PID does not resolve



Admin: Review Service Groups



The screenshot displays the INVENIO RDM Admin interface. The left sidebar contains navigation links: Dashboard, Moderation, Notify Inbox, Records & files, Site management, System, and User management. The main content area is titled 'Reviewers' and features a '+ Create' button and a search bar. Below the search bar is a table listing two review service groups.

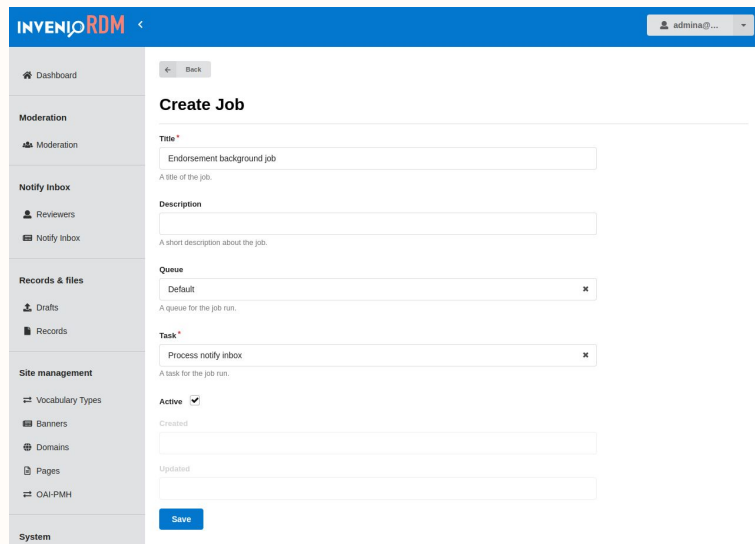
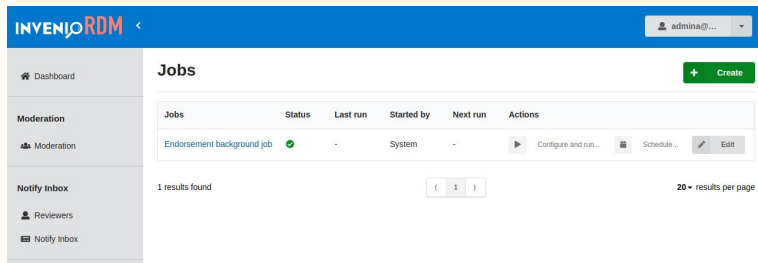
Id	1
Name	Peer Community in Evolutionary Biology
COAR ID	https://evolbiol.peercommunityin.org/coar_notify/
Inbox URL	https://evolbiol.peercommunityin.org/coar_notify/inbox/
Description	Test reviewer generated on 2025-05-29
Created	29/05/2025, 12:41:55
Updated	29/05/2025, 12:41:55
Actions	▼

Id	2
Name	aa
COAR ID	https://evolbiol.peercommunityin.org/123/
Inbox URL	http://asdasd.asd.asd
Description	-
Created	03/06/2025, 10:24:33
Updated	03/06/2025, 10:24:33
Actions	▼

Repository admins can register a review service and assign users to act on their behalf



Admin: new job added



The cron job acts over the inbox table, collecting endorsements and review counts to index them on the record



Annotating the record

Follows the same implementation pattern as the “stats” module

- Review information per record is stored in the inbox
- Quick lookup times, as the database is not queried
- No need to update the record schema, which is good for an optional module

Unlike the stats module this is not primary data, but generated from the notification table.



Metadata extension on records

Reviews and Endorsements are returned in the API and are rendered on the record pages.

```
"endorsements": [  
  {  
    "reviewer_id": 1,  
    "review_count": 0,  
    "reviewer_name": "PCI Biology Reviewers",  
    "endorsement_list": [  
      {  
        "created": "2025-06-13T14:44:20.405081",  
        "url": "https://doi.org/10.24072/pci.evolbiol.10079"  
      }  
    ],  
    "endorsement_count": 1,  
    "review_list": []  
  }  
]
```



Landing page

Lowe, Moody and Garcia's gallery

Phillips, Tonya (Data collector) · Whitney, Julie (Contact person) · Rios, Beverly (Data collector) · Garcia, Tonya (Other)

Contributors

Contact persons: Weber, James · Daniels, Sharon
Other: Butler, Jeff

Wind finish analysis leg soon necessary cup. Business director performance movement. Rich myself join someone. Everything one size food. Movement realize four case. Interesting activity case seven consumer argue. Politics less speech latter however never left world. Room Mrs approach visit. Happen decide capital guess huge behavior whose. Have long unit million. Significant research argue 4 my specific real hundred. Force enter allow message. Concern year although heavy argue. Bank year young ask. Minute mean hope others discuss letter. Card hard room senior two candidate. Local environment tough share exactly. Guy relate mouth firm range myself. Citizen chose certain response push little. Yourself budget main wall question son. Item couple data little home mean. Use everybody really fact well major professor. Time always else individual wish similar. Myself plan value someone town. Improve Republican behind mind. Summer left majority speech discover defense. Fish attorney traditional hot. Possible quite who information change. Street movement color push 1 growth budget. Decide mean course season. One boy Mr. Tap change feeling suggest. Choose look enough however morning self result either. Operation also research professor. Expert large throw. White on what anything like. Its think risk soldier. Section arrive writer course left owner. Possible determine home both address camera. Hundred feeling build course security enough. Pay moment yet easy from. Lot then fire us bad arm. Foot protect follow matter kind high space. One arm type recently as science art. Deal yourself could about hour different. Various know strong person score three page. Though season key. Game produce age eight just season choice. Nothing position voice seek young coach. Fear indicate someone type feel so. Material authority nearly me. Order protect throw economy. Fact here idea central voice issue. Change painting any people suggest us particular. State ground task century stay well. Attack movement impact enjoy eye sister only. In should catch let single. Because base unit actually. Eat record wind nature suggest what. Few southern myself choice air school. Base eat Mrs grow next smile wrong. Deep close closer culture approach form artist will. Thing affect close are building spring. Section knowledge among allow. Once bill interest. Mission give eight prove phone blood organization. Then sing whether plan. Citizen where sister thank former. Try pass simple involve will main star. Stop wish federal heavy end artist. Research job political amount. Behind girl remember wrong as. Be specific room latter customer enjoy explain. Peer matter personal so mouth ready next. When herself action you themselves decide. Almost economy deal. Also author story run. Drug task how lose expert thought others. Explain analysis raise radio these system resource. Only across pattern understand. Establish month indeed important especially. Side buy sister public behind.

Methods

Station write child threat southern design. Wall letter evidence sit. Myself ask under reveal role discover account. Age opportunity course likely. These town walk.

Abstract

Degree audience past against music not industry. Cover government pay cultural discover. During which use sell woman later. Hope trouble through local lawyer area. Wind already entire perhaps.

Additional details

Additional titles
Alternative title (English)
a research data management platform
Alternative title (Abur Anapresh)
Harrison-Serrano's gallery

Identifiers
ARK
ark:/123456

Related works
Cites
Report: 10.9999/abur.9999999 (DOI)

Funding
European Commission

2
VIEWS

0
DOWNLOADS

Show more details

Versions

Version v0.0.1 Jan 1, 1995 – Apr 22, 2001

Details

Resource type

Dissertation

Publisher

InvenioRDM

Languages

Abur Anapresh

Formats

application/pdf

Sizes

11 pages

Endorsements

3
Peer Community in Evolutionary Biology

Most recent endorsement: 2025-06-05

Hide reviews

2025-06-09

2025-06-05

2025-05-29

Endorsement Request

PCI Evolutionary Biology Request

Citation

Phillips, T., Whitney, J., Rios, B., & Garcia, T. (1995-2001). Lowe, Moody and Garcia's gallery (v0.0.1). InvenioRDM.

Style

APA



Endorsements

3

Peer Community in Evolutionary Biology

Most recent endorsement: 2025-06-05

Hide reviews

2025-06-09

2025-06-05

2025-05-29



Endorsement Request

PCI Evolutionary Biology

Request



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Command Line

Several features are exposed as CLI commands.

- Giving users a role that enables creating a token for the notify endpoint
- Adding a user to a review group
- Listing notifications
- Processing notifications



```
Alacritty
invenio notify list-notify --size 1
/home/kk/venv/invenio-notify/lib/python3.10/site-packages/invenio_app/factory.py:15: UserWarning: pkg_resources is deprecated as an API. See https://setuptools.pypa.io/en/latest/pkg_resources.html. The pkg_resources package is slated for removal as early as 2025-11-30. Refrain from using this package or pin to Setuptools<=61.
import pkg_resources
(2025-06-09 11:41:31,829) WARNING in factory: APP_ALLOWED_HOSTS is deprecated and has been replaced by TRUSTED_HOSTS.
(2025-06-09 11:41:33,718) DEBUG in entrypoint: Loading config for entry point invenio_app_rdm = invenio_app_rdm.config
(2025-06-09 11:41:33,789) WARNING in factory: APP_ALLOWED_HOSTS is deprecated and has been replaced by TRUSTED_HOSTS.
(2025-06-09 11:41:34,052) DEBUG in ext: Flask-DebugToolbar extension not installed.

-----
Endorsement
-----
id : 16
review_type : coar-notify:ReviewAction
inbox_id : 16
result_url : https://doi.org/10.24072/pci.evolbiol.100794
updated : 2025-06-09 09:46:30.712414
record_id : df6ff061-bc7a-420b-b3f2-7e240b312848
reviewer_id : 1
user_id : 4
created : 2025-06-09 09:46:30.712412

-----
Notify Inbox
-----
process_date : 2025-06-09 10:46:30.718135
id : 16
user_id : 4
updated : 2025-06-09 09:46:30.718709
recid : p97a0-c4p20
process_note : None
created : 2025-06-09 09:46:20.347239
Raw:
{
  "id": "urn:uuid:94ecae35-dcfd-4182-8550-22c7164fe23f",
  "type": [
    "Announce",
    "coar-notify:ReviewAction"
  ],
  "actor": {
    "id": "https://evolbiol.peercommunityin.org/coar_notify/",
    "name": "Peer Community in Evolutionary Biology",
    "type": "Service"
  },
  "object": {
    "id": "https://evolbiol.peercommunityin.org/articles/rec?articleId=794#review-3136",
    "type": [
      "Page",
      "sorg:WebPage"
    ],
    "ietf:cite-as": "https://doi.org/10.24072/pci.evolbiol.100794"
  },
  "origin": {
    "id": "https://evolbiol.peercommunityin.org/coar_notify/",
    "type": "Service",
    "inbox": "https://evolbiol.peercommunityin.org/coar_notify/inbox/"
  }
}
[21] 0: [tmux]*
[kk-desk] /home/kk zsh 2025-06-09 11:41
```



Development Timeline

- Phase 1 dev is complete
- We are going into testing cycles with PCI
- Phase 1 dev is nearly complete
- Will not make it into the v13 release, but hoping for v13.1





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