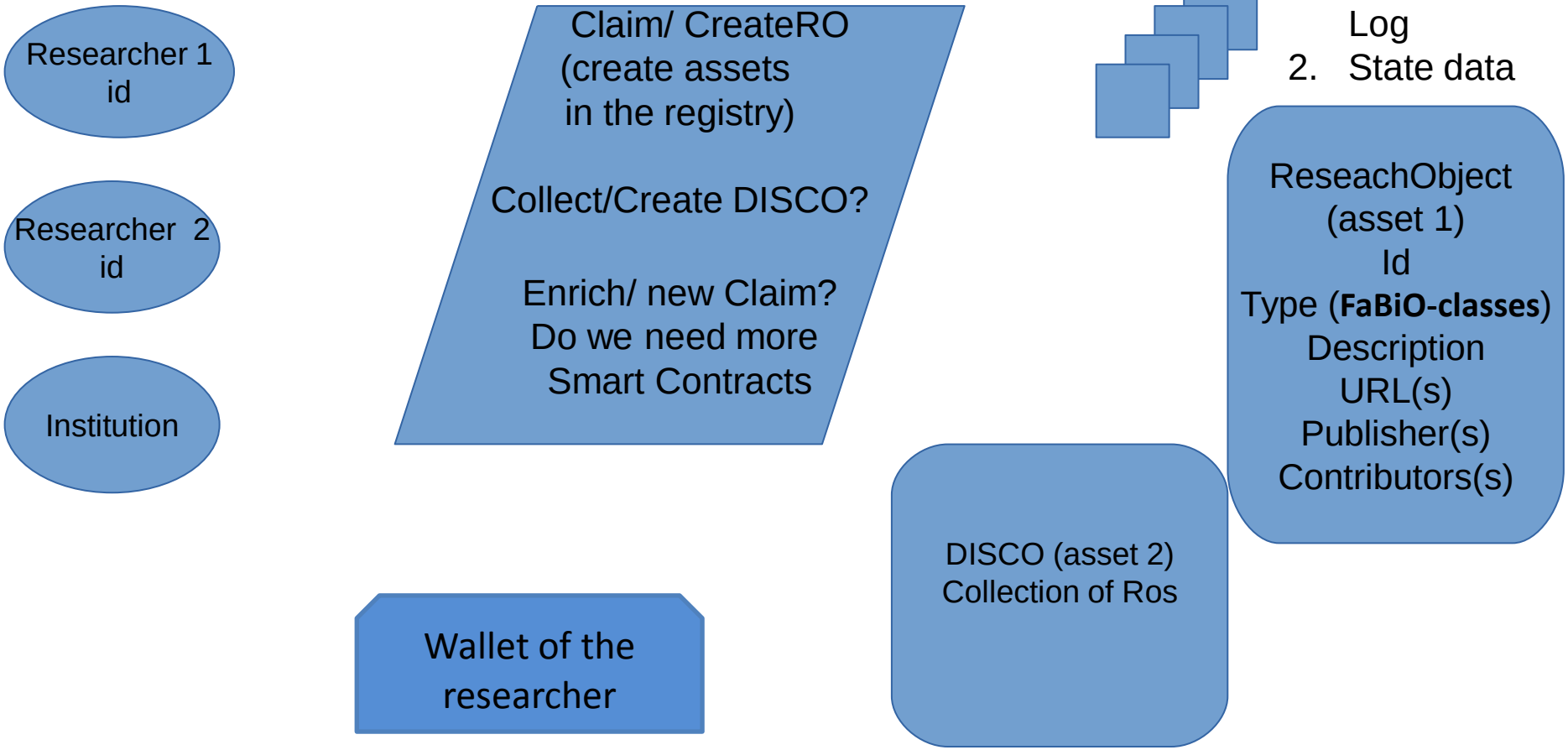
Journal of Research Objects

Flow Charts
Ledger-Frontend-IPFS

Business Network, bforosv3.bna (Scholarly Wallet)



Pluggable registry for science

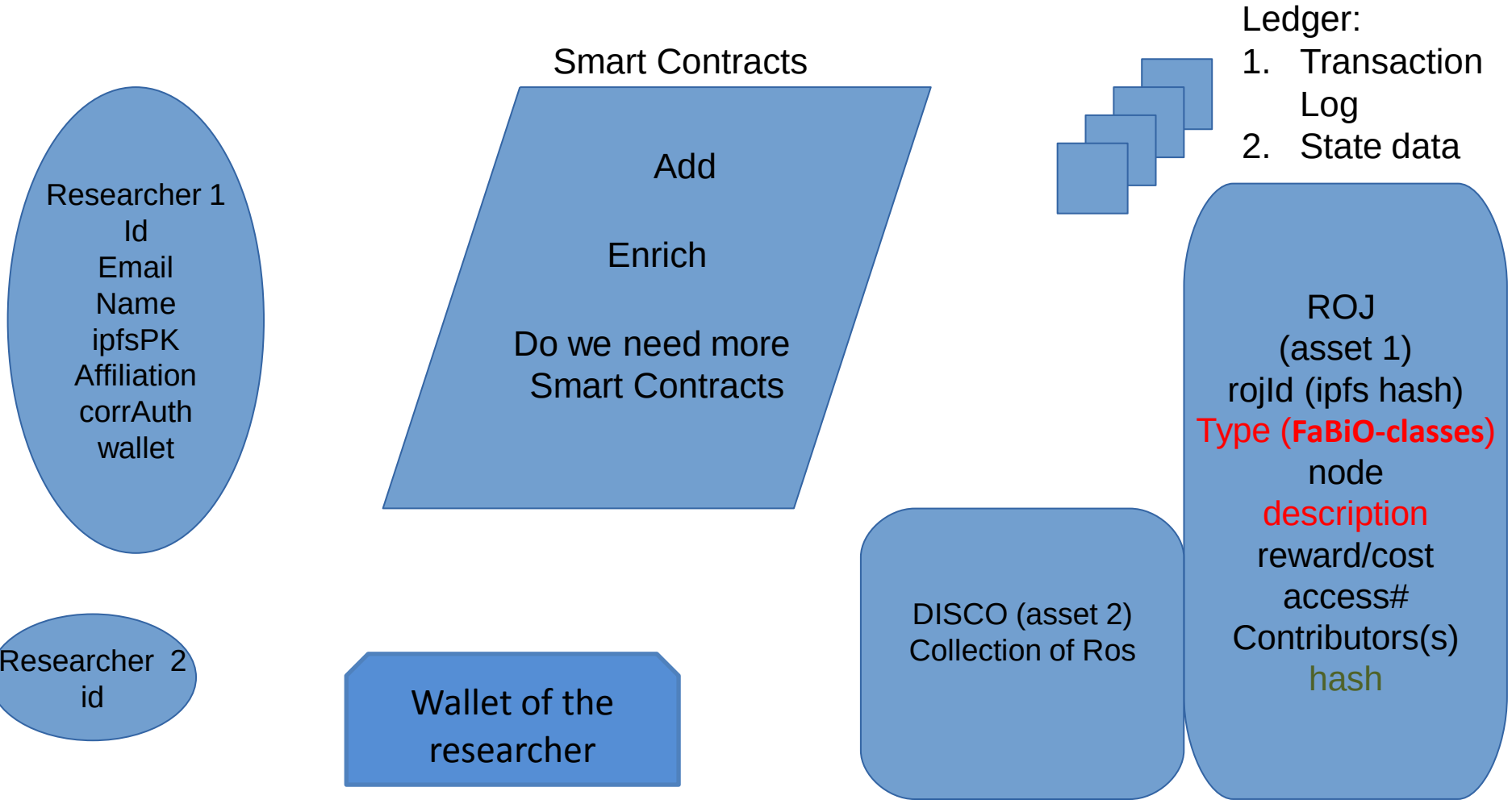
exiting archive | Blockchain Business Network

1. User log-in.
2. Queries and displays www DB's for RO under user name.
3. Claim RO

1. Create participant (if 1st time). Instantiate wallet.
2. Create an asset (Capture metadata).
3. Claim asset
   a) Assign ownership (with and without approval)
   b) Update wallet (event)

2. Count asset use (Wrapper)
   b) Update wallet (event)

Business Network, jro.bna (New Journal Infrastructure)



New Journal Infrastructure

Ledger | Frontend |IPFS node

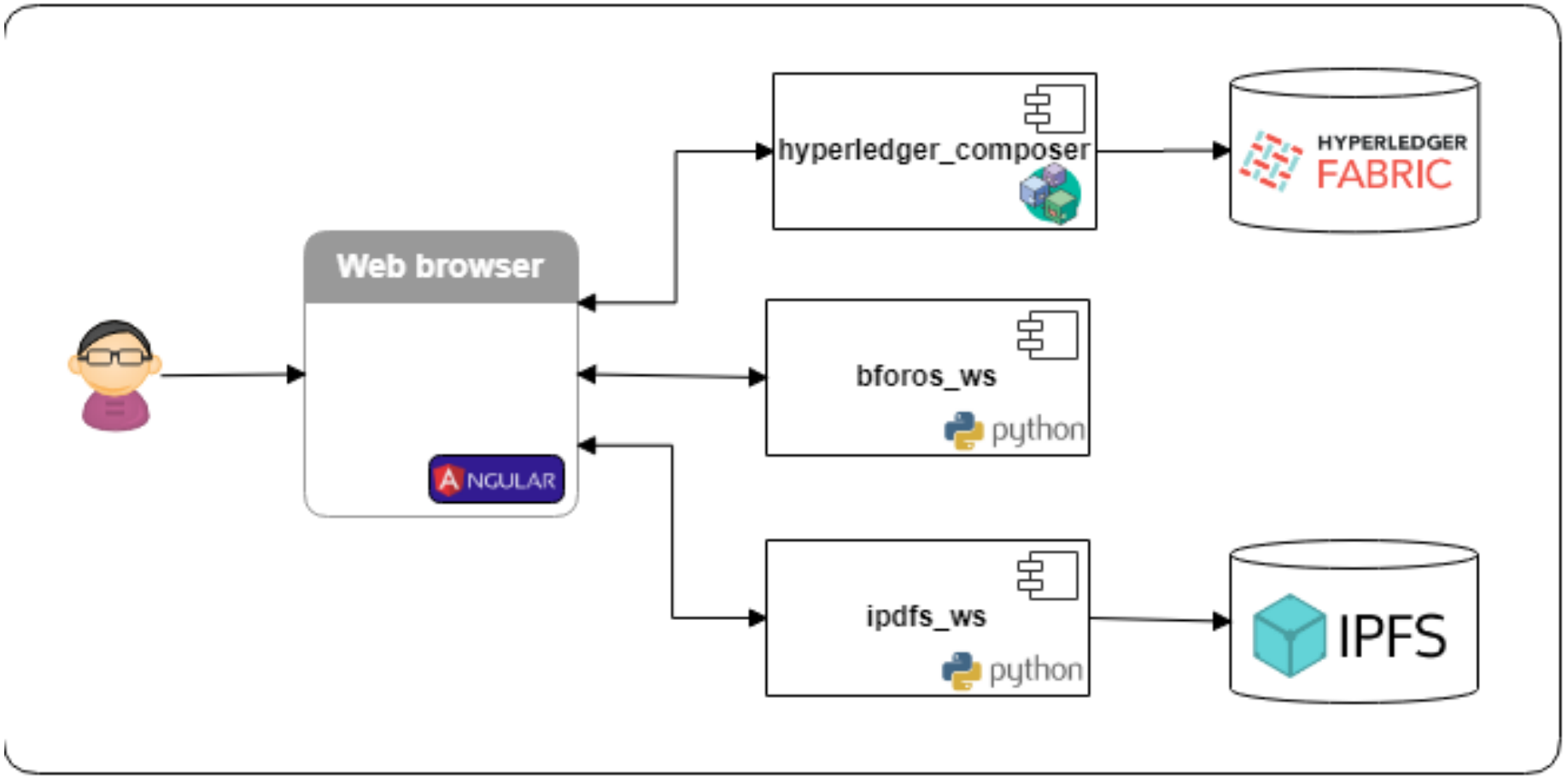
1. Create participant (if 1st time). Instantiate wallet.
2. Create/Add RO
3. Enrich Asset

1. Wallet Activity

1. User log-in.
2. Create node?
3. Add RO
4. Enrich RO with metadata

1. Create node
2. Add object(s)

Arquitecture



Merging JRO.bna and bforos.bna (Participant)

participant Researcher identified by researcherId {
  o String researcherId
  o String email
  o String name
  o String ipfsId
  o afiliation institution
  o Boolean correspAuth default = true
  o Integer wallet default = 10
}
participant Researcher identified by researcherId {
  o String researcherId
  o String email
  o String firstName
  o String lastName
  o Integer wallet default = 10
}

Keep participant from jro.bna, make ipfsId optional; researchId is ORCID ID

Merging JRO.bna and bforos.bna (Assets)

```
asset ROJ identified by rojId {
  o String rojId  //ipfs hash
  o TypeRO typeRO default = "other"
  o String node
  o String description optional
  o Integer reward default = 1
  o Integer cost default = 1
  o Integer countAccess default = 0
  --> Researcher[] contributors
  o String hash  optional //registry hash to verify against
}
asset ResearchOJ identified by researchObjId {
  o String researchObjId
  o TypeRO typeRO default = "OTHER"
  o String uri
  o Integer reward default = 1
  o Integer cost default = 1
  o Integer countAccess default = 0
  --> Researcher[] collectors
  --> Researcher[] contributors
}
```

1. **rojId ipfs hash? / researchObjId hash(url)**
2. **node / uri-url, the node you create makes it findable as long as it is working.**
3. **Eliminate collector**
4. **Hash JSON content to make it verifiable**

Merging JRO.bna and bforos.bna (Transactions)

All Transactions generate wallet events

1. Basic functionalities
    1. Claim (a RO that is already findable in a repository <Github, figshare, slideshare>) / Add (a RO that will be made findable through IPFS).
    2. Enrich (add new or modify metadata)
2. Usage
    1. Count (for code)
    2. Download
3. Aggregate and relationships
    1. Disco
    2. Create relationship (type of enrich)