

Wikidata Infrastructure



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Wikidata:
the knowledge base
anyone can edit!



Like Wikipedia. But
machine-readable.



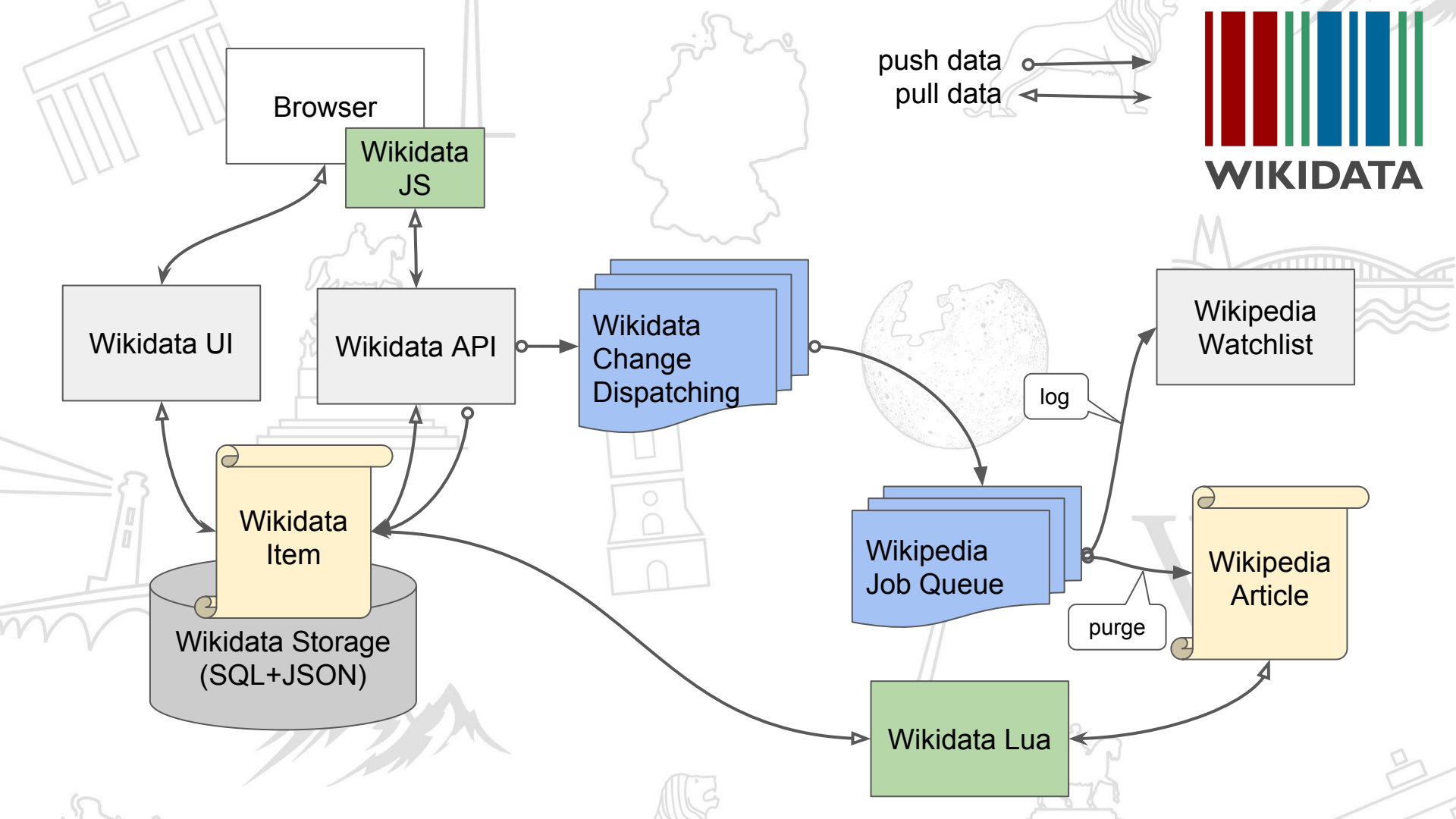
Don't say semantic!



What happens when
you edit Wikidata?
What does it have to
do with Wikipedia?



- **User visit a Wikipedia page**
...and sees bad info coming from Wikidata.
- **User visits Wikidata item page**
...and edits the bad statement
...using API calls for parsing and formatting.
- **Wikidata processes edit**
...by applying validation
...storing the new version
...and sending out notifications.
- **Wikipedia receives the notification**
...and re-renders the page
...using Lua to access the data Item.



Douglas Adams (Q42)

English writer and humorist

Douglas Noël Adams | Douglas Noel Adams | Douglas N. Adams | DNA

 edit

▼ In more languages

Language	Label	Description	Also known as
English	Douglas Adams	English writer and humorist	Douglas Noël Adams Douglas Noel Adams Douglas N. Adams DNA
German	Douglas Adams	britischer Schriftsteller	Douglas Noël Adams Douglas Noel Adams

[All entered languages](#)

Statements

instance of



human

 edit

▶ 2 references

+ add value

image



Douglas adams portrait cropped.jpg 

 edit

media legend

Portræt af Douglas Adams
(Danish)

A portrait photo of Douglas
Adams (English)

Portrait de Douglas Adams.
(French)

Douglas Adams' Porträt.



WIKIDATA



- **User visits Wikidata item page**
...and edits the bad statement



A screenshot of a Wikidata item page. The left side is a blue sidebar with the label "birth name". The main area is yellow and contains a statement editor. The statement text is "Douglas Noël Adams" with a red squiggly underline under "Noël". To the right of the text are icons for save, remove, and cancel. A language selection dialog box is open, showing "Language (mandatory):" and a dropdown menu set to "British English (en-gb)". Below the dialog, there is a link for "0 references" and a "+ add reference" button. At the bottom of the yellow area is a "+ add value" button.

- **Wikidata processes edit**

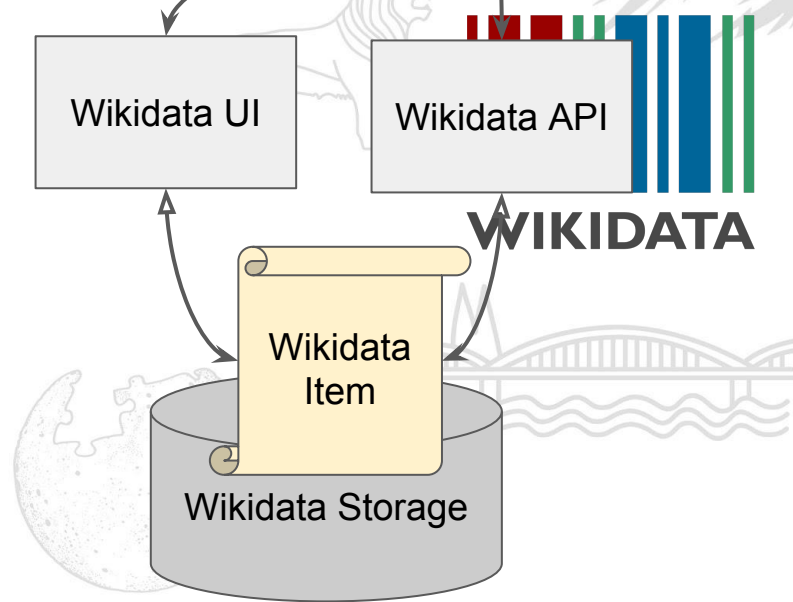
...by applying validation

...storing the new version

```
"P1477": [
  {
    "mainsnak": {
      "snaktype": "value",
      "property": "P1477",
      "datavalue": {
        "value": {
          "text": "Douglas No\u00ebl Adams",
          "language": "en-gb"
        },
        "type": "monolingualtext"
      },
      "datatype": "monolingualtext"
    },
    "type": "statement",
    "id":
      "Q4115189$2d402ae1-431e-f6ba-e839-9d6d6c6e6ea4",
    "rank": "normal"
  }
]
```

```
entities:
  Q4115189:
    pageid: 4246474
    ns: 0
    title: "Q4115189"
    lastrevid: 585020031
    modified: "2017-10-27T16:39:18Z"
    type: "item"
    id: "Q4115189"
  labels: {...}
  descriptions: {...}
  aliases: {...}
  claims:
    P18: [...]
    P106: [...]
    P1477:
      0:
        mainsnak:
          snaktype: "value"
          property: "P1477"
        datavalue:
          value:
            text: "Douglas No\u00ebl Adams"
            language: "en-gb"
            type: "monolingualtext"
          datatype: "monolingualtext"
        type: "statement"
        id: "Q4115189$2d402ae1-431e-f6ba-e839-9d6d6c6e6ea4"
        rank: "normal"
  sitelinks: {...}
```

- **Wikidata processes edit**
 ...by applying validation
 ...storing the new version



main

[action=wbsetclaim](#)

format=json

Results

action=wbsetclaim

Creates or updates an entire Statement or Claim.

{ } Examples

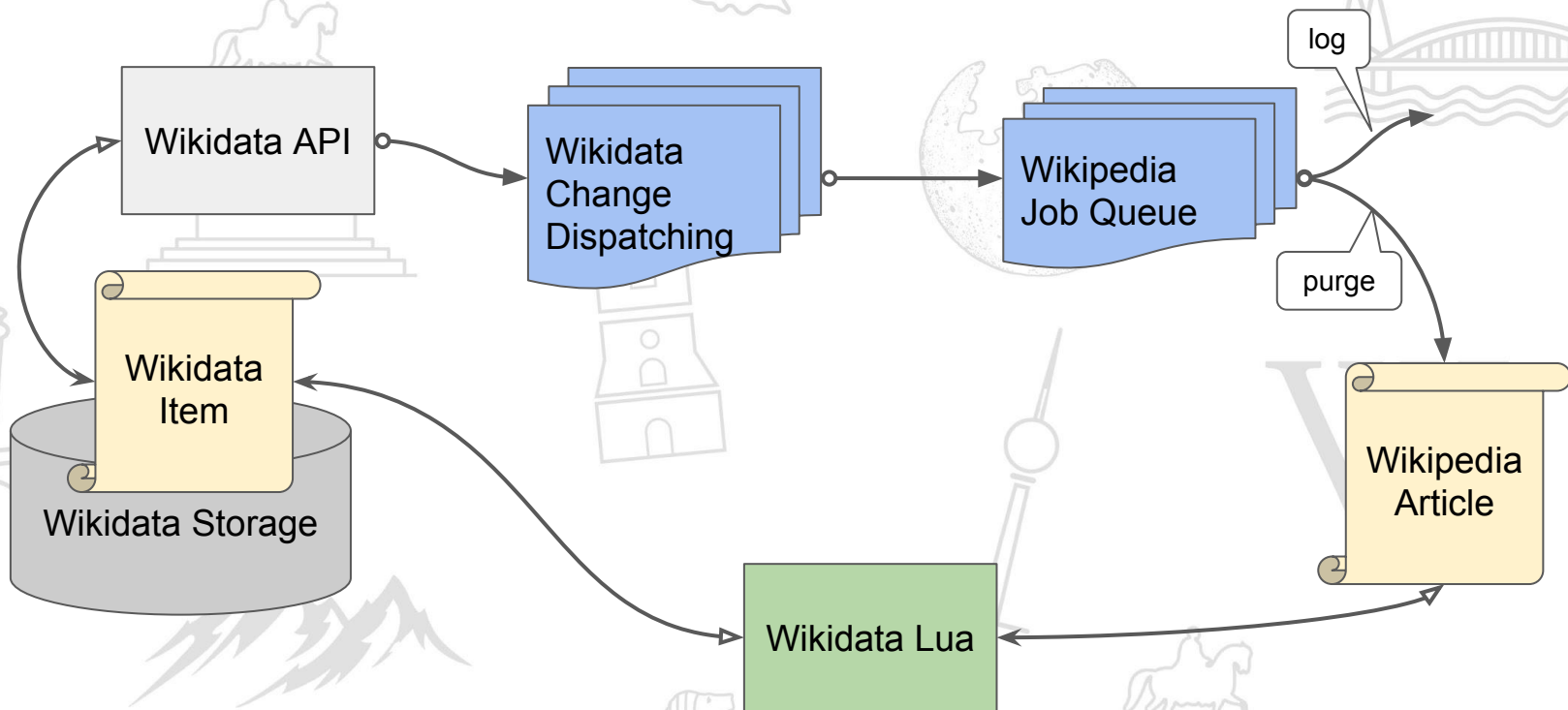
claim

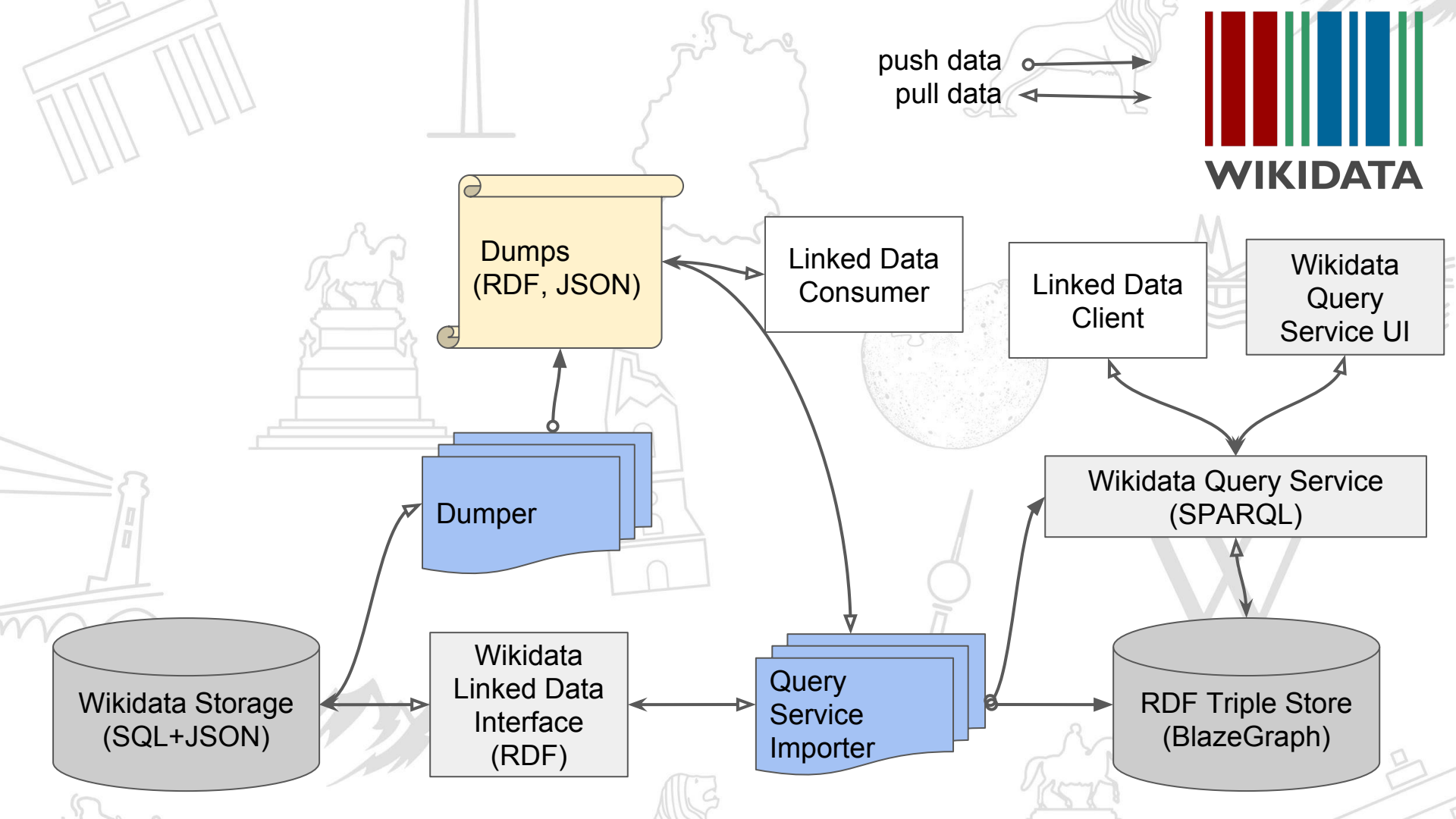
```
{ "id": "Q4115189$5627445f-43cb-ed6d-3adb-760e85bd17ee", "type": "claim", "mainsnak":
```

*

Statement or Claim serialization

- **Wikipedia receives the notification**
...and re-renders the page







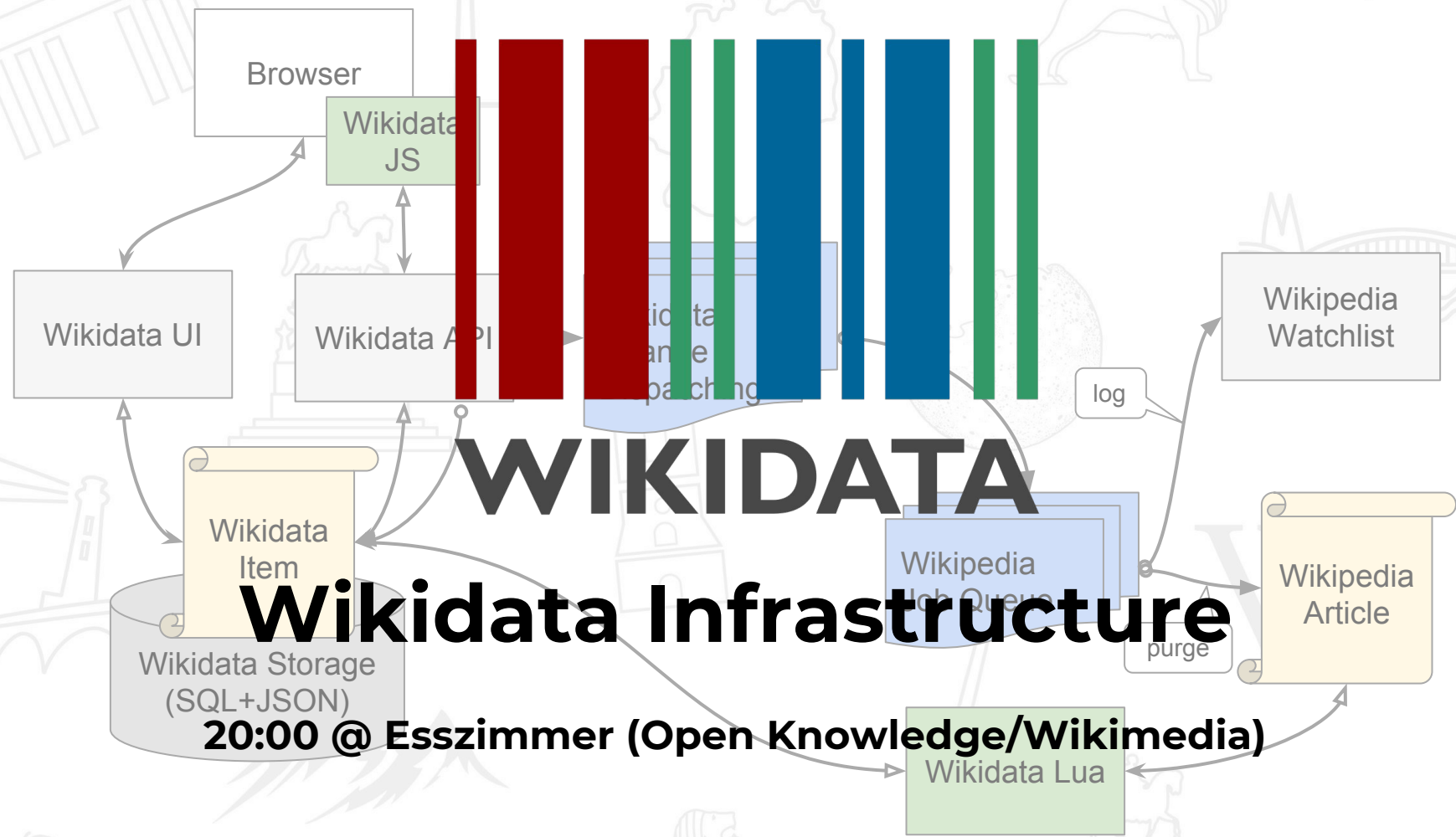
WIKIDATA

Thank You!

https://www.wikidata.org/wiki/Wikidata:Data_access

WIKIDATA

Wikidata Infrastructure



20:00 @ Esszimmer (Open Knowledge/Wikimedia)