Pubby: front end for RDF data
Japanese Visual Media Graph

- Research project at Stuttgart Media University
- Goal: Build a knowledge graph on the domain of Japanese visual media (manga, anime, computer games)
- Data source: Enthusiast communities on the web

Ingestion workflow
- Retrieve data dump / load data from API in proprietary data format
- Assess data structure and organisation and create an OWL ontology
- Convert into RDF triples
- Load into Fuseki database

Integration workflow
- Match semantically equivalent entities into clusters
- Merge information from all sources (create a merged entity)
- Match semantically equivalent entity properties
- Merge property values (reduce redundancy)
Pubby

- **Usage:** Exploring RDF data in the browser

- **Pubby v1**
  - Existing Java-based frontend for RDF triple stores
  - Developed for the DM2E (Digitised Manuscripts to Europeana) research project
  - Slow for specific queries and rather high overhead (Tomcat)

- **Pubby v2**
  - New development based on the original concepts
  - Python / Django web application
  - Faster and low overhead (gunicorn)

- **Main features**
  - Configurable: base SPARQL query, label and graph visibility
  - User friendly: Label language, UI theme and graph visibility selectable by user
  - Expandable: Extending using standard Django views
Look and feel

Phorni

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>label</td>
<td>Phorni</td>
</tr>
<tr>
<td>type</td>
<td>Character</td>
</tr>
<tr>
<td>Alias</td>
<td>Fairy of Music, Sprite of Music</td>
</tr>
<tr>
<td>Blood type</td>
<td>unknown</td>
</tr>
<tr>
<td>Description</td>
<td>A small, fairy-like creature no taller than 14 cm and possessing tiny, translucent, fluttering wings. But, even though she is so small, she can sing and speak at a normal person's volume. Despite having wings, she cannot rise above a certain height. Phorni is the self-declared, 'fairy of music' who shares the room with Chris ever since he moved in. Apart from Chris, no one is able to hear her, see her, or touch her. She enjoys singing (which she is very good at), and would pester Chris into playing the Forteille so that she can sing along. She has a habit of saying &quot;miyah&quot; when she is surprised.[1][From [url=<a href="http://en.wikipedia.org/wiki/Symphonic_Rain">http://en.wikipedia.org/wiki/Symphonic_Rain</a>][Wikipedia][url]]</td>
</tr>
</tbody>
</table>

Gender: f
Height: 14
Image: ch74289
Main spoil: 2
Name: Phorni
Original: フォーニ
Other instance: Anetta Fine
Primary role: Symphonic Rain

Trait
- Ackle Length (Hair)
- Antenna (Hair)
- Beret (Clothes)
- Boots (Clothes)
- Blown (Hair)
- Cleaning (Engages in)
- Curious (Personality)
- Disappearance (Subject of)
- Dress (Clothes)
- Energetic (Personality)

FNDB link: http://vndb.org/c1
is Voices of: Takahashi Natsume
Current state

- Active development for two different research projects
- Prototypes running on internal testing servers
- Example expansions: elasticsearch, project-specific queries
- Public release soon™ - needs more testing, code cleanup and documentation
- Open licence with no restrictions (e.g. MIT, Apache)

- Future work
  - “RDF_viewer” as a self-contained program that works on RDF files instead of triple store