This document describes the infrastructure and workflows of the project:

Infrastructure

- 1. Current infrastructure
- 2. Proposed infrastructure ### Workflows
- 3. Current workflow
- 4. Proposed workflow

Current Infrastructure

Data Crawler

Crawl Reddit data (posts only) periodically and store them as JSON files. ### Data Transporter Transport data from JSON files into DiscourseDB. ### Data Analyzer Fetch data from JSON files, run data analysis and store results as txt files. ### Data Visualizer Transfer analysis results to DiscourseDB, fetch data from DiscourseDB and visualize it using elastic.

Current Workflow

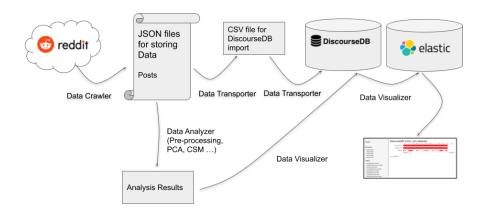


Figure 1:

Proposed Infrastructure

Data Crawler

Crawl Reddit data (posts and comments) periodically and store them in MongoDB. ### Data Transporter Transfer data from MongoDB to DiscourseDB. ### Data Analyzer Fetch data from DiscourseDB, run data analysis and plug results back into DiscourseDB. ### Data Visualizer Fetch data from DiscourseDB and visualize data using elastic.

Proposed Workflow

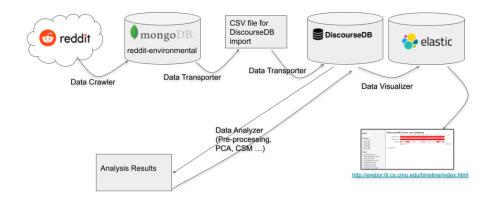


Figure 2: