SGF: SPARQL updates over Solid without access path dependencies

Posts 1 Posts 2 Posts 3

? ? ? ?

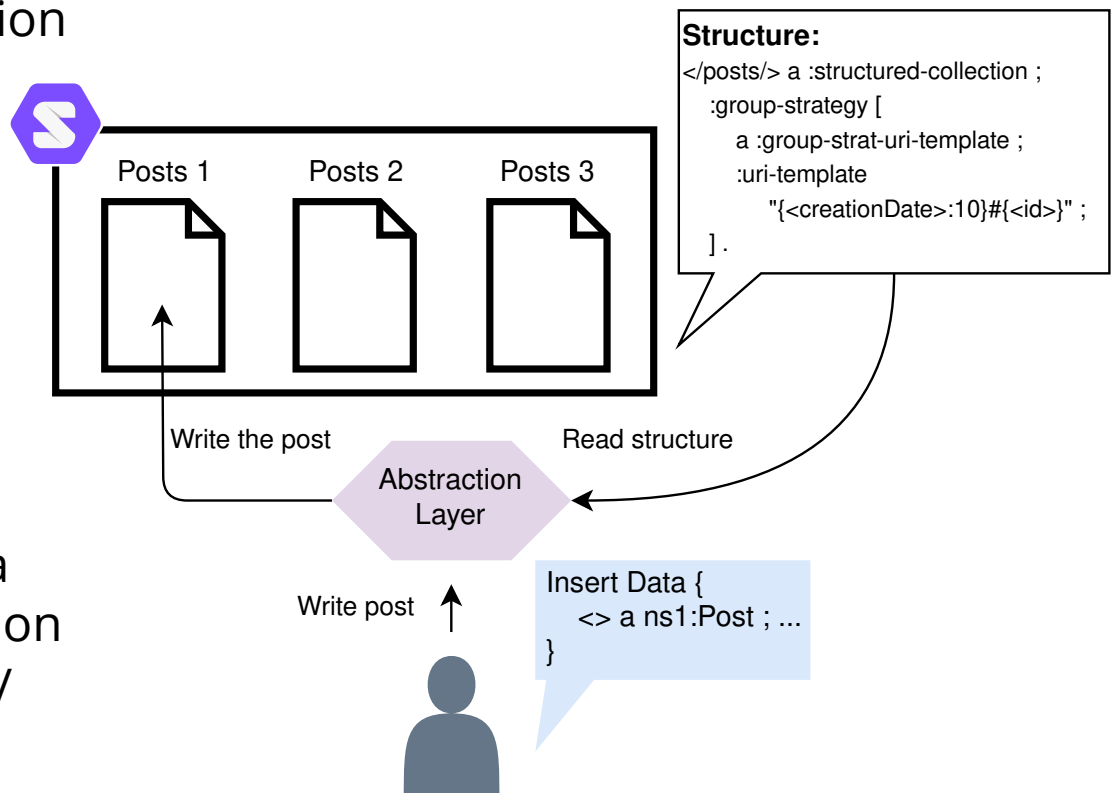*Where* to write new post?
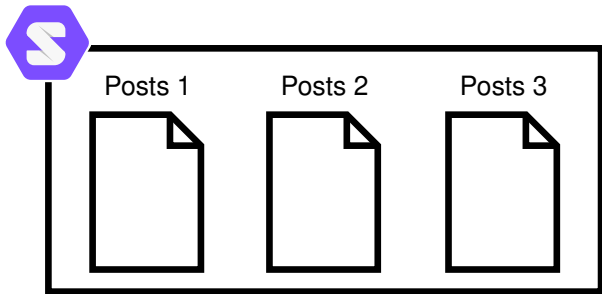
— Each write requires explicit mention of the document

— Storage structure is defined by data consumers, instead of owners

— Weak interoperability since each application chooses its structure

Tired of specifying where data resources reside?
Query engine and structural descriptions to the rescue!

Description contains:

- 🗎 Resource Description
- 🗎 Group Strategy
- 🗎 Store Condition
- 🗎 Update Condition

Posts 1 Posts 2 Posts 3

Structure:
```
</posts/> a :structured-collection ;
    :group-strategy [
        a :group-strat-uri-template ;
        :uri-template
            "{<creationDate>:10}#{<id>}" ;
    ] .
```

Write the post   Read structure

Abstraction Layer

Future work:

- 🔭 Fundamental data interface description
- 🔭 Server awareness/ enforcement

Write post ↑

Insert Data {
    <> a ns1:Post ; ...
}

Treat a Solid pod as a collection of data instead of a collection of resources containing RDF data

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Demo   Paper