A new technique for semantic data access (RDF) in support of the Semantic Web and Linked Data Web...

Enables data to be easily stored directly on the network through simple network requests, to be retrieved in the same way with a known response format to facilitate subsequent automated processing, and enables each entity referenced by a triple to store a separate copy of that triple to facilitate improved navigation.

Core capabilities:
- A defined response format
- Direct triple access interface
- Multiple storage locations

Advantages:
- Data visibility
  Dereferenceable URI usage, coupled with data distribution greatly increase the opportunity for discovery of data through linkages
- Data access
  Potential entry points to the data from any of the three locations in the data triple
- Data ownership
  Data is stored locally to the entities which are referenced within the data
- Data redundancy
  Storage of multiple copies of the same data triples provides some level of natural redundancy

Disadvantages:
- Efficiency
  Multiple storage of data potentially increases number of requests to retrieve all known facts
- Reliability & trust
  Distributed network environment (WWW) is inherently unreliable and potentially untrustworthy
- Privacy
  The multiple potential storage locations for each triple can lead to concerns about privacy.

Assumptions:
- Dereferenceable URIs
- Anonymous / blank nodes*
- Inference / entailment support*

* Note that these capabilities are assumed to be delegated to the application or agent using the GIDS

Triples are statements with a subject, predicate and object which can be literal or non-literal values.

Entities are collections of triples which each share the same non-literal subject value.

- Node 1 defines and stores information related to three entities (A, B, C)
- Node 2 defines and stores information related to three entities (D, E, F).
- The triple of particular interest (A, B, D) is stored against Node1 and Node2 because Node1 defines entities A and B, whereas Node2 defines entity D.