gridPIR: A central resource for genomic and proteomic information

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**Development - Model Driven Approach**

- **Information Model**
  - 48 objects, 51 attributes including Protein/Gene, Taxonomy and Protein Feature related objects

- **Semantic Annotation**
  - 149 concepts from Enterprise Vocabulary System (EVS) used

- **caGrid 1.0 Deployment**
  - Introduce Grid Service Authoring Tool is used

**Querying gridPIR data service (1)**

Send the CQL query to gridPIR data service

Retrieve matching Protein objects from service

**Querying gridPIR data service (2)**

Send the CQL query to gridPIR data service

Retrieve matching Protein objects from service

**Discovering gridPIR on caGrid**

- **Step 1:** Find the EVS concept for Protein using EVS API
- **Step 2:** Discover data services using the “Protein” concept and discovery API

**Interoperability with other data services**

- GridPIR @ Georgetown
- GeneConnect @ Washington St. Louis

**Value domain = String**