

Market Requirements Document

Feature Name: Objectivity/Meta Data Store

Version: 0.1 Date Submitted: 5/21/2015 Completed By: Brian Clark

Version: 0.2 Date Submitted: 5/28/2015 Completed By: Brian Clark

Added data types to be stored in MDS, name changed to Meta Data Store.

Description of the Problem

As part of the Objy30 initiative there is a need to store meta data about the data being stored by the Objy30 framework.

The Objy30 POC, and ongoing use cases will determine exactly what meta-data is required initially. Therefore the Meta Data Store (MDS) needs to be flexible and accommodate dynamic schema and meta data creation and use. The Objectivity/REST server should provide this capability.

The Meta Data Store will be an instance of an Objectivity/DB database.

Background

Experience has shown the need to store meta data as well as actual data. There are different types of meta data that can be stored in the meta data store, such as derived data, actual meta data, and ontologies

Description of the Requested Feature

Need a way to dynamically describe and store meta data in the Objy30 data store.

1. Source file meta data e.g. location, type (format - csv, json, other), owner, size, dates, etc.
2. Sensor data (fast data or data in motion) that represent data streams,
3. Metadata about the events in the data streams,
4. Derived data generated from processing the data stream through transformations, filtering,
5. Output data that reflects a “common data model” to support specific types of analytics (I.e. Cross time-series anomaly detection, geospatial clustering, season trend analysis, etc.)
6. Ontologies.

Part of an existing feature or does it require another feature, if so, which one?

- New feature.
- Depends on Objectivity/REST Server.

How is this problem being solved now, and why isn't that acceptable?

- New problem being addressed and resulting solution.

What languages must support this capability?

- Initially Java.

Which platforms must be supported?

- Should run on Linux, Windows and Mac OS X.

Do any competitors already have this feature?

- TBD.

Customers who require this feature

- Some existing customers e.g. CGG, new customers in the 'big data' space.

Revenue at risk, or which could be won

- Could lead to more early adopters.

When is this required?

- Increments through 'Purple' MVP end of June.

Additional Notes

1. Implementation notes:

- a. Need examples of meta data.

2. Related Material

We will also need:

Field Training.

Quality Assurance.

3. Software requirements

- a. Objectivity/REST Server.

4. Hardware Requirements