User Guide for Data Enrichment Service

1 Application based Configuration:

The data enrichment service is used to provide the structure related information about the system object. After performing the data analytic operation, EDASICH finds out some data of system object. But it have no structure related information about this system object.This service provides such information to the EDASICH.

It works in such way:

1. **File Based Configuration:**

    (a) The structure related information of system object is represented as rdf based file. Here each system object is represented as one single rdf file. These rdf files which are going to represent the objects of same system are linked with each other.

    (b) In the data enrichment service, the classes under com.mkyoung.datamodel are used to generate the rdf file of system objects.

2. **Storage Based Configuration:**

    (a) One virtuoso universal server is installed in a virtual machine.

    (b) The generated rdf files are stored in the virtuoso universal server as the list of triples of graph.

3. **Information Retrieval Based Configuration:**

    (a) When it receives the object name from EDASICH, it returns set of structural information about the object to the EDASICH.

2 Run Time Configuration:

1. Through the Configuration.properties file user provides the information about the virtuoso universal server, like: VIRTUOSO.IP is used to

hold the IP address of the virtual machine where the virtuoso universal server is installed. VIRTUOSO.PORT is used to represent the port number of virtuoso universal server (by default the value is 1111). VIRTUOSO.USERNAME for the database name where the rdf file will be stored as the form of list of triples of graph. VIRTUOSO.PASSWORD represents the password of the database.

2. This service is work as the external utility of the EDASICH. So it is installed in a virtual machine. ENHANCEMENT.IP is used to represent the IP address of the virtual machine. Here tomcat server is used to deploy this service. ENHANCEMENT.PORT is actually represent the port number of this tomcat server (by default 8080).

3. Each system holds a unique URI to represent all the objects of this system. RDFURI is used to represent the URI of the system.