# dotNetRDF Design Document

## dotNetRDF 0.5.0

Library: dotNetRDF.dll  
Version: 0.5.0  
Target Date: August 2011  
Author: Rob Vesse  
Proposed Implementer: Rob Vesse  
Last Updated:

## Required Features

* Extend IRdfHandler and ISparqlResultsHandler to be available for use in every appropriate place
* Add additional handlers and associated required classes for serializing direct to other formats like RDF/XML, SPARQL XML etc
* Add support for .Net serialization
* Implement all features originally planned for the 0.4.2 and 0.4.3 releases, see relevant design documents for details

## Time Permitting Features

* TBC

## Known Issues/Bugs to Fix

* Any remaining bugs from the 0.4.x series

# Design

## Extend Handlers Interfaces

### 1 – Use with Query Processors (Done)

* Add an overload which takes a IRdfHandler and a ISparqlResultsHandler for processing the results as appropriate

### 2 – Use with IGenericIOManager (Done)

* Add a LoadGraph() method that takes a IRdfHandler instead of a IGraph
* Add a Query() method that takes a IRdfHandler and a ISparqlResultsHandler for processing the results

### 3 – Use with SparqlRemoteEndpoint (Done)

* Add QueryWithResultSet() and QueryWithResultGraph() methods that use ISparqlResultsHandler and IRdfHandler instead

### 4 – Use with all other Query Methods (Done)

Any method which executes a SPARQL Query should be capable of taking an IRdfHandler and a ISparqlResultsHandler for use as appropriate

## Additional Handlers (Done)

Define new interfaces for allowing formatting of data into formats that require a header and/or footer such as XML based formats. Alter existing write through handlers to support these. Add a write through handler for SPARQL results

## .Net Serialization Support (In Progress)

Make the core classes (or the basic implementations of core interfaces) serializable using .Net’s ISerializable and IXmlSerializable interfaces