

Evaluation of the Bank for International Settlements (BIS) RDF Data Sets

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Abstract. Evaluation of the Bank for International Settlements (BIS) RDF Data Sets

Keywords: RDF Validation, RDF Constraints, DDI-RDF Discovery Vocabulary, Disco, RDF Data Cube Vocabulary, Linked Data, Semantic Web

1 Data Model Consistency

	Constraints										
Data Sets											
	<i>DATA-MODEL-CONSISTENCY-01</i>	<i>DATA-MODEL-CONSISTENCY-02</i>	<i>DATA-MODEL-CONSISTENCY-03</i>	<i>DATA-MODEL-CONSISTENCY-04</i>	<i>DATA-MODEL-CONSISTENCY-05</i>	<i>DATA-MODEL-CONSISTENCY-06</i>	<i>DATA-MODEL-CONSISTENCY-07</i>	<i>DATA-MODEL-CONSISTENCY-08</i>	<i>DATA-MODEL-CONSISTENCY-09</i>	<i>DATA-MODEL-CONSISTENCY-10 (!)</i>	<i>DATA-MODEL-CONSISTENCY-11</i>
<i>http://bis.270a.info/sparql</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓

Table 1: Evaluation of *http://bis.270a.info/sparql*

Data Sets	Constraints										
	DATA-MODEL-CONSISTENCY-01	DATA-MODEL-CONSISTENCY-02	DATA-MODEL-CONSISTENCY-03	DATA-MODEL-CONSISTENCY-04	DATA-MODEL-CONSISTENCY-05	DATA-MODEL-CONSISTENCY-06	DATA-MODEL-CONSISTENCY-07	DATA-MODEL-CONSISTENCY-08	DATA-MODEL-CONSISTENCY-09	DATA-MODEL-CONSISTENCY-10 (!)	DATA-MODEL-CONSISTENCY-11
<i>BIS_M_IBLR</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓
<i>BIS_M_CIBL_IB</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓
<i>BIS_M_CIBL_UR</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓
<i>BIS_EER</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓
<i>BIS_TOTAL_CREDIT</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓
<i>BIS_M_IBLN</i>	✓	✓	✓	✓	✗	✓	✓	✓	✓	-	✓

Table 2: Evaluation of <http://bis.270a.info/sparql>

Data Sets

2 Existential Quantifications

Data Sets	Constraints			
	<i>EXISTENTIAL-QUANTIFICATIONS-01</i>			
	<i>EXISTENTIAL-QUANTIFICATIONS-02</i>			
	<i>EXISTENTIAL-QUANTIFICATIONS-03</i>			
	<i>EXISTENTIAL-QUANTIFICATIONS-04</i>			
<i>http://bis.270a.info/sparql</i>	8	✓	✓	✓

Table 3: Evaluation of *http://bis.270a.info/sparql*

3 Cardinality Restrictions

Data Sets	Constraints			
http://bis.270a.info/sparql	MINIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-02	MAXIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-01	EXACT-UNQUALIFIED-CARDINALITY-RESTRICTIONS-01	EXACT-QUALIFIED-CARDINALITY-RESTRICTIONS-02
	12	✓	✓	✓

Table 4: Evaluation of <http://bis.270a.info/sparql>

Data Sets	Constraints
	MAXIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-01
<i>BIS_M_IBLR</i>	✓
<i>BIS_M_CIBL_IB</i>	✓
<i>BIS_M_CIBL_UR</i>	✓
<i>BIS_EER</i>	✓
<i>BIS_TOTAL_CREDIT</i>	✓
<i>BIS_M_IBLN</i>	✓

Table 5: Evaluation of <http://bis.270a.info/sparql>

Data Sets

4 Structure

Data Sets	Constraints	
	<i>STRUCTURE-01</i>	<i>STRUCTURE-02</i>
<i>http://bis.270a.info/sparql</i>	✓	✓

Table 6: Evaluation of *http://bis.270a.info/sparql*

5 Further Constraints