

# SANSA RDF Layer

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`class rdf.Rdf(sparkContext)`

Python wrapper class for SANSA RDF Layer

**count()**

Counts the triples in the Rdf object by using count function from SANSA RDF Layer.

**Returns:** **count** – Size of the triples that is read from the given file

**Return type:** int

**getTriplesAsArray(size=0)**

Gets the triples array with the given size from the triples that is read from the given file. Uses “take” function from SANSA RDF Layer.

**Parameters:** **size** (*int, optional*) – To return smaller array with given size or the whole array. The default is 0

**Returns:** **triples** – Triples that is taken from the given file

**Return type:** array

**initializeRdfReader(spark)**

Initializes RDFReader class from SANSA RDF Layer to be used to read triples or for extended usage with deeper SANSA knowledge

**Parameters:** **spark** (*SparkSession*) – SparkSession that was built with SANSA fat-jar and necessary configuration

**Returns:** **rdfReader** – RDFReader object from SANSA RDF Layer

**Return type:** RDFReader

**outputExceptionLog(functionName, exception)**

Exception function to print the exception and the function that throws the exception

**Parameters:** • **functionName** (*string*) – Name of the function that throws the exception

• **exception** (*Exception*) –

**printAttributesOfGivenObject(obj)**

Prints functions of the given object.

E.g.:

`rdf.printAttributesOfGivenObject(rdf.packagesDict[“qualityassessment”])`

**Parameters:** **obj** (*Object*) – Any object

**printRdfClassPackageList()**

Prints the SANSA RDF Package list that is loaded to this python wrapper.

E.g.:

`rdf.packagesDict[“io”].RDFReader(spark)`

**printRdfIOAttributes()**

Prints attributes of RDF/IO to see which functions can be used from SANSA rdf/io Package.

**printTripleObjectAttributes()**

Prints attributes of RDF Triple Object. It can be used to see the usable functions. It is possible to use functions directly with SANSA knowledge.

**printTriples(tripleArray)**

Prints triples as string with indexes from the given tripleArray.

**Parameters:** **tripleArray** (*array*) – Triple array

**readTriples(rdfReader, path)**

Reads triples by using RDFReader class from SANSA RDF Layer

**Parameters:** • **rdfReader** (*RDFReader*) – RDFReader object from SANSA RDF Layer

• **path** (*string*) –

Path to triple file in local machine or hadoop

E.g.:

<file:///data/rdf.nt> ==> Local machine

hdfs://localhost:54310/user/erce/rdf.nt ==> Hadoop

**saveAsTextFile**(*rdfObject*, *outputPath*)

Save triples as text file in small partitions. Uses “saveAsTextFile” from SANSa RDF Layer.

**Parameters:** • **rdfObject** (*RDF Triple Object*) – Return object of SANSa RDF IO Package “rdf” function

• **outputPath** (*string*) –

Output will be a directory with several text files

E.g.:

<file:///output> ==> Local machine

hdfs://localhost:54310/user/erce/output ==> Hadoop