

Welcome

Apache MetaModel is a library that encapsulates the differences and enhances the capabilities of different datastores. Rich querying abilities are offered to datastores that do not otherwise support advanced querying and a unified view of the datastore structure is offered through a single model of the schemas, tables, columns and relationships.

Key concepts:

- [DataContext](#)
- [Query object, the QueryBuilder API and Query parsing](#)
- [UpdateableDataContext](#)
- [UpdateScript \(and BatchUpdateScript\)](#)

Knowledge base and background information:

- [Schema and table semantics](#)
- [Query execution strategies](#)
- [Building connectors](#)
- [User Defined Functions \(UDFs\)](#)
- [Compiled queries](#)

Details about Connectors / DataContext implementations:

Datastore type	DataContext class name	Properties "type" value	Variants supported/available
JDBC / Relational Databases	JdbcDataContext	jdbc	PostgreSQL, MySQL, Microsoft SQL Server, Oracle DB, IBM DB2 Apache Hive, Apache Derby, SQLite, Ingres, H2, HSQLDB (... and many more)
CSV files	CsvDataContext	csv	Comma-separated Tab-separated Anything-separated files
Fixed width value files	FixedWidthDataContext	fixed-width	Fixed width EBCDIC
Microsoft Excel spreadsheets	ExcelDataContext	excel	.xls .xlsx
Microsoft Access database files	AccessDataContext	-	.mdb .accdb
OpenOffice.org database files	OpenOfficeDataContext	-	.odb
XML files	XmldomDataContext XmllaxDataContext	xml	DOM-based parsing (all in-memory) SAX-based parsing (streaming)
JSON files	JsonDataContext	json	
ElasticSearch	ElasticSearchDataContext ElasticSearchRestDataContext	elasticsearch	Native Java API RESTful JSON API
MongoDB	MongoDbDataContext	-	MongoDB 2.x MongoDB 3.x
Apache CouchDB	CouchDbDataContext	couchdb	
Apache Cassandra	CassandraDataContext	cassandra	
Apache HBase	HBaseDataContext	hbase	
Apache Kafka	KafkaDataContext		
Neo4j	Neo4jDataContext	-	
Salesforce.com	SalesforceDataContext	salesforce	
SugarCRM	SugarCrmDataContext	-	
Java collections	PojoDataContext	pojo	Collection<Object[]> Collection<Map<String, Object>> Collection<JavaBean>
Collections of other datastores	CompositeDataContext		

Additional information for the interested:

- [Blogs and presentations - external readings, presentations, videos etc. about Apache MetaModel](#)
- [Data type conversion](#)
- [MetaModel extras - third party modules built on top of Apache MetaModel](#)
- [Migrating from \(legacy\) eobjects.org MetaModel to Apache MetaModel](#)

- [Release Guide](#)