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AtomicDB Add-On Application in Wolfram Language
Professional Version
Mathematica ver.10.0 for Microsoft Windows (64-bit) (June 29, 2014)
.NET Framework ver. : 4.0.30319.34209
```

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AtomicDB API Primitive Operations Package ver1.0
(c) April 2015, By Athanassios I. Hatzis, PhD
Package version 1.0 for Microsoft Windows (64-bit), x86-64, Windows .
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AtomicDB API Enhanced Commands Package ver1.0
(c) April 2015, By Athanassios I. Hatzis
Package version 1.0 for Microsoft Windows (64-bit), x86-64, Windows .
```

AtomicDB Add - On in *Mathematica*

Professional Version

By Athanassios I. Hatzis - (C) Thu 9 Apr 2015 × 01 : 26 : 32

This output has been generated automagically. ☺

In this demo we build first a simple relational data model using the Wolfram List structure. Our relational model example includes two main tables STOCK and ORDER that are joined with a third junction table STOCK-ORDER. Then we convert this to AtomicDB data model by adding a new Model, then Concepts (columns) and Records (rows).

■ Relational Model

Relations

STOCK Table

StockID	StockNameEN	StockPrice	StockNameGR
991	Pinto Beans	11.1	Φασόλια Πίντο
992	Kidney Beans	9.85	Φασόλια Κόκκινα
993	White Beans	13.45	Φασόλια Άσπρα
994	Wax Beans	18.72	Φασόλια Καναρίνια

ORDER Table

OrderID	OrderKey
441	1111-BZ
442	1117-CM
443	1118-SA
444	1119-TT

STOCK - ORDER Table

SOID	SOrderID	SStockID	SOQuantity
224	441	991	1
225	442	992	3
226	443	994	2
227	444	993	1
228	441	993	3

■ AtomicDB Model

Login To Server

Existing Models

```
{0, 3, 13, 256}
```

Concept Map System

Add A New Model

```
{0, 3, 13, 269} → Beans Stock-Order Model Added with ADBAddOn Pro Version
```

Get All Models

```
{0, 3, 13, 256} → Beans Stock-Order Model Example  
{0, 3, 13, 269} → Beans Stock-Order Model Added with ADBAddOn Pro Version
```

Add Concepts to the Model

Add STOCK Group Concepts

```
{2, 1025, 269, 1} → StockNEXUS  
{2, 1025, 269, 2} → StockID  
{2, 1025, 269, 3} → StockNameEN  
{2, 1025, 269, 4} → StockPrice  
{2, 1025, 269, 5} → StockNameGR
```

Add ORDER Group Concepts

```
{2, 1025, 269, 6} → OrderNEXUS  
{2, 1025, 269, 7} → OrderID  
{2, 1025, 269, 8} → OrderKey
```

Add STOCK - ORDER Group Concepts

{2, 1025, 269, 9} → SONEXUS
 {2, 1025, 269, 10} → SOID
 {2, 1025, 269, 7} → OrderID
 {2, 1025, 269, 2} → StockID
 {2, 1025, 269, 11} → SOQuantity

Data Holder System

Add Collections

Add STOCK Group Collections

{0, 3, 15, 258} → StockID {0, 3, 15, 259} → StockNameEN {0, 3, 15, 260} → StockPr:

Add ORDER Group Collections

{0, 3, 15, 264} → OrderID {0, 3, 15, 265} → OrderKey

Add STOCK - ORDER Group Collections

{0, 3, 15, 267} → SOID {0, 3, 15, 264} → OrderID {0, 3, 15, 258} → StockID {0, 3, 15, 265} → OrderKey

Add Records

Add STOCK Group Records

{2, 7, 257, 5} → 5 {2, 7, 257, 6} → 6 {2, 7, 257, 7} → 7 {2, 7, 257, 8} → 8 {2, 7, 257, 9} → 9

Add ORDER Group Records

{2, 10, 264, 1} → 1 {2, 10, 264, 2} → 2 {2, 10, 264, 3} → 3 {2, 10, 264, 4} → 4

Add STOCK - ORDER Group Records

{0, 0, 0, 1} → 1 {0, 0, 0, 2} → 2 {0, 0, 0, 3} → 3 {0, 0, 0, 4} → 4 {0, 0, 0, 5} → 5