Article
Robert Cemper · Apr 27, 2020 2m read

Multidimensional Property Persistence - Part 2 (New Age)

While the classic solution followed rather close the concepts and design of the ancestors
Caché / IRIS allows a more modern approach to flexible/multidimensional properties

Let's see our demo class as before:

```
Class DC.Multi Extends (%Persistent, %Populate) [ Final ]
{
Property Name As %String;
Property DOB As %Date;
Property mJSON As %DynamicObject;
///  Property Multi As %String [ MultiDimensional ];
```

The JSON object allows us all the flexibility you may need
with the key-value paradigm as a basic concept.

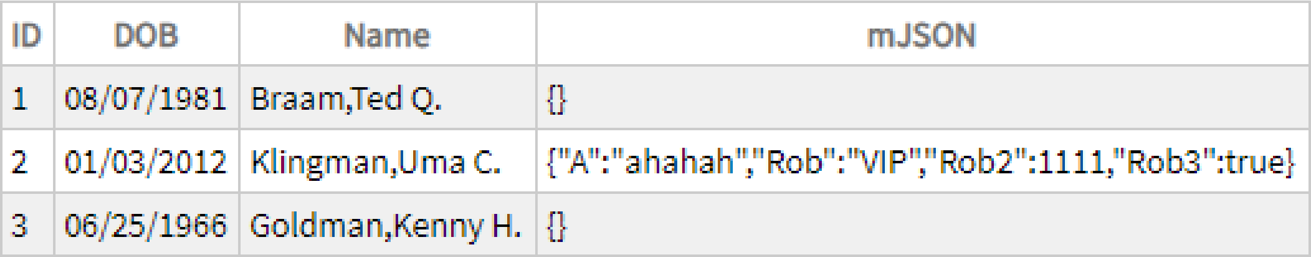
The storage map honors this with a suitable entry.

```
Storage Default
{
<Data name="MultiDefaultData">
  <Value name="1">
    <Value>Name</Value>
  </Value>
    <Value name="2">
    <Value>DOB</Value>
  </Value>
</Data>
<Data name="mJSON">
  <Attribute>mJSON</Attribute>
  <Structure>node</Structure>
  <Subscript>"mJSON"</Subscript>
</Data>
<DataLocation>^DC.MultiD</DataLocation>
<DefaultData>MultiDefaultData</DefaultData>
<IdLocation>^DC.MultiD</IdLocation>
<IndexLocation>^DC.MultiI</IndexLocation>
<StreamLocation>^DC.MultiS</StreamLocation>
<Type>%Storage.Persistent</Type>
}
```

Diagnosis: The storage generator has already foreseen the structure we had previously to add manually.

Issue #1) doesn't exist anymore

The same for issue #2) no extra fiddling for SQL. Access out of the box.



ID	DOB	Name	mJSON
1	08/07/1981	Braam,Ted Q.	{}
2	01/03/2012	Klingman,Uma C.	{"A":"ahahah","Rob":"VIP","Rob2":1111,"Rob3":true}
3	06/25/1966	Goldman,Kenny H.	{}

I admit, my fantasy for test data was rather limited.😉

So what's the price for this improvement ?

Instead of: **Set obj.Multi("robert")="rcc"**
it is now :   **Do obj.mJSON.%Set("robert","rcc")**
a substructure comparable to **obj.Multi("robert",1)** might require a dynamic array

instead of navigation by **$order()** and **$query()** you now use an iterator and operate full JSON compatible.

retrieving data by **set var=obj.Multi("robert")**
or similar changes to **set var=obj.mJSON.%Get("robert")**
Personally I find this a much cleaner approach and it is independent of registered or persistent objects

#Other

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