
Question

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%WriteJSONFromObject retrieves too much of database when complex relationships are involved

Hi all,

We're creating a series of RESTful APIs that output data from a Cache database (made up of global storage that we've mapped to classes). I'm running into some problems with object-to-JSON conversions when relationships are involved. Eg:

ParentClass has children relationship to ChildClass

ChildClass has parent relationship to ParentClass

If you %WriteJSONFromObject on an instance of ChildClass, it will retrieve the instance of ChildClass you're asking for, and it will retrieve the ParentClass as a JSON sub object, via the parent relationship (this part is OK), AND it will retrieve EVERY other instance of ChildClass as sub-sub objects, via the children relationship of ParentClass (not OK).

I totally understand why it is doing this, as it's simply retrieving every related object, but for our database this ends up retrieving almost every instance of a given object, and more, when you're only asking for one!

What to do? Here's my thoughts:

- Can you setup relationships that are only one-way? Eg, a child that knows about a parent, but a parent that doesn't know about the child(ren)? I think even if you can, we can't do this here as we're using these relationships to work out subscripts in the mapped globals.
- I've had a brief look at the new JSON stuff in Cache 2016, but that seems to be using an abstract %Object class, but we're dealing with mapped persistent classes here. Does it help us?
- Is there a way of limiting the 'depth' that %WriteJSONFromObject goes into the object?

I have created a related work-around where the client sends an class path, an id, and an empty JSON object of the properties they want to retrieve, and my service converts this to a %ZEN.ProxyObject, loops through it, and populates it with those same properties from the instance, then converts back to a JSON to send back to the client. We could maybe use this, but it would mean sending hard-coded JSON 'templates' for every object :(

Thanks!

Chris

[#JSON](#) [#Object Data Model](#) [#REST API](#) [#Cache](#)

Source

URL: <https://community.intersystems.com/post/writejsonfromobject-retrieves-too-much-database-when-complex-relationships-are-involved>