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## Serialize and Deserialize objects to JSON (or whatever) format

What if you could serialize/deserialize objects in whatever format: JSON, XML, CSV,...; attending different criteria: export/import some properties and not others, transform values in this or that way before exporting/importing,...; and all of this without having to change the class definition? Wouldn't that be great??

Well, perhaps it's a goal too ambitious to reach 100% but, exploring this idea, I've developed a bunch of classes that I thought it was good to share. If you want to test, change, modify or improve the code, or just take a look at it, you can do it <u>here</u>. There you'll find a more detailed explanation (see Readme.md) Be aware, this is a proof of concept for myself done in spare times, sure it's not robust enough or it can be done much better... but, I was just playing...ok, I could just wait to the new JSON Adaptor (coming soon!) that sure is going to resolve much more scenarios in a cleaner way, but... meanwhile... :-) ...

Basically, you just have to import the classes. Then choose one of your persistent or registered classes or create a new one, and change it to extend OPNLib.Serialize.Adaptor. After that, you just can do the following:

```
set obj = ##class(MyPkg.MyPersistentClass).%OpenId(1)
set json = obj.Export()
do json.%ToJSON()
{"prop1":"value1","prop2":"value"}
set newObj = ##class(MyPkg.MyClass).%New()
do newObj.Import(json)
write newObj.%Save()
write newObj.%Id() //if it's a persistent object, of course
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```

This approach doesn't entirely avoid the need to modify the class definition yet... but once you do it, you'll have 2 methods that can act as dispatchers for whatever other serialization logic you want to inject in the future... and also, if you explore the idea behind the OPNLib.Serialize.Template class, it'll be relatively easy to adapt it to have a pre-compiled export/import methods to export/import data in whatever serialization format without modifying the source/target class.

## Enjoy!

#Code Snippet #JSON #Mapping #Object Data Model #REST API #Caché

Source URL: https://community.intersystems.com/post/serialize-and-deserialize-objects-json-or-whatever-format