



Voyage ∞

(I don't know what to put here :))



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(The Pharo fireman)







Self-promotion

- ✦ Pharo core developer, payed by the Pharo Consortium and INRIA (Thanks!)
- ✦ Also author of some frameworks, between them Voyage



So, let's talk about Voyage



- 14:00 Tugrik: A new persistence option for Pharo
- 14:45 Voyage Reloaded - New features and backends in the document-database
- 15:30 Development and Features of the new Cincom Smalltalk ObjectStudio Launcher

Ouch!



The Voyage goal

- ✦ To be the GLORP for NOSQL databases
- ✦ We are doing fine :)



Voyage-Mongo update

- ✦ Replica set support (next week)
- ✦ Version generators
- ✦ Conflict handling support
- ✦ Better serialisation support
- ✦ Better error handling support



Voyage-Tugrik

- ✦ GemStone backend for big databases (and all the power of a GemStone/S)
- ✦ See previous talk ;)



But what happens when your your needs are not so big? Not even big for MongoDB? (After all, it requires a server installed).

What happens when you do not need more than an **embedded** database?



Voyage-UnQLite

- ✦ Embeddable database in the “Voyage” style.
- ✦ Yet easy to migrate to higher needs.
- ✦ Uses PunQLite driver



UnQLite features

- Serverless
- Transactional
- Single database file
- Key/Value **and** document
- Jx9
- Cross-platform
- Thread safe and full reentrant
- Support terabyte sized databases
- BSD License



PunQLite driver

- ✦ First developed by Masashi Umezawa (@mumez), as a key-value database.
- ✦ Extended (by me) to support collections and JSON structures.
- ✦ As MongoTalk, is an standalone driver you can use without Voyage (but using Voyage is cool ;)



Voyage-UnQLite vocabulary

- ✦ Object>>save
- ✦ Object>>remove
- ✦ Object class>>selectOne:
- ✦ Object class>>selectMany: (and family)
- ✦ Object class>>selectAll
- ✦ Object class>>removeAll



Voyage-UnQLite query language

- ✦ UnQLite uses an UFFI callback to decide if a document matches, then is just block evaluation.
- ✦ Very powerful
- ✦ Very dangerous
- ✦ No equivalent of MongoQueries for the moment, but you can access the raw dictionary.



Idiom extensions

- ✦ `<voyageDescription>`
- ✦ `<voyageDescriptionPlatforms: #()>`
- ✦ `<voyageContainerPlatforms: #()>`
- ✦ `<mongoDescription>` and `<mongoContainer>` are now deprecated (but they are still there for backward compatibility)



The heroic **DEMO**



Pharo Catalog

Hey there! This is a catalog of registered Pharo projects (currently 416).
The list is not exhaustive but it shows some of the most important community projects around.
If you have a project you'd like to share, please see [a note to developers](#).

[show all projects](#)

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parser (8)
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VoyageMongo

Pharo 6 persistence database nosql mongodb

Voyage-Mongo is an object persistence layer made for easy the work with *MongoDB><http://www.mongodb.org>*. It is an "ODM" (Object-Document Mapper), in the same spirit of the ORMs for relational approaches.

VoyageUnqlite

Pharo 6 persistence database nosql unqlite

Voyage-UnQLite is an object persistence layer made for easy the work with *UnQLite><https://unqlite.org>*. It is an "ODM" (Object-Document Mapper), in the same spirit of the ORMs for relational approaches.



```
(VOUnQLiteRepository on: 'demo.db') enableSingleton.
```



```
(Hero named: 'Spiderman')  
  level: 20;  
  addPower: (Power named: 'Super strenght');  
  addPower: (Power named: 'Wall climbing');  
  addPower: (Power named: 'Spider instinct');  
  save.
```



```
(Hero named: 'Iron-man')  
  level: 20;  
  addEquipment: (Armor new  
    addItem: Pistol new;  
    yourself);  
  save.
```



```
Hero selectAll.
```

```
Hero selectOne: [ :each | (each at: 'level') > 5 ].
```

```
regex := '.*woman.*' asRegexIgnoringCase.
```

```
Hero selectMany: [ :each |  
    regex matches: (each at: 'name') ].
```



Voyage-UnQLite vs. Voyage-MongoDB

- ✦ JSON, not BSON and certainly not STON
 - ✦ String, Number, Object (another dictionary), Array, true, false and null.
 - ✦ More use of Magritte-Voyage
- ✦ Callback query gives you access to image when filtering so you can do very complex things...



Future

- ✦ UnQLiteQueries (style MongoQueries)
- ✦ Implement VOUnQLiteRepository>>commit:



Last but not least

Collaboration over competition.



Last but not least

- ✦ PharoPro
 - ✦ Migration support
 - ✦ Custom development (frameworks, etc.)
 - ✦ everything you need, even coffee :)
- ✦ You are not alone, nor by yourself... we are here to help





Summary

- ✦ With Voyage-UnQLite we are now capable to work with embedded databases.
- ✦ Voyage-UnQLite provides an easy and customisable way, yet easy to scale to bigger solutions if needed.



Thanks!

`Smalltalk quitSession.`

