ZeroMQ C-API, PULLREQUEST and now JAVA!?

MARKDOWN Still working on the **ZeroMQ**-Front. And I am still convinced, now that I finished most of the guide. Actually I did plan to use [JeroMQ](https://github.com/zeromq/jeromq) but this pure Java ZeroMQ-Port seems to [not have implemented security,yet](https://github.com/zeromq/jeromq/issues/267). Therefore I switched to the jni-Binding of libzmq which have everything implemented but the security (CURVE) that I wanted to use. :D The source-code says: ```java if (self.mechanism.equals("PLAIN")) { self.username = request.popString(); self.password = request.popString(); } else if (self.mechanism.equals("CURVE")) { // TODO: Handle CURVE authentication } else if (self.mechanism.equals("GSSAPI")) { self.principal = request.popString(); } ``` Nothing that shocks me too much. I'm not afraid to make my hands dirty. Therefore my plan was to first try security using C and then look if it is too complicated to get this mapped via jni. Well, I found a [wonderful article] that describes everything about CURVE-based security with ZeroMQ,**but** for API v2 which is **of course** not compatible to API v3. ;) Took me some time to port those examples to compile with the current version of [CZMQ], which is a 'High-level C binding for ZMQ'. Actually I found those files from the article as examples in the CZMQ-Git-repository and made a [pullrequest] for this. Let's see, what they have to say ;) **EDIT: Funny thing, while writing they accepted the pullrequest. Soooo proud ;)** Now I have two options: 1) Write the proper mapping so I can get it work with JZMQ (the java-jni-binding) 2) Write a function that creates everything I want and make it accessable via JNI. But this have to wait till tomorrow. Now a little bit gamekit-fun :D **EDIT2:** *Ok, found out that JZMQ actually do have encryption built in and with this ZAP-Request you only have the final say if you are willing to allow or disallow a connection. Atm, I'm implementing CertStores for JZMQ, so only known clients are accepted as connecting clients. But this will be another post.* Links: * [JeroMQ](https://github.com/zeromq/jeromq) * [CZMQ] * [wonderful article] * [pullrequest] * [Zauth API v3](http://czmq.zeromq.org/manual:zauth) * [libzmq-test curve-security](https://github.com/zeromq/libzmq/blob/master/tests/test_security_curve.cpp) * [libzmq-test plain-security](https://github.com/zeromq/libzmq/blob/master/tests/test_security_plain.cpp) * [czmq-test zauth](https://github.com/zeromq/czmq/blob/master/src/zauth.c#L597) [CZMQ]: https://github.com/zeromq/czmq [wonderful article]: http://hintjens.com/blog:49 [pullrequest]: https://github.com/zeromq/czmq/pull/1580

Published by Thomas Trocha
Fri Dec 30 00:06:00 CET 2016
http://thomas.trocha.com:80/pebble/zeromq-c-api-pullrequest-and-now-java