Example of How to Create an Encrypted Channel

* Given a PlainTCPChannel object *ch* do:
* Create a symmetric encryption scheme object *encScheme*.
* Set *encScheme* with a suitable secret key. ( The same key has to be used by both parties using the channel).
* Create an EncryptedChannel object with *ch* and *encScheme*.

//Create a Symmetric Encryption object

SymmetricEnc aesEnc = **null**;

**try** {

aesEnc = SymmetricEncFactory.getInstance().getObject("CBCEncRandomIV");

} **catch** (FactoriesException e) {

e.printStackTrace();

}

//Generate a key and set it. (The same key has to be used by both parties. The application using //the channels is responsiblefor this).

SecretKey key = aesEnc.generateKey(128);

**try** {

aesEnc.setKey(key);

} **catch** (InvalidKeyException e) {

e.printStackTrace();

}

//Create and EncryptedChannel:

EncryptedChannel encChannel = **new** EncryptedChannel(ch, aesEnc);