

ADAMS

Advanced **D**ata mining **A**nd **M**achine learning **S**ystem

Module: adams-security

SECURITY

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Chapter 1

Introduction

The *adams-security* module offers some rudimentary support around generating, reading and writing key pairs. It also allows you to configure an SSL (or TLS) context.

For inspecting keystore files or similar, you might want to look at the cross-platform Keystore Explorer[2] tool.

Chapter 2

Flow

The following standalone actors are available:

- *KeyManager* - for configuring a KeyManagerFactory instance.
- *TrustManager* - for configuring a TrustManagerFactory instance.
- *SSLContext* - for setting up an SSL context.

The following sources are available:

- *KeyPairFileReader* - for reading private/public key pair in DER format from disk.
- *KeyPairGenerator* - for generating key pairs (e.g., RSA).

The following transformers are available:

- *GetKeyFromKeyPair* - retrieves private or public key from pair.

The following sinks are available:

- *KeyPairFileWriter* - for writing key pairs to disk (in DER format).

The following control actors are available:

- *Keytool* - for executing the `keytool` executable, forwards the generated output to its sub-actors.

Bibliography

- [1] *ADAMS* – Advanced Data mining and Machine learning System
<https://adams.cms.waikato.ac.nz/>
- [2] *Keystore Explorer* – an open source GUI replacement for the Java
command-line utilities keytool and jarsigner
<https://keystore-explorer.org/>