Saagie Data Fabric
Release 1.4

Capsules

Name	Features	Benefits	Live
HDFS	HDFS Transparent Encryption Option	● Security improvement - Encrypted data in of case stolen hardware or rogue administrator.	June 2017 Option on Demand
HDFS	Encryption KeyStore can be integrated in your own server (Key Management Server)	● Security and autonomy improvement - user controls the encryption/decryption keys.	

HDFS Transparent Encryption

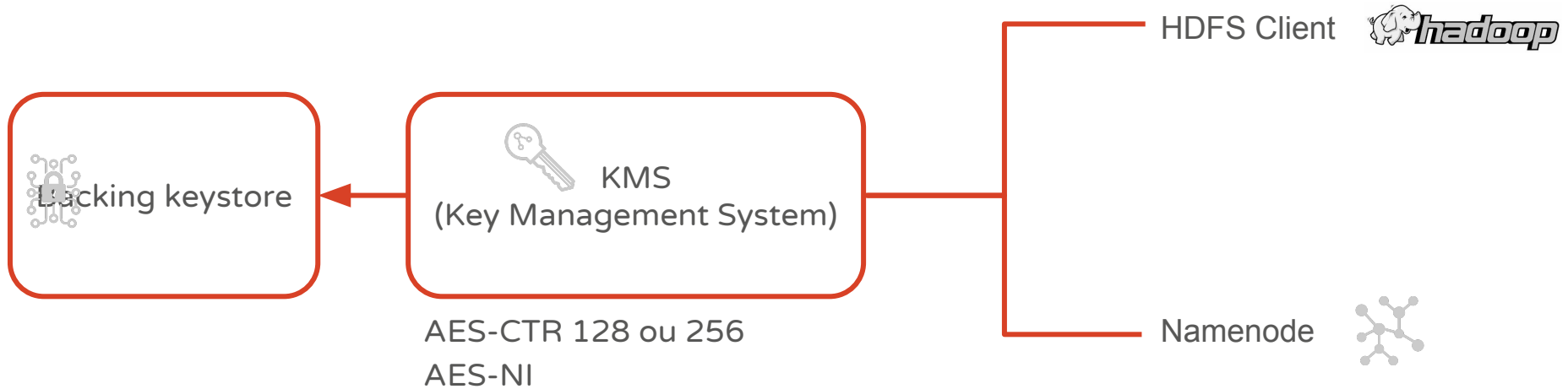Encryption over HDFS, 10 to 15% of performance impact, transparent for HDFS client.

User Documentation is available here :

https://creativedata.atlassian.net/wiki/display/SAP/HDFS+Transparent+Encryption

Officiel Apache Hadoop documentation is available here:

https://hadoop.apache.org/docs/r2.6.0/hadoop-project-dist/hadoop-hdfs/TransparentEncryption.html

Encryption KeyStore can be in your own server

HDFS Client

KMS
(Key Management System)

Backing keystore

Namenode

AES-CTR 128 ou 256
AES-NI

Officiel Apache Hadoop documentation is available here:

https://hadoop.apache.org/docs/r2.6.0/hadoop-kms/index.html