CryptoStreamUtils

- + IV_LENGTH_IN_BYTES
- + SPARK_IO_ENCRYPTION_COMMONS_CONFIG_PREFIX
- + def createCryptoOutputStream(os: OutputStream,sparkConf: SparkConf,key: Array[Byte]): OutputStream
- + def createWritableChannel(channel: WritableByteChannel,sparkConf: SparkConf,key: Array[Byte]): WritableByteChannel
- + def createReadableChannel(channel: ReadableByteChannel,sparkConf: SparkConf,key: Array[Byte]): ReadableByteChannel
- + def toCryptoConf(conf: SparkConf): Properties
- + def createKey(conf: SparkConf): Array[Byte]
- + def createInitializationVector(properties: Properties): Array[Byte]

Provider

GroupMappingServiceProvider

+ def getGroups(userName : String) : Set[String]

ShellBasedGroupsMappingProvider

- + def getGroups(username: String): Set[String]
- + def getUnixGroups(username: String): Set[String]

Hadoop Delegation Token Provider

- + def delegationTokensRequired(sparkConf: SparkConf, hadoopConf: Configuration): Boolean
- + def obtainDelegationTokens(hadoopConf: Configuration,sparkConf: SparkConf,creds: Credentials):

Option[Long]

SocketAuthServer

- + authHelper: SocketAuthHelper
- + threadName: String
- + def startServer(): (Int, String)
- + def handleConnection(sock: Socket): T
- + def getResult(): T
- + def getResult(wait: Duration): T

SocketFuncServer

- + authHelper: SocketAuthHelper
- + threadName: String
- + func: Socket => Unit
- + def handleConnection(sock: Socket): Unit

SocketAuthServer(Object)

+ def serveToStream(threadName: String,authHelper: SocketAuthHelper) (writeFunc: OutputStream => Unit): Array[Any]

Server

BaseErrorHandler

- + closed : Boolean
- + def cipherStream: Closeable
- + def original: Closeable
- + def safeCall[T](fn: => T): T
- + def close(): Unit

CryptoParams

- + key: Array[Byte]
- + sparkConf: SparkConf
- + keySpec : SecretKeySpec
- + transformation
- + conf

Channel

CryptoHelperChannel

- + sink: WritableByteChannel
- + def isOpen(): Boolean
- + def close(): Unit
- + def write(src: ByteBuffer): Int

ErrorHandlingWritableChannel

- + cipherStream: WritableByteChannel
- + original: WritableByteChannel
- + def isOpen(): Boolean
- + def write(src: ByteBuffer): Int

ErrorHandlingReadableChannel

- + cipherStream: ReadableByteChannel
- + original: ReadableByteChannel
- + def read(src: ByteBuffer): Int
- + def isOpen(): Boolean

Stream

ErrorHandlingInputStream

- + cipherStream: InputStream
- + original: InputStream
- + def read(b: Array[Byte]): Int
- + def read(): Int
- + def read(b: Array[Byte], off: Int, len: Int):

ErrorHandlingOutputStream

- + cipherStream: OutputStream
- + original: OutputStream
- + def flush(): Unit
- + def write(b: Array[Byte]): Unit
- + def write(b: Array[Byte], off: Int, len: Int): Unit
- + def write(b: Int): Unit