

# Package ‘OhdsiSharing’

May 6, 2016

**Type** Package

**Title** Package for sharing of the results of the OHDSI tools

**Version** 0.1.0

**Date** 2016-05-06

**Author** Martijn Schuemie [aut, cre],  
Marc Suchard [aut]

**Maintainer** Martijn Schuemie <schuemie@ohdsi.org>

**Description** Package for sharing of the results of the OHDSI tools, with  
functions for encrypting results and sending results through FTP and S3 to a central  
site.

**Imports** rJava,  
aws.signature,  
httr,  
XML,  
uuid,  
xml2,  
base64enc,  
digest,  
curl

**Suggests** OhdsiRTools

**License** Apache License

**RoxygenNote** 5.0.1

## R topics documented:

compressAndEncryptFolder . . . . .	2
compressFolder . . . . .	2
decompressFolder . . . . .	3
decryptAndDecompressFolder . . . . .	4
decryptFile . . . . .	5
encryptFile . . . . .	5
generateKeyPair . . . . .	6
putS3File . . . . .	7

<b>Index</b>	<b>8</b>
--------------	----------

---

```
compressAndEncryptFolder
```

*Compress and encrypt a folder*

---

### Description

Compress and encrypt a folder

### Usage

```
compressAndEncryptFolder(sourceFolder, targetFileName, publicKeyFileName)
```

### Arguments

```
sourceFolder    Name of the folder that must be encrypted.
targetFileName  Name of the file that will hold the encrypted data.
publicKeyFileName
                Name of the file where the public key is stored.
```

### Details

Compresses all files in a folder and its subfolders, and encrypts using the provided public key.

### Examples

```
## Not run:
generateKeyPair("public.key", "private.key")

# Create a folder with some data
dir.create("test")
data <- data.frame(x = runif(1000), y = 1:1000)
saveRDS(data, "test/data1.rds")
saveRDS(data, "test/data2.rds")

compressAndEncryptFolder("test", "data.zip.enc", "public.key")
decryptAndDecompressFolder("data.zip.enc", "test2", "private.key")

## End(Not run)
```

---

```
compressFolder
```

*Compress a folder*

---

### Description

Compress a folder

### Usage

```
compressFolder(sourceFolder, targetFileName)
```

**Arguments**

sourceFolder    Name of the folder that must be compressed.  
targetFileName    Name of the file that will hold the compressed data.

**Details**

Compresses all files in a folder and its subfolders, and stores it in a single zip file.

**Examples**

```
## Not run:  
# Create a folder with some data  
dir.create("test")  
data <- data.frame(x = runif(1000), y = 1:1000)  
saveRDS(data, "test/data1.rds")  
saveRDS(data, "test/data2.rds")  
  
compressFolder("test", "data.zip")  
decompressFolder("data.zip", "test2")  
  
## End(Not run)
```

---

decompressFolder	<i>Decompress a folder</i>
------------------	----------------------------

---

**Description**

Decompress a folder

**Usage**

```
decompressFolder(sourceFileName, targetFolder)
```

**Arguments**

sourceFileName    Name of the file that must be decompressed.  
targetFolder    Name of the folder that will hold the extracted data.

**Details**

Extracts all compressed files to a folder.

**Examples**

```
## Not run:  
# Create a folder with some data  
dir.create("test")  
data <- data.frame(x = runif(1000), y = 1:1000)  
saveRDS(data, "test/data1.rds")  
saveRDS(data, "test/data2.rds")  
  
compressFolder("test", "data.zip")
```

```
decompressFolder("data.zip", "test2")  
  
## End(Not run)
```

---

decryptAndDecompressFolder

*Decrypt and decompress a folder*

---

## Description

Decrypt and decompress a folder

## Usage

```
decryptAndDecompressFolder(sourceFileName, targetFolder, privateKeyFileName)
```

## Arguments

sourceFileName   Name of the file that must be decrypted.  
targetFolder      Name of the folder that will hold the unencrypted data.  
privateKeyFileName  
                    Name of the file where the private key is stored.

## Details

Decrypts the data using the provided private key and extracts all files to a folder.

## Examples

```
## Not run:  
generateKeyPair("public.key", "private.key")  
  
# Create a folder with some data  
dir.create("test")  
data <- data.frame(x = runif(1000), y = 1:1000)  
saveRDS(data, "test/data1.rds")  
saveRDS(data, "test/data2.rds")  
  
compressAndEncryptFolder("test", "data.zip.enc", "public.key")  
decryptAndDecompressFolder("data.zip.enc", "test2", "private.key")  
  
## End(Not run)
```

---

decryptFile	<i>Decrypt a data file</i>
-------------	----------------------------

---

**Description**

Decrypt a data file

**Usage**

```
decryptFile(sourceFileName, targetFileName, privateKeyFileName)
```

**Arguments**

sourceFileName Name of the file that must be decrypted.  
targetFileName Name of the file that will hold the unencrypted data.  
privateKeyFileName  
                    Name of the file where the private key is stored.

**Details**

Decrypts the data using the provided private key.

**Examples**

```
## Not run:  
generateKeyPair("public.key", "private.key")  
data <- data.frame(x = runif(1000), y = 1:1000)  
saveRDS(data, "data.rds")  
encryptFile("data.rds", "data.rds.enc", "public.key")  
decryptFile("data.rds.enc", "data2.rds", "private.key")  
  
## End(Not run)
```

---

encryptFile	<i>Encrypt a data file</i>
-------------	----------------------------

---

**Description**

Encrypt a data file

**Usage**

```
encryptFile(sourceFileName, targetFileName, publicKeyFileName)
```

**Arguments**

sourceFileName Name of the file that must be encrypted.  
targetFileName Name of the file that will hold the encrypted data.  
publicKeyFileName  
                    Name of the file where the public key is stored.

## Details

Encrypts the data using the provided public key.

## Examples

```
## Not run:
generateKeyPair("public.key", "private.key")
data <- data.frame(x = runif(1000), y = 1:1000)
saveRDS(data, "data.rds")
encryptFile("data.rds", "data.rds.enc", "public.key")

## End(Not run)
```

---

generateKeyPair	Create a public-private key pair
-----------------	----------------------------------

---

## Description

Create a public-private key pair

## Usage

```
generateKeyPair(publicKeyFileName, privateKeyFileName)
```

## Arguments

publicKeyFileName	Name of the file where the public key should be stored.
privateKeyFileName	Name of the file where the private key should be stored.

## Details

Creates an RSA 4096-bit public-private key pair. The public key can be used to encrypt data, and only with the private key can the data be decrypted.

## Examples

```
## Not run:
generateKeyPair("public.key", "private.key")

## End(Not run)
```

---

putS3File	<i>Put a local file into a remote S3 bucket</i>
-----------	---

---

**Description**

Put a local file into a remote S3 bucket

**Usage**

```
putS3File(file, bucket, region = "us-east-1", key, secret,  
          appendUUID = TRUE)
```

**Arguments**

file	The path to the file in the local filesystem.
bucket	The name of the bucket to put the file in.
region	The region of the S3.
key	Your AWS access key.
secret	Your AWS secret access key.
appendUUID	Should append an universally unique identifier to file name when uploading?

# Index

compressAndEncryptFolder, [2](#)  
compressFolder, [2](#)  
  
decompressFolder, [3](#)  
decryptAndDecompressFolder, [4](#)  
decryptFile, [5](#)  
  
encryptFile, [5](#)  
  
generateKeyPair, [6](#)  
  
putS3File, [7](#)