Manual Para crear Backups de Bases de Datos SQL con Certificado de Encriptacion

* Ejecutar los querys para creación y backup del Certificado en la base de datos master:

Text

Description automatically generated

Table

Description automatically generated with low confidence

-- Encryption Backup 2020

----------------------SOURCE SERVER-----------------------

USE master;

IF NOT EXISTS (

SELECT 1

FROM sys.key\_encryptions ke

WHERE ke.key\_id = 101 --master key

)

BEGIN

CREATE MASTER KEY ENCRYPTION BY PASSWORD = N'M@$t3rk3y@2020';

END

GO

BACKUP MASTER KEY TO FILE = N'E:\Program Files\Microsoft SQL Server\MSSQL13.MSSQLSERVER\MSSQL\BackupCertificadosSQLServer\Master\_Key.key'

ENCRYPTION BY PASSWORD = N'$tat3@2020';

GO

--DROP CERTIFICATE DBACert;

CREATE CERTIFICATE DBACert --Begin and End one year

--ENCRYPTION BY PASSWORD = N'M@$t3rk3y@2020' -- -- If use Master key you don't need this line

WITH SUBJECT = 'TDE Encryption Certifcate for Backup Database Statetrust.com',

START\_DATE = '20210801',

EXPIRY\_DATE = '20221231';

--SELECT name, start\_date, expiry\_date FROM sys.certificates

BACKUP CERTIFICATE DBACert

TO FILE = N'E:\Program Files\Microsoft SQL Server\MSSQL13.MSSQLSERVER\MSSQL\BackupCertificadosSQLServer\MyDBACert.cer'

WITH PRIVATE KEY

( FILE = N'E:\Program Files\Microsoft SQL Server\MSSQL13.MSSQLSERVER\MSSQL\BackupCertificadosSQLServer\MyDBACert.pvk'

, ENCRYPTION BY PASSWORD = N'M@$t3rk3yD3cry9t@2020'

-- , DECRYPTION BY PASSWORD = N'R3allyToughP@ssword4You' -- If use Master key you don't need this line

)

--attempt to create a database encryption key, Work for Enterprirse versions

--USE DATABASENAME;

--CREATE DATABASE ENCRYPTION KEY

--WITH ALGORITHM = AES\_256

--ENCRYPTION BY SERVER CERTIFICATE DBACert;

--select name,is\_encrypted,\* from sys.databases

---HASTA AQUI Ejecute yo el 19/08/2021

Esto es en caso de que queramos usar la misma llave de encriptación en el servidor destino.

Si es el mismo server donde se descarga el backup no se necesita.

En caso de necesitar un backup en otro server se ha estado utilizando el crear un backup copyonly sin encriptación..

----------------------BACKUP MODE WITH ENCRYPT-----------------------

BACKUP DATABASE [BonosConcursos\_test\_DBA] TO DISK = N'E:\Program Files\Microsoft SQL Server\MSSQL13.MSSQLSERVER\MSSQL\BackupCertificadosSQLServer\Backup\_BonosConcursos\_Test\_DBA\_20200909\_withoutEncrypt.bak'

WITH FORMAT,

INIT,

NAME = N'BonosConcursos\_test\_DBA-Full Database Backup',

SKIP,

NOREWIND,

NOUNLOAD,

COMPRESSION,

--ENCRYPTION(ALGORITHM = AES\_256, SERVER CERTIFICATE = [DBACert]), ---Uncomment this line for encrypt

STATS = 10

GO

declare @backupSetId as int

select @backupSetId = position

from msdb..backupset

where database\_name=N'BonosConcursos\_test\_DBA' and backup\_set\_id=(select max(backup\_set\_id)

from msdb..backupset where database\_name=N'BonosConcursos\_test\_DBA' )

if @backupSetId is null

begin

raiserror(N'Verify failed. Backup information for database ''BonosConcursos\_test\_DBA'' not found.', 16, 1)

end

RESTORE VERIFYONLY FROM DISK = N'E:\MSSQLSQL2016\Backup\Backup\_BonosConcursos\_Test\_DBA\_20200909\_withoutEncrypt.bak'

WITH

FILE = @backupSetId,

NOUNLOAD,

NOREWIND

GO

----------------------TARGET SERVER-----------------------

USE master;

IF NOT EXISTS (

SELECT 1

FROM sys.key\_encryptions ke

WHERE ke.key\_id = 101 --master key

)

BEGIN

CREATE MASTER KEY ENCRYPTION BY PASSWORD = N'M@$t3rk3y@2020';

END

GO

--CREATE MASTER KEY OR RESTORE FROM MASTER KEY FILE--

USE MASTER

GO

RESTORE MASTER KEY

FROM FILE = 'E:\MSSQL\DATA\Master\_Key.key'

DECRYPTION BY PASSWORD = '$tat3@2020'

ENCRYPTION BY PASSWORD = '$tat3@2020';

GO

--OPEN MASTER KEY DECRYPTION BY PASSWORD = '$tat3@2020';

--CLOSE MASTER KEY;

CREATE CERTIFICATE DBACert

FROM FILE = N'E:\MSSQL\DATA\MyDBACert.cer'

WITH PRIVATE KEY (

FILE = N'E:\MSSQL\DATA\MyDBACert.pvk',

DECRYPTION BY PASSWORD = 'M@$t3rk3yD3cry9t@2020'

);

GO

--- Melvin Melara No funciona al copiar en otro server

-- Creates a database master key.

-- The key is encrypted using the password "<master key password>"

USE master;

GO

CREATE MASTER KEY ENCRYPTION BY PASSWORD = 'BkpStateTDE2020';

GO

Use Master

GO

CREATE CERTIFICATE StatetrustBkpEncryptCert

WITH SUBJECT = 'Statetrust Backup Encryption Certificate';

GO

-- Syntax for SQL Server

BACKUP CERTIFICATE StatetrustBkpEncryptCert TO FILE = 'D:\MSSQL\SQL2016\StatetrustBkpEncryptCert'

WITH PRIVATE KEY

(

FILE = 'D:\MSSQL\SQL2016\StatetrustBkpEncryptKey' ,

ENCRYPTION BY PASSWORD = 'BkpStateTDE2020'

--, DECRYPTION BY PASSWORD = 'BkpStateTDE2020'

)

--Here's my summary:

--Folder Permissions

--Make sure the files have different names

--Make sure they have extensions

--Make sure the path that you want to save to is already there

--Hope this helps!

BACKUP DATABASE [StVirtualOffice]

TO DISK = N'E:\MSSQL\Backup\BkpFullEncripted\_StVirtualOffice\_080920200.bak'

WITH

COPY\_ONLY, NOFORMAT, NOINIT, NAME = N'StVirtualOffice-Full Database Backup',

SKIP, NOREWIND, NOUNLOAD, COMPRESSION,

ENCRYPTION

(

ALGORITHM = AES\_256,

SERVER CERTIFICATE = StatetrustBkpEncryptCert

),

STATS = 10

GO

BACKUP DATABASE [StVirtualOffice]

TO DISK = N'E:\MSSQL\Backup\backup\_StVirtualOffice\_08092020.bak'

WITH COPY\_ONLY, NOFORMAT, NOINIT, NAME = N'StVirtualOffice-Full Database Backup',

SKIP, NOREWIND, NOUNLOAD, COMPRESSION, STATS = 10

GO

* Creación de Plan de Mantenimiento para Backups

Graphical user interface, text

Description automatically generated

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, application, table, Excel

Description automatically generated