

**UNIVERSIDAD NACIONAL DE INGENIERIA**

**INSTITUTO DE ESTUDIOS SUPERIORES**

**IES – UNI**



**Ingeniería de Sistemas.**

**Asignatura: Base de datos II**

**“Resolución de la Guía de laboratorio auditoría de servidor y base de datos “**

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**Docente:**

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**Grupo:**

3T1 de sistemas

Managua-Nicaragua, martes 03 de mayo del 2022

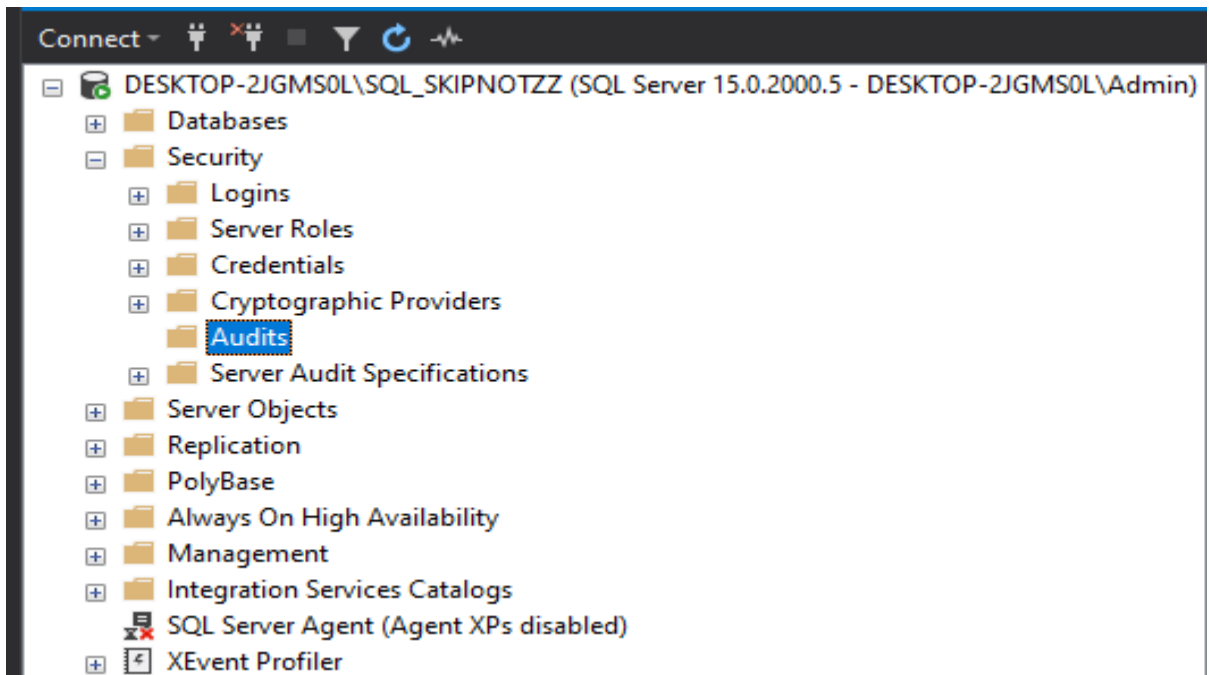
## Contenido

Práctica de Laboratorio .....	3
Especificación de Auditoría de Servidor .....	3
Especificación de Auditoría de Base de Datos .....	9
Tarea.....	17
Tres eventos de auditoría de servidor relacionados a la administración de inicios de sesión en el servidor .....	17
1.    Evento auditorio del servidor – INICIO DE SESIÓN FALLIDO .....	17
2.    Evento auditorio del servidor – INICIO DE SESIÓN CORRECTO .....	23
3.    Evento auditorio del servidor – INICIO DE SESIÓN CAMBIO DE CONTRASEÑA .....	30
Tres eventos de auditoría de base de datos relacionados a la administración de esquemas .....	36
4.    Evento auditoria de base de datos – SELECCIÓN EN TABLA REGION .....	36
5.    Evento auditoria de base de datos – MODIFICAR EN TABLA REGION .....	42
6.    Evento auditoria de base de datos – INSERTAR EN TABLA REGION .....	48

## Práctica de Laboratorio

### Especificación de Auditoría de Servidor

En este ejemplo estaremos realizando una auditoría de servidor para registrar los eventos de cambios de contraseña a los inicios de sesión en la herramienta de Microsoft SQLSERVER. Desde el Management Studio de SQL Server, acceda a la carpeta Seguridad en el explorador de Objetos y ubique la carpeta Auditoría.



**Ready**

**Select a page**

- General
- Filter

**Script** | **Help**

Audit name: Auditoria del Servidor

Queue delay (in milliseconds): 1000

On Audit Log Failure:

- ☒ Continue
- ☐ Fail operation
- ☐ Shut down server

Audit destination: File

Path: C:\Base de datos

Audit File Maximum Limit:

- ☒ Maximum rollover files:
  - ☒ Unlimited
- ☐ Maximum files:
  - Number of files: 2147483647

Maximum file size: 0 MB GB TB

- ☒ Unlimited

☐ Reserve disk space

**Connection**

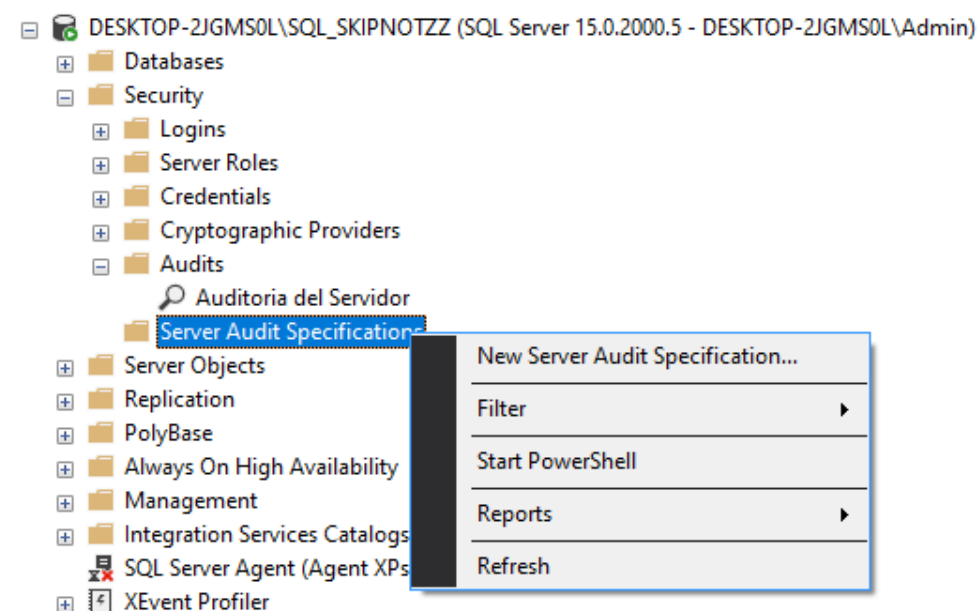
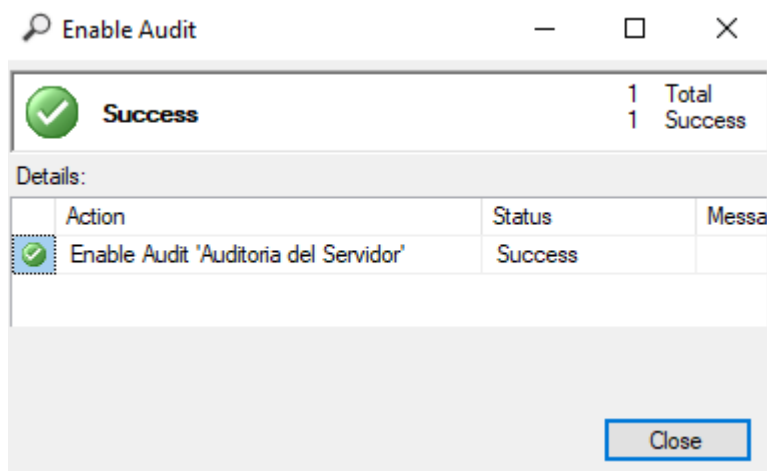
DESKTOP-2JGMS0L\SQL\_SKIP  
NOTZZ  
[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

**Progress**

Ready

OK Cancel Help



Create Server Audit Specification

Server audit was not provided

Select a page

General

Script Help

Name: Auditorias de Cambios de Contraseña y Inicio de Sesión

Audit: Auditoria del Servidor

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
*1					

Connection

DESKTOP-2JGMSQL\SQLEXPRESS  
NOTZ [DESKTOP-2JGMSQL\Admin]

View connection properties

Progress

Ready

OK Cancel Help

Create Server Audit Specification

Ready

Select a page

General

Script Help

Name: Auditorias de Cambios de Contraseña y Inicio de Sesión

Audit: Auditoria del Servidor

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
1	LOGIN_CHANGE_PASSWORD_GROUP				
*2	FEATURE_RESTRICTION_CHANGE_GROUP				

Connection

DESKTOP-2JGMSQL\SQLEXPRESS  
NOTZ [DESKTOP-2JGMSQL\Admin]

View connection properties

Progress

Ready


OK Cancel Help

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)


- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
  - Server Audit Specifications
    - Auditorias de Cambios de Contraseña y Inicios de Sesión
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

- New Server Audit Specification...
- Enable Server Audit Specification
- Script Server Audit Specification as ▶
- Policies ▶
- Facets
- Start PowerShell

Enable Server Audit Specification

 **Success** 1 Total  
1 Success

Details:

Action	Status	Mes
 Enable Server Audit Specification 'Audito...	Success	

Close

```
1 --Creación de Inicio de Sesión
2
3 Create login UNIFCYS WITH PASSWORD = 'uni'
4
5 --Cambio de Contraseña
6
7 Alter login UNIFCYS WITH PASSWORD = 'uni2020'
```

100 %

Messages

Commands completed successfully.

Completion time: 2022-05-02T14:52:54.5537152-06:00

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
  - Server Audit Specification
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs)
- XEvent Profiler

New Audit...

Disable Audit

View Audit Logs

Script Audit as

Policies

Facets

Start PowerShell

Reports

Rename

Delete

Refresh

Properties

Log File Viewer - DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ

Select logs: ☒ Audit Collection, ☒ Auditoria del Servidor, ☐ Windows NT

Log file summary: No filter applied

Date	Event Time	Server Instance Name	Action ID	Class Type	Sequence Number	Succeeded	Permission Bit Mask
2/5/2022 20:52:54	20:52:54.4967187	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	RESET PASSWORD	SQL LOGIN	1	True	0x00000000000000000000000000000000
2/5/2022 20:26:29	20:26:29.1287301	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	AUDIT SESSION CHANGED	SERVER AUDIT	1	True	0x00000000000000000000000000000000

Selected row details:

Date: 2/5/2022 20:52:54  
Log: Audit Collection (Auditoria del Servidor)

Event Time: 20:52:54.4967187  
Server Instance Name: DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ  
Action ID: RESET PASSWORD  
Class Type: SQL LOGIN  
Sequence Number: 1  
Succeeded: True  
Permission Bit Mask: 0x00000000000000000000000000000000  
Column Permission: False  
Session ID: 60  
Server Principal ID: 259  
Database Principal ID: 1  
Target Server Principal ID: 278  
Target Database Principal ID: 0  
Object ID: 278  
Session Server Principal Name: DESKTOP-2JGMS0L\Admin  
Server Principal Name: DESKTOP-2JGMS0L\Admin  
Server Principal SID: 0x01050000000000000515000000FDE79936FD707B618528EE8DE9030000  
Database Principal Name: dbo  
Target Server Principal Name: UNIFCYS  
Target Server Principal SID: 0x0EF3376CD046AD24991B7B02FF448B074  
Target Database Principal Name: master  
Database Name: master  
Schema Name: UNIFCYS  
Object Name: UNIFCYS  
Statement: After login UNIFCYS WITH PASSWORD = '-----'  
Additional Information: File Name: C:\Base de datos\Auditoria\5del\Servidor\_8811AE35-7665-4689-889C-5E462EE0A521\_0\_132959967876950000.sqaudit  
File Offset: 7580  
User Defined Event ID: 0  
User Defined Information: Sequence Group ID: 0x6A40509E61A4A548AC0FBA430BAF6A16  
Transaction ID: 331614  
Client IP: fe80:49f:630:6966:e483:13  
Application Name: Microsoft SQL Server Management Studio - Query  
Affected Rows: 0  
Response Rows: 0  
Connection ID: 1a138b224f923-4be6-9dbf-801f5461232e

Status: Last Refresh: 2/5/2022 14:55:32  
Filter: None

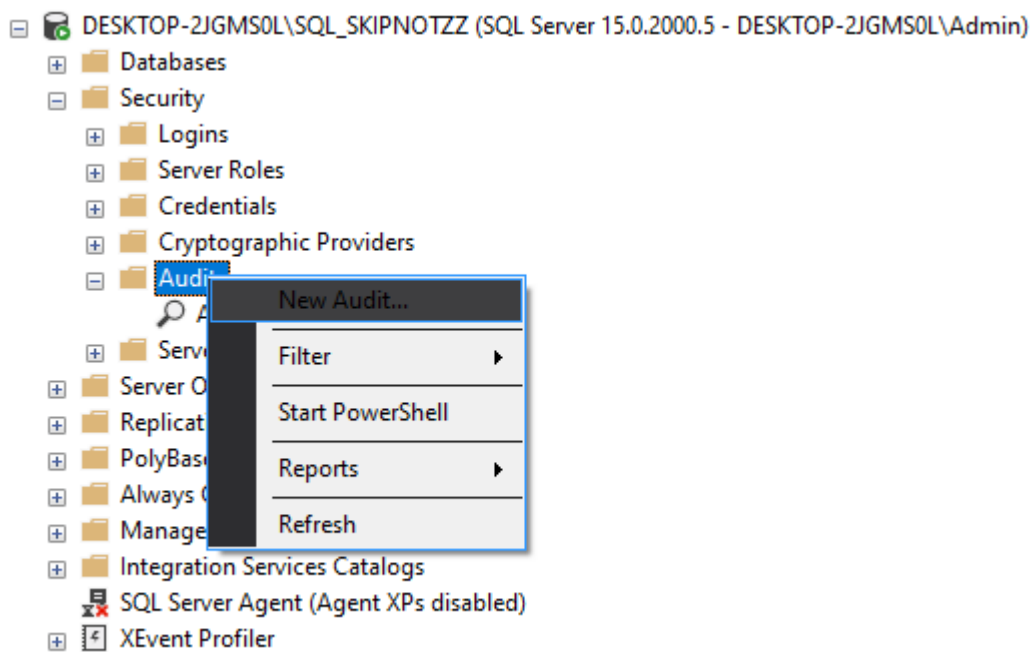
View filter settings

Progress: Done (2 records).

Close



## Especificación de Auditoría de Base de Datos



# Create Audit

Ready

## Select a page

- General
- Filter

Script | Help

Audit name: Auditoria de Base de datos

Queue delay (in milliseconds): 1000

On Audit Log Failure:  
☒ Continue  
☐ Fail operation  
☐ Shut down server

Audit destination: File

Path: C:\Base de datos

Audit File Maximum Limit:  
☒ Maximum rollover files:  
☒ Unlimited

☐ Maximum files:  
Number of files: 2147483647

Maximum file size: 0 MB  
☒ Unlimited

☐ Reserve disk space

## Connection

DESKTOP-2JGMS0L\SQL\_SKIP  
NOTZZ  
[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

## Progress



Ready

OK

Cancel


Help

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
    - Auditoria de Base de datos
  - Server Audit Specifications
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

- New Audit...
- Enable Audit
- View Audit Logs
- Script Audit as ▶
- Policies ▶
- Facets
- Start PowerShell
- Reports ▶
- Rename
- Delete
- Refresh
- Properties


Enable Audit

 **Success**

1 Total

1 Success

Details:

Action	Status	Message
 Enable Audit 'Auditoria de Base de datos'	Success	

Close

- [-] Northwind
  - + Database Diagrams
  - + Tables
  - + Views
  - + External Resources
  - + Synonyms
  - + Programmability
  - + Service Broker
  - + Storage
  - [-] Security
    - + Users
    - + Roles
    - + Schemas
    - + Asymmetric Keys
    - + Certificates
    - + Symmetric Keys
    - + Always Encrypted Keys
    - + Database Audit Specification
    - + Security Policies

New Database Audit Specification...

Create Database Audit Specification

Enter object name in row 1

Select a page: General

Script | Help

Name: Evento de Selección

Audit: Auditoría de Base de datos

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
1	SELECT				
2					

Connection: DESKTOP-2JGMSQL\_SQL\_SKIP NOTZ [DESKTOP-2JGMSQL\Admin]

View connection properties

Progress: Ready

OK Cancel Help

Create Database Audit Specification

Enter object name in row 1

Select a page

General

Name: Evento de Selección

Audit: Auditoria de Base de datos

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
1	SELECT	OBJECT			
2					

Select Objects

Select these object types:  
Users, Database roles, Application roles

Object Types...

Enter the object names to select (examples):  
[creador]

Check Names

Browse...

OK Cancel Help

Connection

DESKTOP-2JGMSQL\Skip  
NOTZZ  
[DESKTOP-2JGMSQL\Admin]

View connection properties

Progress

Ready

OK Cancel Help

Create Database Audit Specification

Ready

Select a page

General

Name: Evento de Selección

Audit: Auditoria de Base de datos

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
1	SELECT	OBJECT	dbo	Employees	creador
2					

Connection

DESKTOP-2JGMSQL\Skip  
NOTZZ  
[DESKTOP-2JGMSQL\Admin]

View connection properties

Progress

Ready

OK Cancel Help

Northwind

Database Diagrams

Tables

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

Security

Users

Roles

Schemas

Asymmetric Keys

Certificates

Symmetric Keys

Always Encrypted Keys

Database Audit Specification

Evento de Selección

Security Policies

New Database Audit Specification...

Enable Database Audit Specification

Script Database Audit Specification as ▶

Enable Database Audit Specification

✓

Success

1 Total

1 Success

Details:

Action	Status	Messa
✓ Enable Database Audit Specification 'E...	Success	

Close

Database Audit Specification Properties

Ready

Select a page: General

Script Help

Name: Evento de Selección

Audit: Auditoría de Base de datos

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
1	SELECT	OBJECT	dbo	Employees	acceso
2					

Connection: DESKTOP-2JGMSO\SQL\_SKIP NOTZZ [DESKTOP-2JGMSO\Admin]

View connection properties

Progress: Ready

OK Cancel Help

```

1 USE Northwind
2 GO
3 SELECT * FROM Employees

```

100 %

Results Messages

	EmployeeID	LastName	FirstName	Title	TitleOfCourtesy	BirthDate	HireDate
1	1	Davolio	Nancy	Sales Representative	Ms.	1948-12-08 00:00:00.000	1992-05-01 00:00:00.000
2	2	Fuller	Andrew	Vice President, Sales	Dr.	1952-02-19 00:00:00.000	1992-08-14 00:00:00.000
3	3	Leverling	Janet	Sales Representative	Ms.	1963-08-30 00:00:00.000	1992-04-01 00:00:00.000
4	4	Peacock	Margaret	Sales Representative	Mrs.	1937-09-19 00:00:00.000	1993-05-03 00:00:00.000
5	5	Buchanan	Steven	Sales Manager	Mr.	1955-03-04 00:00:00.000	1993-10-17 00:00:00.000
6	6	Suyama	Michael	Sales Representative	Mr.	1963-07-02 00:00:00.000	1993-10-17 00:00:00.000
7	7	King	Robert	Sales Representative	Mr.	1960-05-29 00:00:00.000	1994-01-02 00:00:00.000
8	8	Callahan	Laura	Inside Sales Coordinator	Ms.	1958-01-09 00:00:00.000	1994-03-05 00:00:00.000
9	9	Dodsworth	Anne	Sales Representative	Ms.	1966-01-27 00:00:00.000	1994-11-15 00:00:00.000

- sa
- Sistema
- UNIFCYS
- Server Roles
- Credentials
- Cryptographic Providers
- Audits
  - Auditoria del Servidor
  - Auditoria de Base de datos
- Server Audit Specification
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalog
- SQL Server Agent (Agent XP)
- XEvent Profiler

New Audit...  
 Disable Audit  
**View Audit Logs**  
 Script Audit as  
 Policies  
 Facets  
 Start PowerShell

Log File Viewer - DESKTOP-2JGMSOL\SQL\_SKIPNOTZZ
 

Load Log
 Export
 Refresh
 Filter ...
 Search ...
 Stop
 Help

Select logs
 

☒ Audit Collection
 

☐ Auditoria del Servidor
 ☒ Auditoria de Base de datos

☐ Windows NT

Log file summary: No filter applied
 

Date	Event Time	Server Instance Name	Action ID	Class Type	Sequence Number	Succeeded	Permission Bit Mask	Col
2/5/2022 21:48:58	21:48:58.7537771	DESKTOP-2JGMSOL\SQL_SKIPNOTZZ	SELECT	TABLE	1	True	0x00000000000000000000000000000001	Tru
2/5/2022 21:46:54	21:46:54.3271073	DESKTOP-2JGMSOL\SQL_SKIPNOTZZ	AUDIT SESSION CHANGED	SERVER AUDIT	1	True	0x00000000000000000000000000000000	Fal

Selected row details:
 

Date 2/5/2022 21:48:58  
 Log Audit Collection (Auditoria de Base de datos)  
 Event Time 21:48:58.7537771  
 Server Instance Name DESKTOP-2JGMSOL\SQL\_SKIPNOTZZ  
 Action ID SELECT  
 Class Type TABLE  
 Sequence Number 1  
 Succeeded True  
 Permission Bit Mask 0x00000000000000000000000000000001  
 Column Permission True  
 Session ID 74  
 Server Principal ID 277  
 Database Principal ID 8  
 Target Server Principal ID 0  
 Target Database Principal ID 0  
 Object ID 581577110  
 Session Server Principal Name Creator  
 Server Principal Name Creator  
 Server Principal SID 0x1E99C44C6CF8E5439665205D279367F3  
 Database Principal Name acceso  
 Target Server Principal Name  
 Target Server Principal SID NULL  
 Target Database Principal Name  
 Database Name Northwind  
 Schema Name dbo  
 Object Name Employees  
 Statement **SELECT \* FROM Employees**  
 Additional Information C:\Base de datos\Auditoria\5de\5Base\5de\5datos\_CE182331-DEE0-4426-A127-A1D2A6A4EE2F\_0\_132960016143210000.sqlaudt  
 File Name  
 File Offset 7680  
 User Defined Event ID 0  
 User Defined Information  
 Sequence Group ID 0x269C368E204EF8488465B18D7908CCDE  
 Transaction ID 463658  
 Client IP local machine  
 Application Name Microsoft SQL Server Management Studio - Query  
 Affected Rows 0  
 Retention Rows 0

Status
 

Last Refresh: 2/5/2022 15:51:27  
 Filter: None  
 View filter settings

Progress
 

Done (2 records)

Close



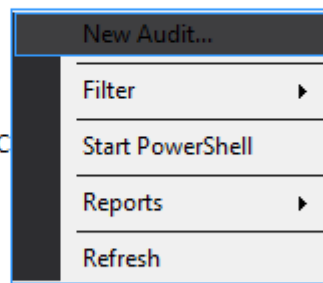
## Tarea

Tres eventos de auditoría de servidor relacionados a la administración de inicios de sesión en el servidor

### 1. Evento auditorio del servidor – INICIO DE SESIÓN FALLIDO

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- + Databases
- Security
  - + Logins
  - + Server Roles
  - + Credentials
  - + Cryptographic Providers
  - Audits
    - Auditoria del Servidor
    - Auditoria de Base de datos
  - Server Audit Specifications
    - Auditorias de Cambios de C
- + Server Objects
- + Replication
- + PolyBase
- + Always On High Availability
- + Management
- + Integration Services Catalogs
- + SQL Server Agent (Agent XPs disabled)
- + XEvent Profiler



Create Audit

Ready

Select a page

General

Filter

Connection

DESKTOP-2JGMS0L\SQL\_SKIP

NOTZZ

[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

Progress

Ready

Script

Help

Audit name:

1 Auditoria del Servidor - Inicio de Sesión Fallido

Queue delay (in milliseconds):

1000

On Audit Log Failure:

Continue

Fail operation

Shut down server

Audit destination:

File

Path:

C:\Base de datos

...

Audit File Maximum Limit:

Maximum rollover files:

Unlimited

Maximum files:

2147483647

Maximum file size:

0

MB

GB

TB

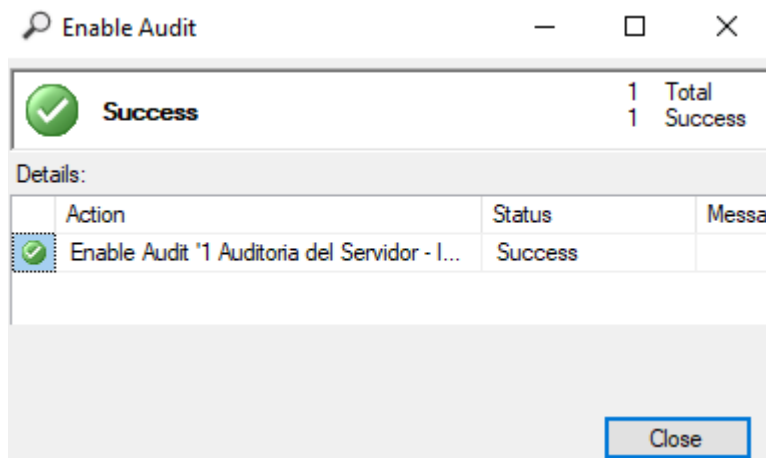
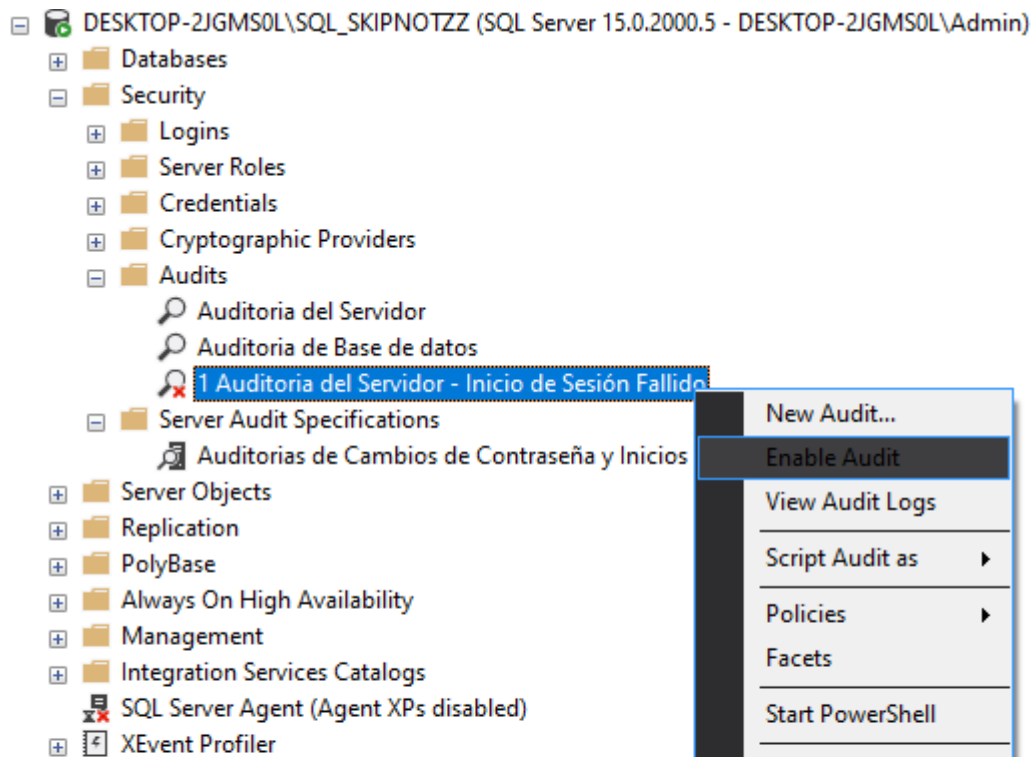
Unlimited

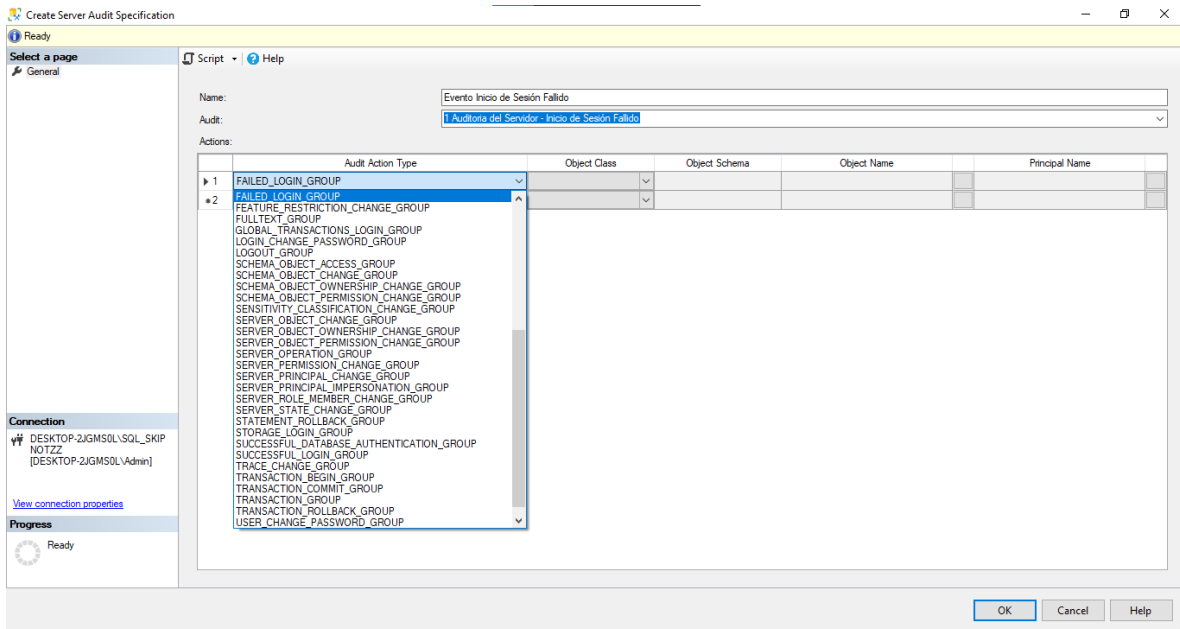
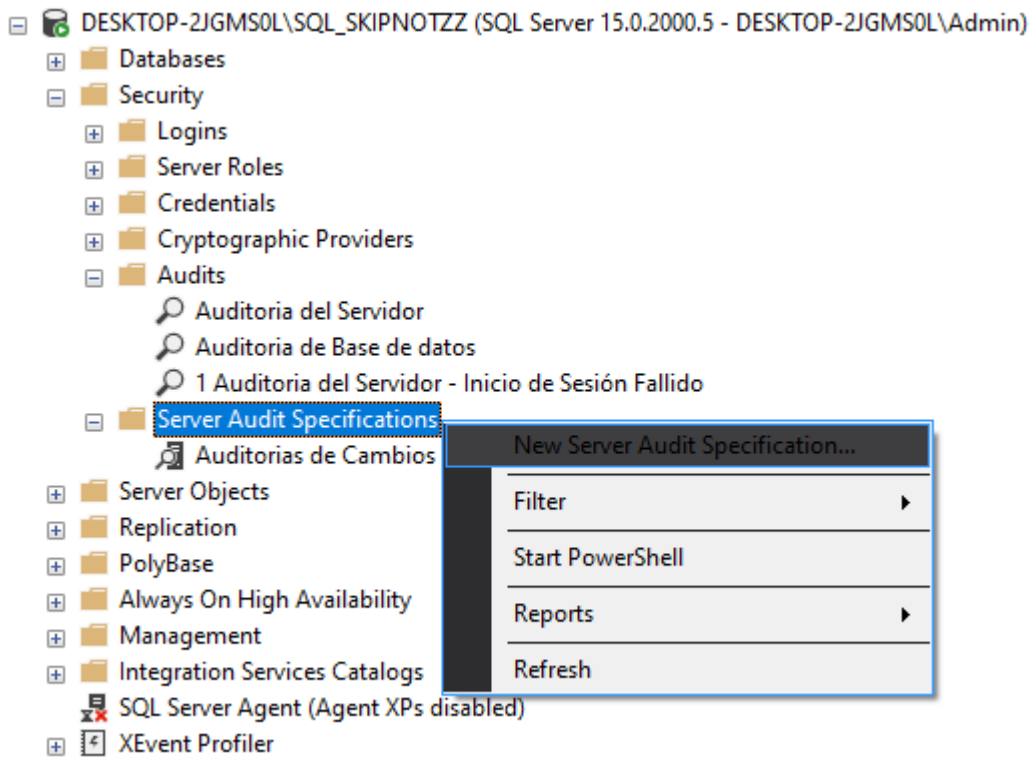
Reserve disk space

OK

Cancel

Help





DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
    - Auditoria de Base de datos
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
  - Server Audit Specifications
    - Auditorias de Cambios de Contraseña y Inicios de Sesión
    - Evento Inicio de Sesión Fallido**
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

- New Server Audit Specification...
- Enable Server Audit Specification
- Script Server Audit Specification as ▶
- Policies ▶
- Facets
- Start PowerShell
- Reports ▶
- Delete
- Refresh
- Properties**

Connect to Server

## SQL Server

Server type: Database Engine

Server name: DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ

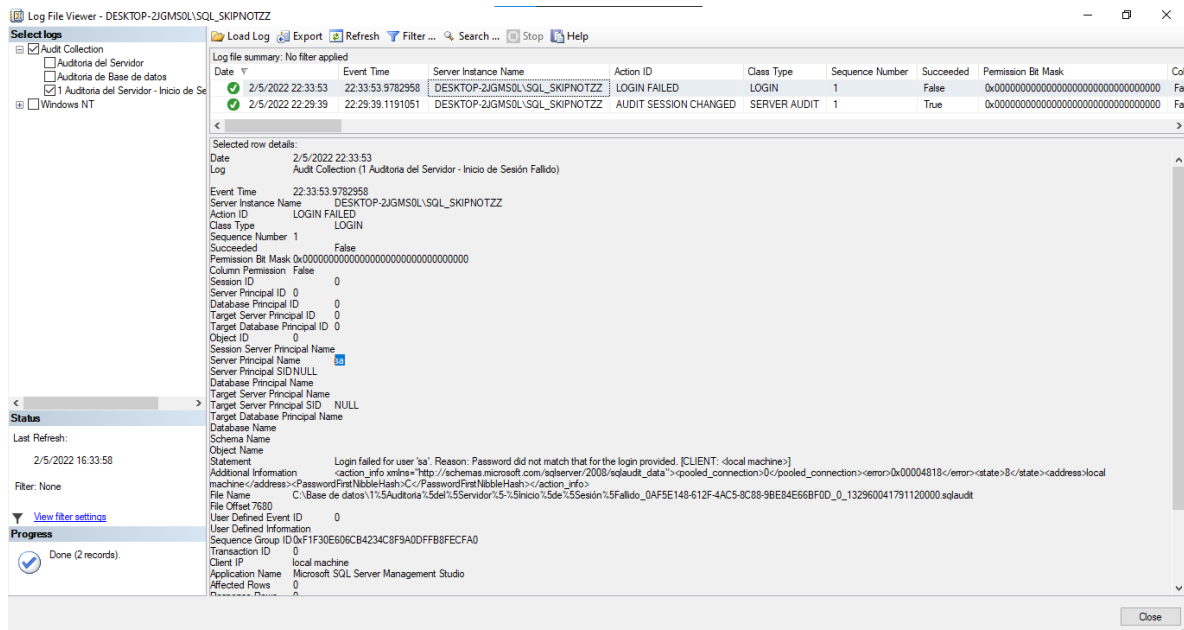
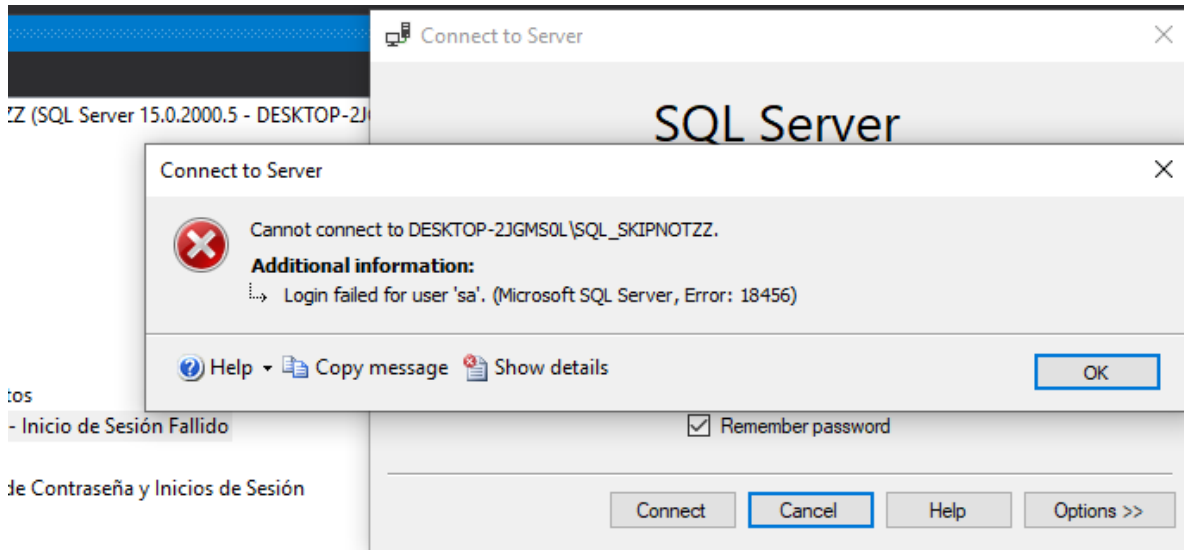
Authentication: SQL Server Authentication

Login: sa

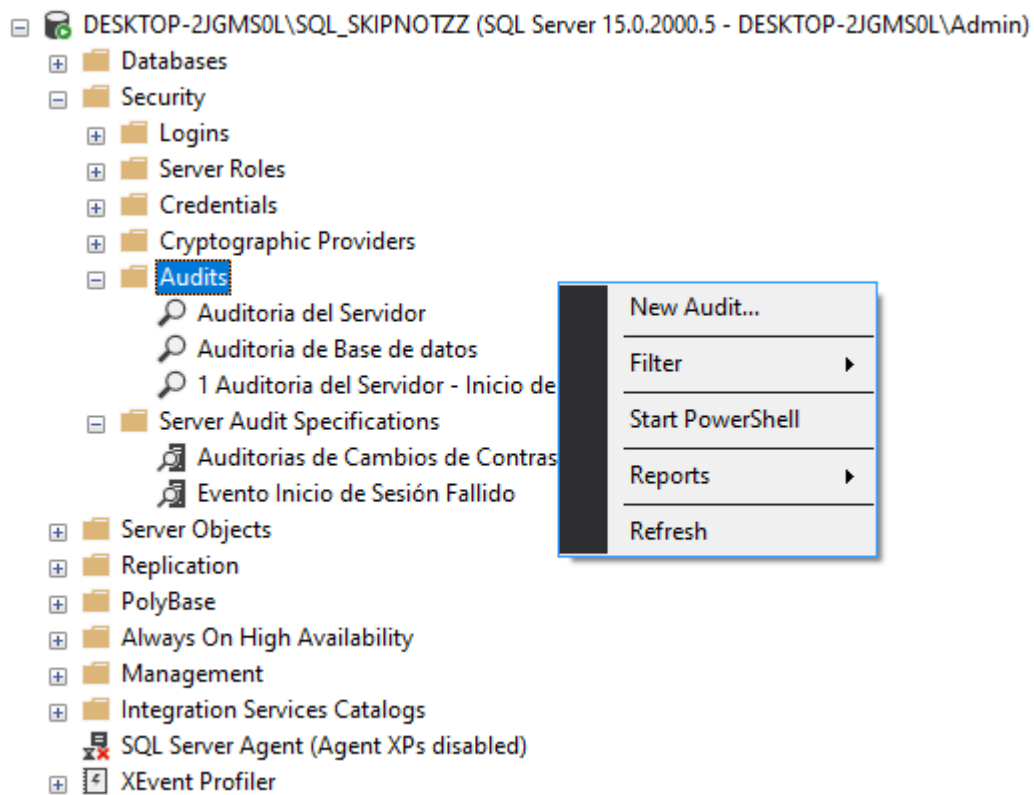
Password: \*

☒ Remember password

**Connect** Cancel Help Options >>



## 2. Evento auditorio del servidor – INICIO DE SESIÓN CORRECTO



Ready

## Select a page

- General
- Filter

Script ▾ ? Help

Audit name: 2 Auditoria del Servidor - Inicio de Sesión Correcto

Queue delay (in milliseconds): 1000

On Audit Log Failure:

☒ Continue

☐ Fail operation

☐ Shut down server

Audit destination: File

Path: C:\Base de datos

Audit File Maximum Limit:

☒ Maximum rollover files: ☒ Unlimited

☐ Maximum files:

Number of files: 2147483647

Maximum file size: 0 ☒ MB ☐ GB ☐ TB

☒ Unlimited

☐ Reserve disk space

## Connection

DESKTOP-2JGMS0L\SQL\_SKIP  
NOTZZ  
[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

## Progress



Ready

OK

Cancel

Help




DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
    - Auditoria de Base de datos
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
  - Server Audit Specifications
    - Auditorias de Cambios de Contraseña y Inicios de S...
    - Evento Inicio de Sesión Fallido
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler


Context menu for '2 Auditoria del Servidor - Inicio de Sesión Correcto':

- New Audit...
- Enable Audit
- View Audit Logs
- Script Audit as ▶
- Policies ▶
- Facets
- Start PowerShell
- Reports ▶
- Rename
- Delete
- Refresh
- Properties

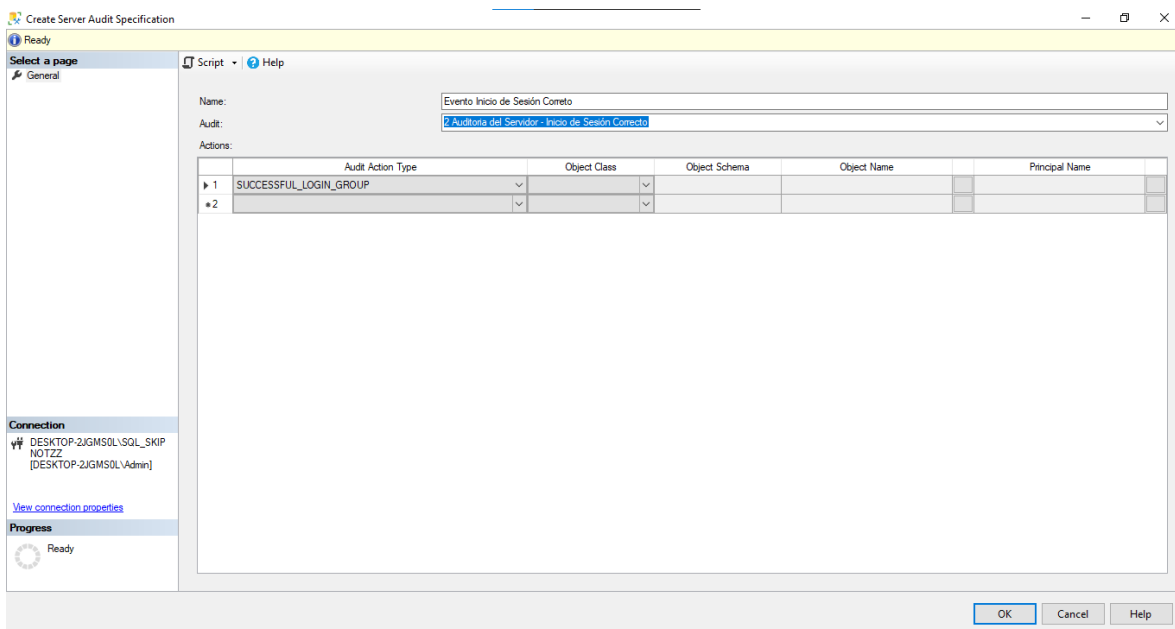
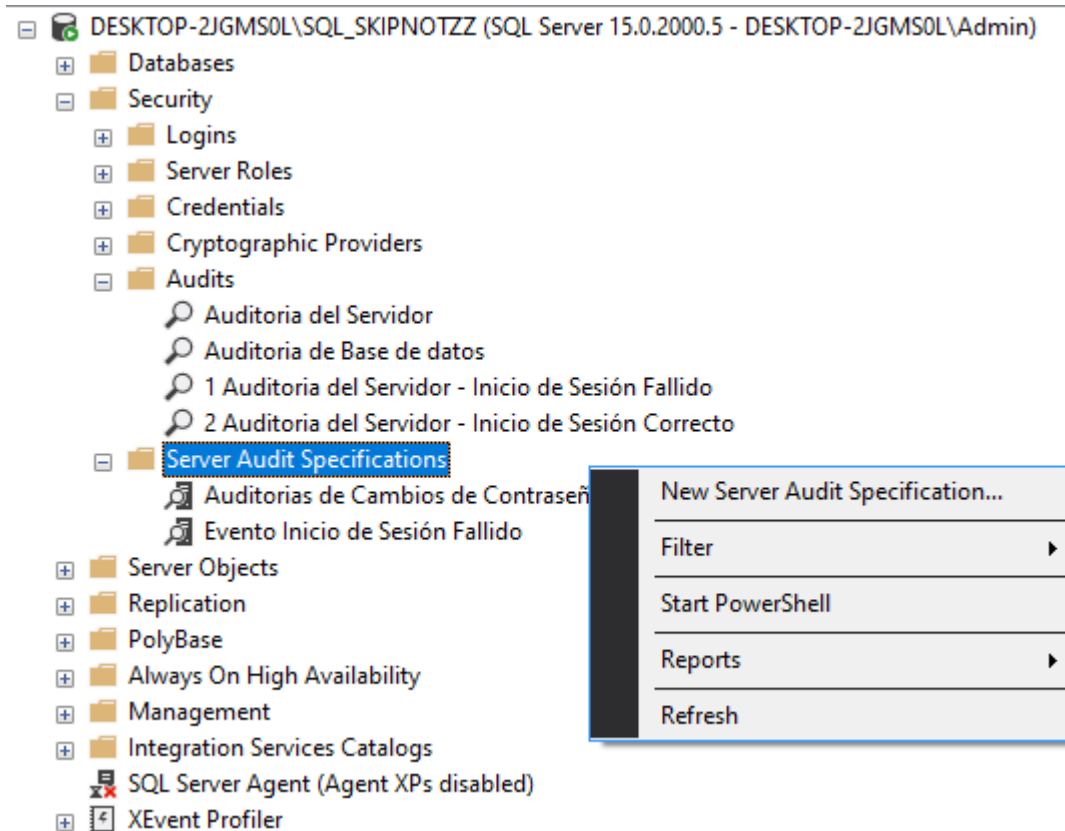
Enable Audit

 **Success** 1 Total  
1 Success

Details:

Action	Status	Messa
 Enable Audit '2 Auditoria del Servidor - I...	Success	

Close



DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
    - Auditoria de Base de datos
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
  - Server Audit Specifications
    - Auditorias de Cambios de Contraseña y Inicios de Sesión
    - Evento Inicio de Sesión Fallido
    - Evento Inicio de Sesión Correcto**
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

New Server Audit Specification...

Enable Server Audit Specification

Script Server Audit Specification as ▶

Policies ▶

Facets

Start PowerShell


Reports ▶

Delete

Refresh


Properties

Enable Server Audit Specification

**Success**

1 Total  
1 Success

Details:

Action	Status	Messa
 Enable Server Audit Specification 'Even...	Success	

Close

Connect to Server



## SQL Server

Server type: Database Engine

Server name: DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ

Authentication: SQL Server Authentication

Login: sa

Password:

☒ Remember password

Connect

Cancel

Help

Options >>

- + DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)
- + DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - sa)

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
    - Auditoria de Base de datos
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
  - Server Audit Specifications
    - Auditorias de Cambios de Contraseña y Inicios de
    - Evento Inicio de Sesión Fallido
    - Evento Inicio de Sesión Correto
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 -

New Audit...

Disable Audit

View Audit Logs

Script Audit as

Policies

Facets

Start PowerShell

Reports

Rename

Delete

Refresh

Properties

Log File Viewer - DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ

Select logs

- ☒ Audit Collection
  - ☐ Auditoria del Servidor
  - ☐ Auditoria de Base de datos
  - ☐ 1 Auditoria del Servidor - Inicio de Sesión Fallido
  - ☒ 2 Auditoria del Servidor - Inicio de Sesión Correcto
- ☐ Windows NT

Log file summary: No filter applied

Date	Event Time	Server Instance Name	Action ID	Class Type	Sequence Number	Succeeded	Permission Bit Mask	Column Permission
2/5/2022 22:41:41	22:41:41.1499991	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	LOGIN SUCCEEDED	LOGIN	1	True	0x00000000000000000000000000000000	False
2/5/2022 22:41:37	22:41:37.3025824	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	LOGIN SUCCEEDED	LOGIN	1	True	0x00000000000000000000000000000000	False
2/5/2022 22:41:15	22:41:15.9538712	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	LOGIN SUCCEEDED	LOGIN	1	True	0x00000000000000000000000000000000	False
2/5/2022 22:41:15	22:41:15.9382469	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	LOGIN SUCCEEDED	LOGIN	1	True	0x00000000000000000000000000000000	False

Selected row details:

Date: 2/5/2022 22:41:15

Log: Audit Collection (2 Auditoria del Servidor - Inicio de Sesión Correcto)

Event Time: 22:41:15.9538712

Server Instance Name: DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ

Action ID: LOGIN SUCCEEDED

Class Type: LOGIN

Sequence Number: 1

Succeeded: True

Permission Bit Mask: 0x00000000000000000000000000000000

Column Permission: False

Session ID: 53

Server Principal ID: 1

Database Principal ID: 0

Target Server Principal ID: 0

Target Database Principal ID: 0

Object ID: 0

Session Server Principal Name: sa

Server Principal Name: sa

Server Principal SID: 0x01

Database Principal Name: sa

Target Server Principal Name: NULL

Target Database Principal SID: NULL

Database Name: sa

Schema Name: sa

Object Name: sa

Statement: -- network protocol: LPC

set quoted\_identifier on

set arithabort off

set numeric\_roundabort off

set ansi\_warnings on

set ansi\_padding on

set ansi\_nulls on

set concat\_null\_yields\_null on

set cursor\_close\_on\_commit off

set implicit\_transactions off

Status

Last Refresh: 2/5/2022 16:41:55

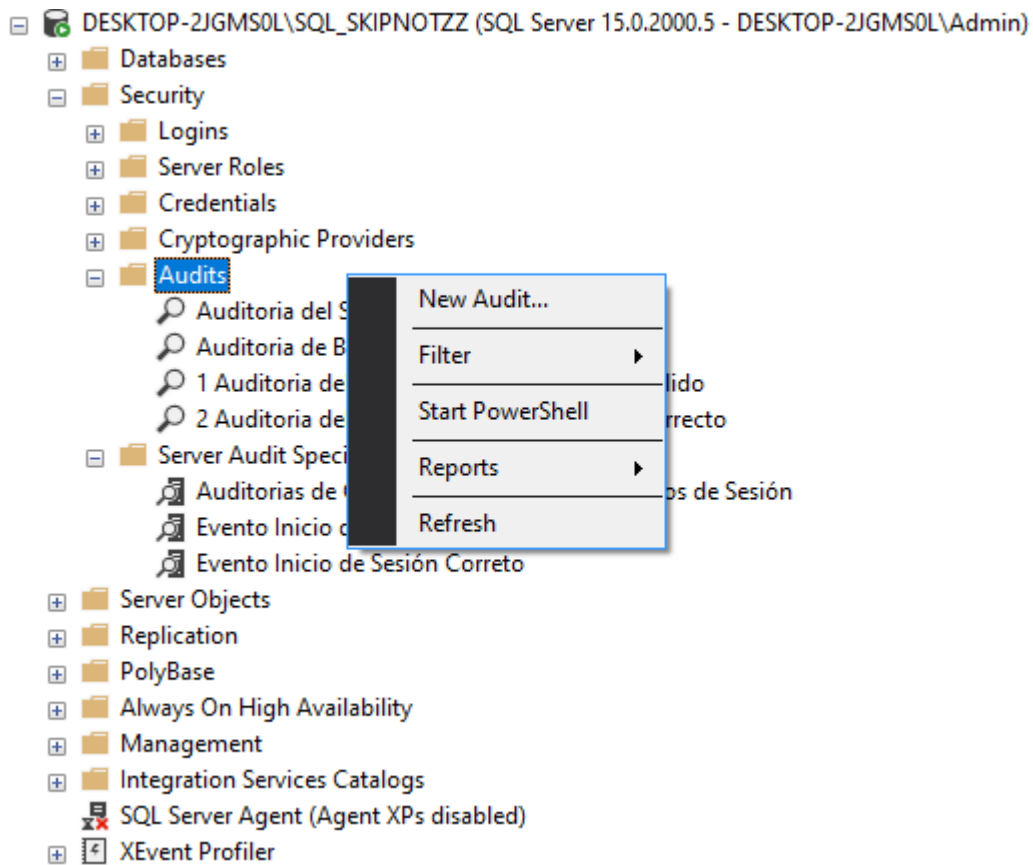
Filter: None

View filter settings

Progress

Done (28 records).

### 3. Evento auditorio del servidor – INICIO DE SESIÓN CAMBIO DE CONTRASEÑA



# Create Audit

Ready

## Select a page

- General
- Filter

Script | Help

Audit name: 3 Auditorio del Servidor - Inicio de Sesión Cambio de Contraseña

Queue delay (in milliseconds): 1000

On Audit Log Failure:  
☒ Continue  
☐ Fail operation  
☐ Shut down server

Audit destination: File

Path: C:\Base de datos

Audit File Maximum Limit:  
☒ Maximum rollover files:  
☒ Unlimited

☐ Maximum files:  
Number of files: 2147483647

Maximum file size: 0 MB  
☒ Unlimited

☐ Reserve disk space

## Connection

DESKTOP-2JGMS0L\SQL\_SKIP  
NOTZZ  
[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

## Progress

Ready

OK

Cancel

Help

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

Databases

Security

Logins

Server Roles

Credentials

Cryptographic Providers

Audits

Auditoria del Servidor

Auditoria de Base de datos

1 Auditoria del Servidor - Inicio de Sesión Fallido

2 Auditoria del Servidor - Inicio de Sesión Correcto

3 Auditorio del Servidor – Inicio de Sesión Cambio de Cont

Server Audit Specifications

Auditorias de Cambios de Contraseña y Inicios de Sesión

Evento Inicio de Sesión Fallido

Evento Inicio de Sesión Correto

Server Objects

Replication

PolyBase

Always On High Availability

Management

Integration Services Catalogs

SQL Server Agent (Agent XPs disabled)

XEvent Profiler

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - sa)

New Audit...

Enable Audit

View Audit Logs

Script Audit as

Policies

Facets

Start PowerShell

Reports

Rename

Delete

Refresh

Properties

Enable Audit

Success

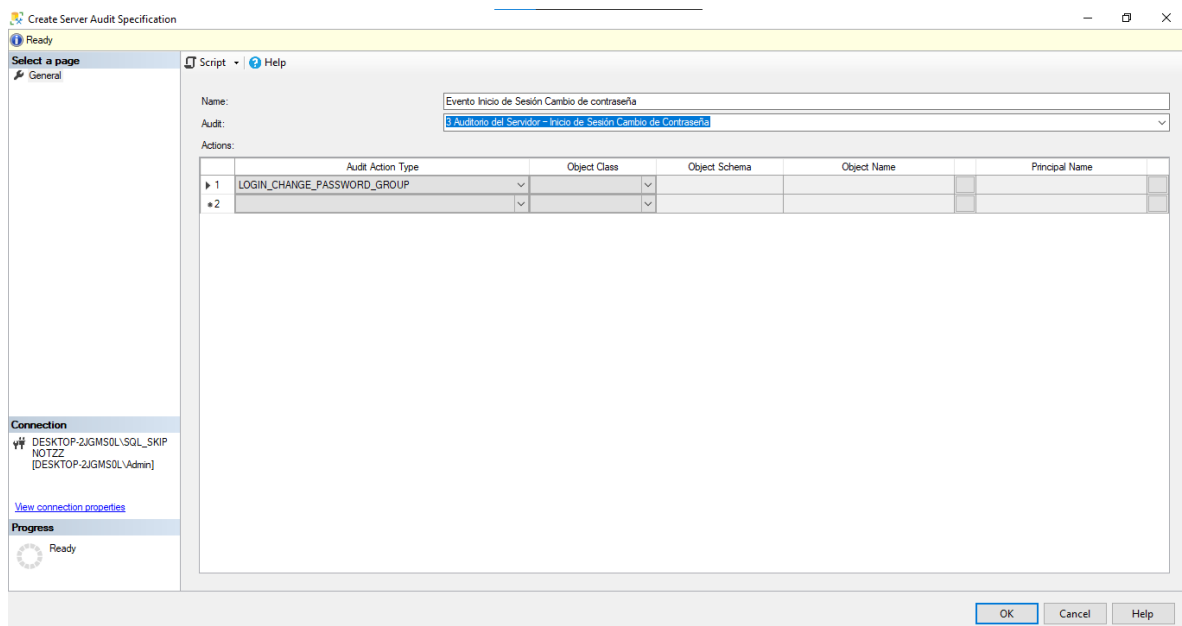
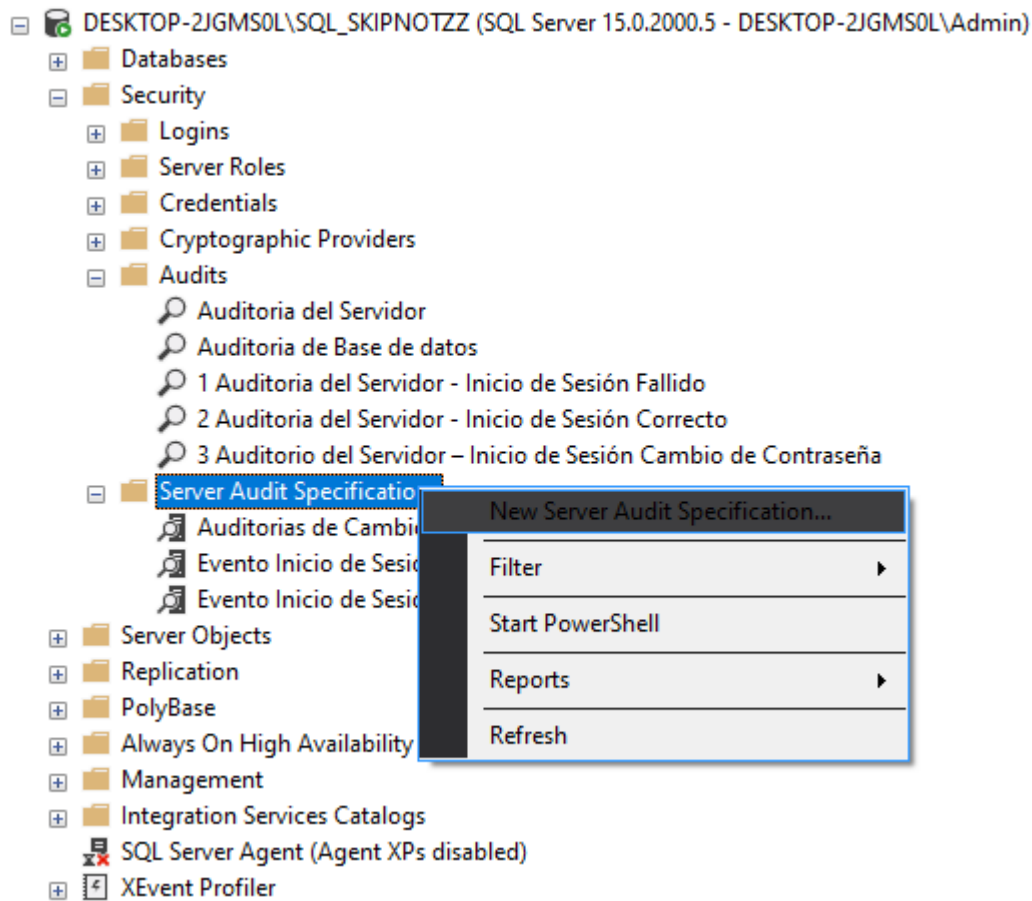
1 Total  
1 Success

Details:

Action	Status	Messa
Enable Audit '3 Auditorio del Servidor - I...	Success	

Close






- DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)
  - Databases
  - Security
    - Logins
    - Server Roles
    - Credentials
    - Cryptographic Providers
    - Audits
      - Auditoria del Servidor
      - Auditoria de Base de datos
      - 1 Auditoria del Servidor - Inicio de Sesión Fallido
      - 2 Auditoria del Servidor - Inicio de Sesión Correcto
      - 3 Auditorio del Servidor – Inicio de Sesión Cambio de Contraseña
    - Server Audit Specifications
      - Auditorias de Cambios de Contraseña y Inicios de Sesión
      - Evento Inicio de Sesión Fallido
      - Evento Inicio de Sesión Correto
      - Evento Inicio de Sesión Cambio de contraseña
  - Server Objects
  - Replication
  - PolyBase
  - Always On High Availability
  - Management
  - Integration Services Catalogs
  - SQL Server Agent (Agent XPs disabled)
  - XEvent Profiler


- New Server Audit Specification
- Enable Server Audit Specification
- Script Server Audit Specification
- Policies
- Facets
- Start PowerShell

Enable Server Audit Specification


**Success**

1 Total  
1 Success

Details:

Action	Status	Messa
 Enable Server Audit Specification 'Even...	Success	

Close

```
9  
10 Create login PRUEBA_BASE_DE_DATOS WITH PASSWORD = 'LUZ'  
11 Alter login PRUEBA_BASE_DE_DATOS WITH PASSWORD = 'ALMA'
```

00 %  
Messages Client Statistics  
Commands completed successfully.  
Completion time: 2022-05-02T16:54:49.8663820-06:00

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - Auditoria del Servidor
    - Auditoria de Base de datos
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
    - 3 Auditorio del Servidor – Inicio de Sesión Cambio de Contraseña
  - Server Audit Specifications
    - Auditorias de Cambios de Contraseña y Inicios de Sesión
    - Evento Inicio de Sesión Fallido
    - Evento Inicio de Sesión Correto
    - Evento Inicio de Sesión Cambio de contraseña
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

New Audit...

Disable Audit

View Audit Logs

Script Audit as

Policies

Facets

Start PowerShell

Reports

Rename

Delete

Log File Viewer - DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ

Select logs: ☒ Audit Collection

Log file summary: No filter applied

Date	Event Time	Server Instance Name	Action ID	Class Type	Sequence Number	Succeeded	Permission Bit Mask
2/5/2022 22:54:49	22:54:49.8404755	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	RESET PASSWORD	SQL LOGIN	1	True	0x00000000000000000000000000000000
2/5/2022 22:52:10	22:52:10.4978646	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	AUDIT SESSION CHANGED	SERVER AUDIT	1	True	0x00000000000000000000000000000000

Selected row details:

Date: 2/5/2022 22:54:49  
Log: Audit Collection (3 Auditorio del Servidor - Inicio de Sesión Cambio de Contraseña)

Event Time: 22:54:49.8404755  
Server Instance Name: DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ  
Action ID: RESET PASSWORD  
Class Type: SQL LOGIN  
Sequence Number: 1  
Succeeded: True  
Permission Bit Mask: 0x00000000000000000000000000000000  
Column Permission: False  
Session ID: 52  
Server Principal ID: 259  
Database Principal ID: 1  
Target Server Principal ID: 280  
Target Database Principal ID: 0  
Object ID: 280  
Session Server Principal Name: DESKTOP-2JGMS0L\Admin  
Server Principal Name: DESKTOP-2JGMS0L\Admin  
Server Principal SID: 0x01050000000000000515000000FDE7936FD707B618528E8DE9030000  
Database Principal Name: dbo  
Target Server Principal Name: PRUEBA\_BASE\_DE\_DATOS  
Target Server Principal SID: 0x5645A4D15480224290E07C0FC1780C37  
Target Database Principal Name: master  
Database Name: master  
Schema Name: PRUEBA\_BASE\_DE\_DATOS  
Object Name: PRUEBA\_BASE\_DE\_DATOS WITH PASSWORD = '\*\*\*\*\*'  
Statement: alter login PRUEBA\_BASE\_DE\_DATOS WITH PASSWORD = '\*\*\*\*\*'  
Additional Information: File Name: C:\Base de datos\3\15Auditorio\5del\15Servidor\15-15Inicio\15de\15Sesión\15Cambio\15de\15Contraseña\_1AB77AD2-44C7-45FE-BA42-42AA54BCB38A\_0\_132960055304910000 aqlaudit  
File Offset: 7680  
User Defined Event ID: 0  
Sequence Group ID: 0x0F24CFEE517EC144987B2770C9A2928A  
Transaction ID: 523276  
Client IP: -1  
Application Name: Microsoft SQL Server Management Studio - Query  
Affected Rows: 0  
Response Rows: 0  
Connection ID: cd2c3a42b306-4953-82f8-0168b5e9d4d

Status: Last Refresh: 2/5/2022 16:55:04  
Filter: None

Progress: Done (2 records).

Tres eventos de auditoría de base de datos relacionados a la administración de esquemas

#### 4. Evento auditoria de base de datos – SELECCIÓN EN TABLA REGION

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits**
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
    - 3 Auditorio del Servidor – Inicio de Sesión Cambio d
    - Auditoria de Base de datos
    - Auditoria del Servidor
  - Server Audit Specifications
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

New Audit...  
Filter  
Start PowerShell  
Reports  
Refresh

Create Audit

Ready

Select a page

General

Filter

Connection

DESKTOP-2JGMS0L\SQL\_SKIP  
NOTZZ  
[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

Progress

Ready

Script

Help

Audit name:

4 Auditoria de Base de datos - SELECT TABLE REGION

Queue delay (in  
milliseconds):

1000

On Audit Log  
Failure:

☒ Continue

☐ Fail operation

☐ Shut down server

Audit  
destination:

File

Path:

C:\Base de datos

...

Audit File  
Maximum Limit:

☒ Maximum rollover files:

☒ Unlimited

☐ Maximum files:

2147483647

Maximum file  
size:

0

☒ MB ☐ GB ☐ TB

☒ Unlimited

☐ Reserve disk space

OK

Cancel


Help

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)


- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
    - 3 Auditorio del Servidor – Inicio de Sesión Cambio de Contraseña
    - Auditoria de Base de datos
    - Auditoria del Servidor
    - 4 Auditoria de Base de datos - SELECT TABLE REGION
  - Server Audit Specifications
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

- New Audit...
- Enable Audit
- View Audit Logs
- Script Audit as
- Policies
- Facets
- Start PowerShell

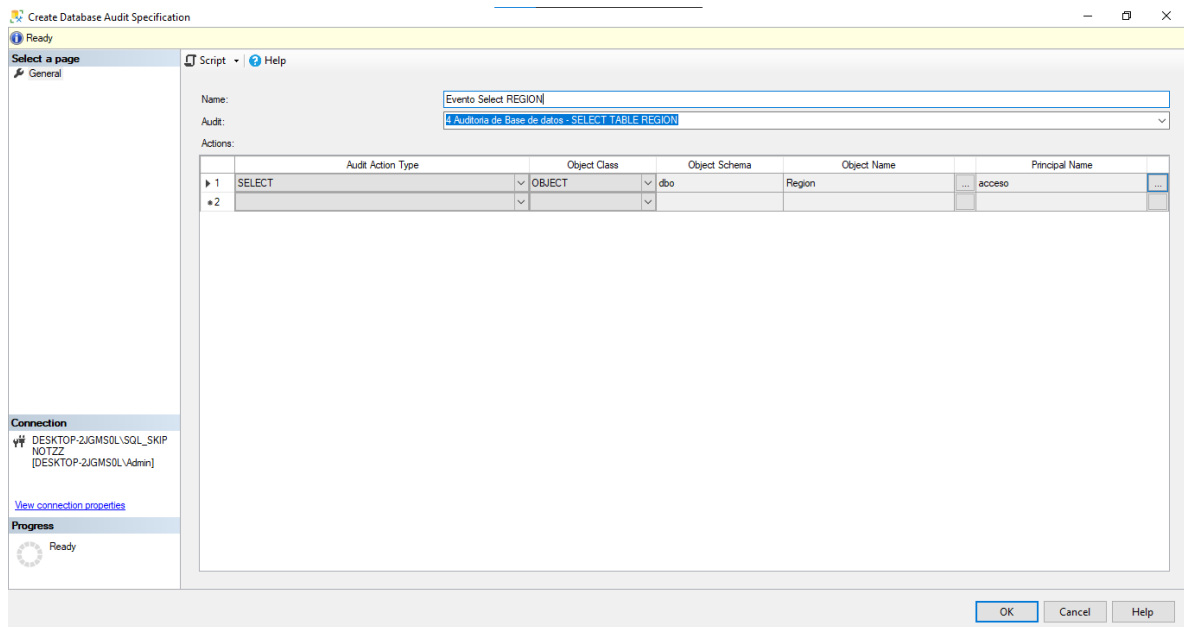
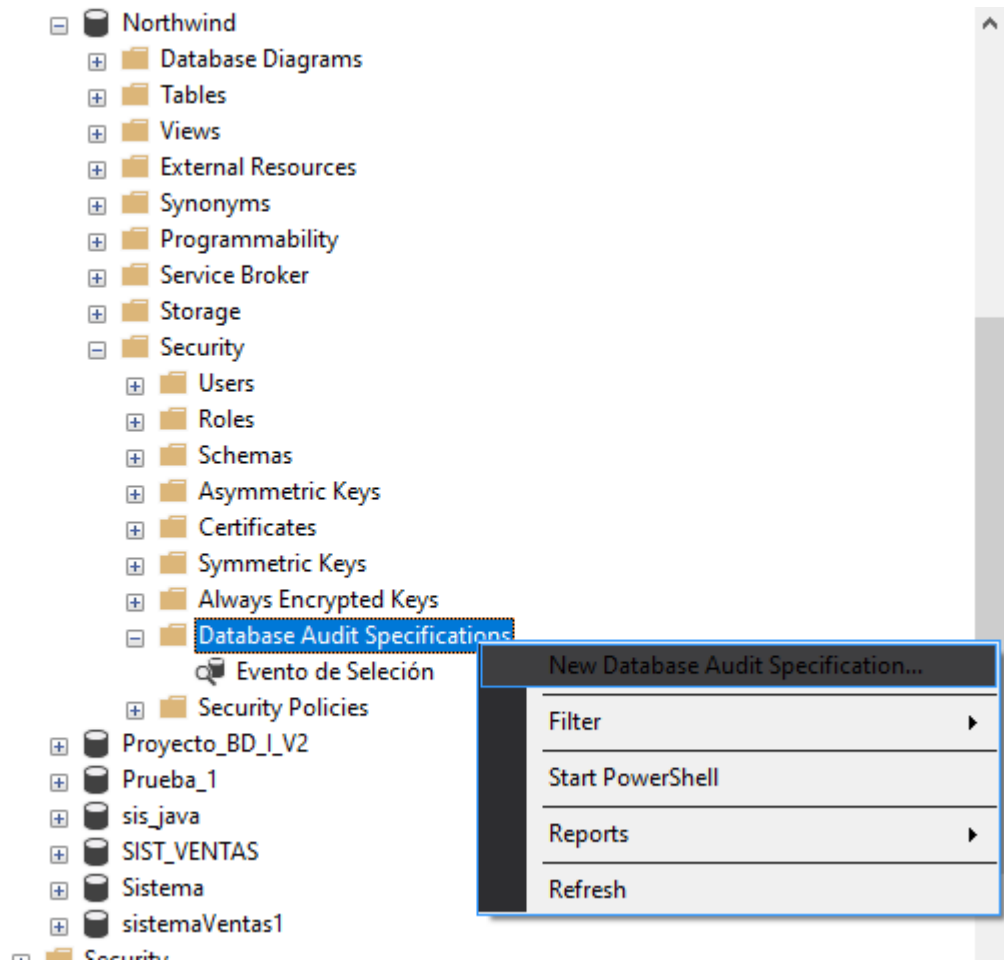
Enable Audit

 **Success** 1 Total 1 Success

Details:

Action	Status	Messa
 Enable Audit '4 Auditoria de Base de da...	Success	

Close



- [-] Northwind
  - [+] Database Diagrams
  - [+] Tables
  - [+] Views
  - [+] External Resources
  - [+] Synonyms
  - [+] Programmability
  - [+] Service Broker
  - [+] Storage
  - [-] Security
    - [-] Users
      - acceso
      - dbo
      - Digitador
      - guest
      - INFORMATION\_SCHEMA
      - Juan
      - Principal
      - sys
    - [+] Roles
    - [+] Schemas
    - [+] Asymmetric Keys
    - [+] Certificates
    - [+] Symmetric Keys
    - [+] Always Encrypted Keys
    - [-] Database Audit Specification
      - Evento de Selección
      - Evento Select REGION
    - [+] Security Policies

New Database Audit Specification...

Enable Database Audit Specification

Script Database Audit Specification as ▶

Policies ▶

Facets

Start PowerShell

Reports ▶

Delete

Enable Database Audit Specification

✓ Success

1 Total  
1 Success

Details:

Action	Status	Messa
✓ Enable Database Audit Specification 'E...	Success	

Close



1 `SELECT * FROM Region`

100 %

Results Messages

	RegionID	RegionDescription
1	1	Eastern
2	2	Western
3	3	Northern
4	4	Southern

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESK

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
    - 3 Auditorio del Servidor – Inicio de Sesión Cambio de Co
    - Auditoria de Base de datos
    - Auditoria del Servidor
    - 4 Auditoria de Base de datos - SELECT TA
- Server Audit Specifications
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

New Audit...  
 Disable Audit  
 View Audit Lo  
 Script Audit a:  
 Policies  
 Facets  
 Start PowerSh

Log File Viewer - DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ

Select logs: ☒ Audit Collection

Log file summary: No filter applied

Date	Event Time	Server Instance Name	Action ID	Class Type	Sequence Number	Succeeded	Permission Bit Mask	Col
3/5/2022 02:45:46	02:45:46.0872110	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	SELECT	TABLE	1	True	0x00000000000000000000000000000001	Tr
3/5/2022 02:34:47	02:34:47.9418925	DESKTOP-2JGMS0L\SQL_SKIPNOTZZ	AUDIT SESSION CHANGED	SERVER AUDIT	1	True	0x00000000000000000000000000000000	Fal

Selected row details:

Date: 3/5/2022 02:45:46  
 Log: Audit Collection (4 Auditoria de Base de datos - SELECT TABLE REGION)

Event Time: 02:45:46.0872110  
 Server Instance Name: DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ  
 Action ID: SELECT  
 Class Type: TABLE  
 Sequence Number: 1  
 Succeeded: True  
 Permission Bit Mask: 0x00000000000000000000000000000001  
 Column Permission: True  
 Session ID: 61  
 Server Principal ID: 277  
 Database Principal ID: 8  
 Target Server Principal ID: 0  
 Target Database Principal ID: 0  
 Object ID: 1637580872  
 Session Server Principal Name: Creador  
 Server Principal SID: 0x1E99C44C6CF8E5439665205D279367F3  
 Database Principal Name: acceso  
 Target Server Principal Name: NULL  
 Target Server Principal SID: NULL  
 Target Database Principal Name: NULL  
 Database Name: Northwind  
 Schema Name: dbo  
 Object Name: Region  
 Statement: SELECT \* FROM Region  
 Additional Information: SELECT \* FROM Region  
 File Name: C:\Base de datos\4\5\Auditoria\5de\5Base\5de\5datos\5\5SELECT\5TABLE\5REGION\_CE409259-BC4C-42E1-AAGA-DE0B8C8A500A\_0\_132960188879380000.sqlaudit  
 File Offset: 7680  
 User Defined Event ID: 0  
 User Defined Information: Sequence Group ID 0xF96CEA8D86832E4D9750B76EB510DE77  
 Transaction ID: 75632  
 Client IP: local machine  
 Application Name: Microsoft SQL Server Management Studio - Query  
 Affected Rows: 0  
 Response Rows: 0  
 Connection ID: 0x044b057-9736-4798-a768-a5889af0f0eb

Status: Last Refresh: 2/5/2022 20:46:47

Filter: None

View filter settings

Progress: Done (2 records).

## 5. Evento auditoria de base de datos – MODIFICAR EN TABLA REGION

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits**
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correc
    - 3 Auditorio del Servidor – Inicio de Sesión Camb
    - Auditoria de Base de datos
    - Auditoria del Servidor
    - 4 Auditoria de Base de datos - SELECT TABLE RE
  - Server Audit Specifications
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

New Audit...  
 Filter  
 Start PowerShell  
 Reports  
 Refresh

# Create Audit

Ready

## Select a page

- General
- Filter

Script ? Help

Audit name: 5 Auditoria de Base de datos - UPDATE TABLE REGION

Queue delay (in milliseconds): 1000

On Audit Log Failure:  
☒ Continue  
☐ Fail operation  
☐ Shut down server

Audit destination: File

Path: C:\Base de datos

Audit File Maximum Limit:  
☒ Maximum rollover files:  
☒ Unlimited

☐ Maximum files:  
Number of files: 2147483647

Maximum file size: 0 MB  
☒ Unlimited

☐ Reserve disk space

## Connection

DESKTOP-2JGMS0L\SQL\_SKIP  
NOTZZ  
[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

## Progress

Ready

OK

Cancel

Help

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
    - 3 Auditorio del Servidor – Inicio de Sesión Cambio de Contraseña
    - Auditoria de Base de datos
    - Auditoria del Servidor
    - 4 Auditoria de Base de datos - SELECT TABLE REGION
    - 5 Auditoria de Base de datos - UPDATE TABLE REGION
  - Server Audit Specifications
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

- New Audit...
- Enable Audit
- View Audit Logs
- Script Audit as ▶
- Policies ▶
- Facets
- Start PowerShell

Enable Audit



Success

1 Total  
1 Success

Details:

	Action	Status	Message
	Enable Audit '5 Auditoria de Base de da...	Success	

Close

- Northwind
  - Database Diagrams
  - Tables
  - Views
  - External Resources
  - Synonyms
  - Programmability
  - Service Broker
  - Storage
  - Security
    - Users
      - acceso
      - dbo
      - Digitador
      - guest
      - INFORMATION\_SCHEMA
      - Juan
      - Principal
      - sys
    - Roles
    - Schemas
    - Asymmetric Keys
    - Certificates
    - Symmetric Keys
    - Always Encrypted Keys
    - Database Audit Specifications
      - Evento de Selección
      - Evento Select REGION
    - Security Policies

### New Database Audit Specification...

Filter

Start PowerShell

Create Database Audit Specification

Ready

Select a page: General

Name: Evento Update REGION

Audit: B-Auditoria de Base de datos - UPDATE TABLE REGION

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
1	UPDATE	OBJECT	dbo	Region	acceso
2					

Connection: DESKTOP-2JGMSQL\SQLEXPRESS [DESKTOP-2JGMSQL\Admin]

View connection properties

Progress: Ready

OK Cancel Help



```
2 | UPDATE Region SET RegionDescription = 'Southern actualizado' WHERE RegionID = 4
```

00 %

Messages

(1 row affected)

Completion time: 2022-05-02T20:59:10.5424941-06:00

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L)

- Databases
- Security
  - Logins
  - Server Roles
  - Credentials
  - Cryptographic Providers
  - Audits
    - 1 Auditoria del Servidor - Inicio de Sesión Fallido
    - 2 Auditoria del Servidor - Inicio de Sesión Correcto
    - 3 Auditorio del Servidor – Inicio de Sesión Cambio de Contraseña
    - Auditoria de Base de datos
    - Auditoria del Servidor
    - 4 Auditoria de Base de datos - SELECT TABLE REGION
    - 5 Auditoria de Base de datos - UPDATE TABLE REGION
  - Server Audit Specifications
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

New Audit...  
Disable Audit  
View Audit Log  
Script Audit as  
Policies  
Facets  
Start PowerShell

Log File Viewer - DESKTOP-2JGMSOL\SQL\_SKIPNOTZZ

Select logs: ☒ Audit Collection

Log file summary: No filter applied

Date	Event Time	Server Instance Name	Action ID	Class Type	Sequence Number	Succeeded	Permission Bit Mask	Col
3/5/2022 02:59:10	02:59:10.5063423	DESKTOP-2JGMSOL\SQL_SKIPNOTZZ	UPDATE	TABLE	1	True	0x00000000000000000000000000000002	Tr
3/5/2022 02:54:42	02:54:42.8251711	DESKTOP-2JGMSOL\SQL_SKIPNOTZZ	AUDIT SESSION CHANGED	SERVER AUDIT	1	True	0x00000000000000000000000000000000	Fal

Selected row details:

Date: 3/5/2022 02:59:10  
 Log: Audit Collection (5 Auditoria de Base de datos - UPDATE TABLE REGION)

Event Time: 02:59:10.5063423  
 Server Instance Name: DESKTOP-2JGMSOL\SQL\_SKIPNOTZZ  
 Action ID: UPDATE  
 Class Type: TABLE  
 Sequence Number: 1  
 Succeeded: True  
 Permission Bit Mask: 0x00000000000000000000000000000002  
 Column Permission: True  
 Session ID: 61  
 Server Principal ID: 277  
 Database Principal ID: 8  
 Target Server Principal ID: 0  
 Target Database Principal ID: 0  
 Object ID: 1637580872  
 Session Server Principal Name: Creador  
 Server Principal Name: Creador  
 Server Principal SID: 0x1E99C44C6CF8E5439665205D279367F3  
 Database Principal Name: acceso  
 Target Server Principal Name: acceso  
 Target Server Principal SID: NULL  
 Target Database Principal Name: Northwind  
 Database Name: dbo  
 Schema Name: Region  
 Object Name: Region  
 Statement: UPDATE Region SET RegionDescription = 'Southern actualizado' WHERE RegionID = 4  
 Additional Information: File Name: C:\Base de datos\5\5Auditoria\5de\5Base\5de\5datos\5\5UPDATE\5TABLE\5REGION\_D127A3EC-FA14-42BE-A75A-6E73424A9593\_0\_132960200828220000.sqlaudit  
 File Offset: 7680  
 User Defined Event ID: 0  
 User Defined Information: Sequence Group ID: 0xB48CC66C2514F34D9D391D828CDB5959  
 Transaction ID: 855619  
 Client IP: local machine  
 Application Name: Microsoft SQL Server Management Studio - Query  
 Affected Rows: 0  
 Response Rows: 0  
 Connection ID: a1f4b4067c5736c4798a746ba58884af0b4b

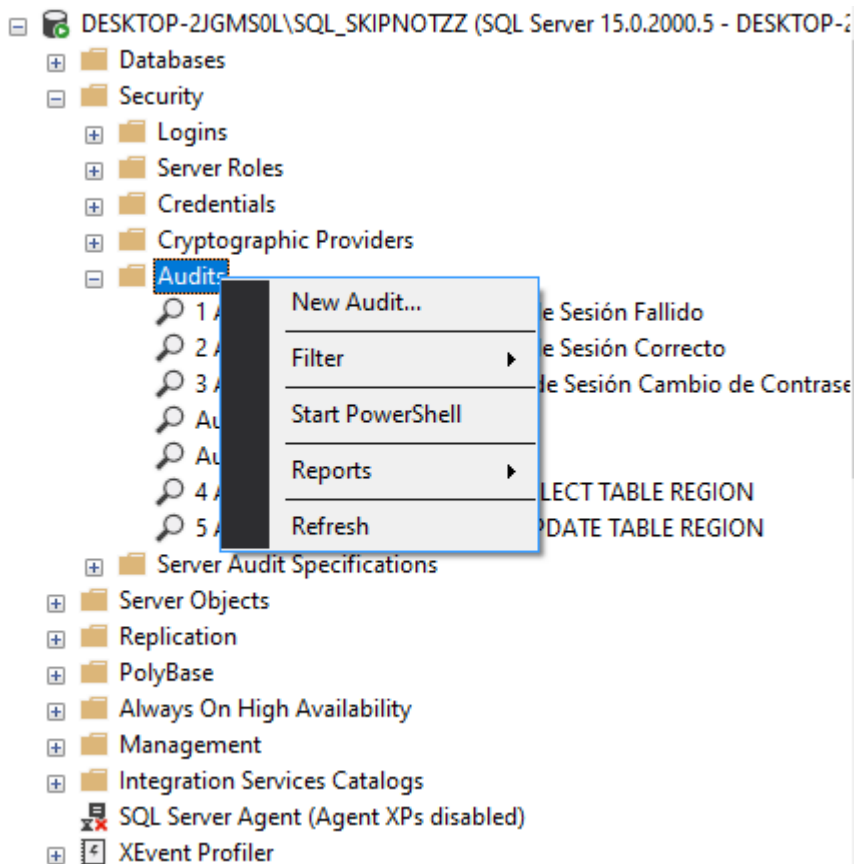
Status: Last Refresh: 2/5/2022 20:59:52

Filter: None

View filter settings

Progress: Done (2 records)

## 6. Evento auditoria de base de datos – INSERTAR EN TABLA REGION





Create Audit

Ready

Select a page

General

Filter

Connection

DESKTOP-2JGMS0L\SQL\_SKIP  
NOTZZ  
[DESKTOP-2JGMS0L\Admin]

[View connection properties](#)

Progress

Ready

Script

Help

Audit name:

6 Auditoria de Base de datos - INSERT TABLE REGION

Queue delay (in milliseconds):

1000

On Audit Log Failure:

☒ Continue

☐ Fail operation

☐ Shut down server

Audit destination:

File

Path:

C:\Base de datos

...

Audit File Maximum Limit:

☒ Maximum rollover files:

☒ Unlimited

☐ Maximum files:

2147483647

Maximum file size:

0

☒ MB

☐ GB

☐ TB

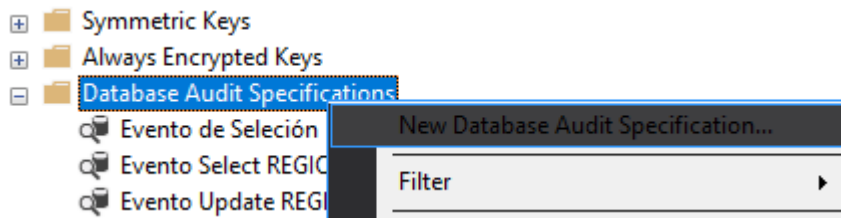
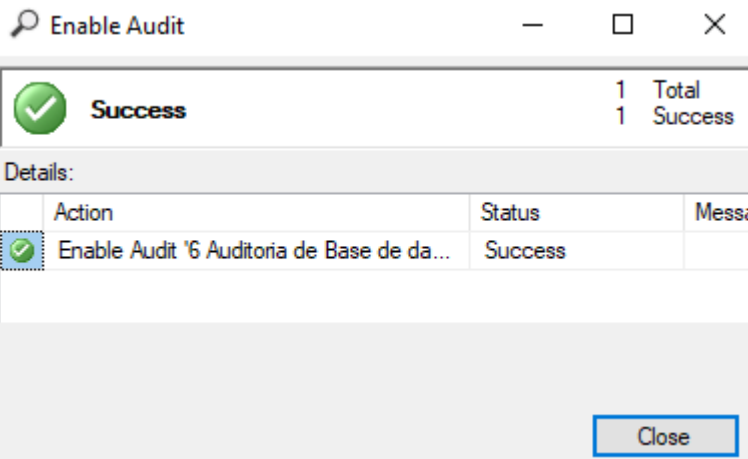
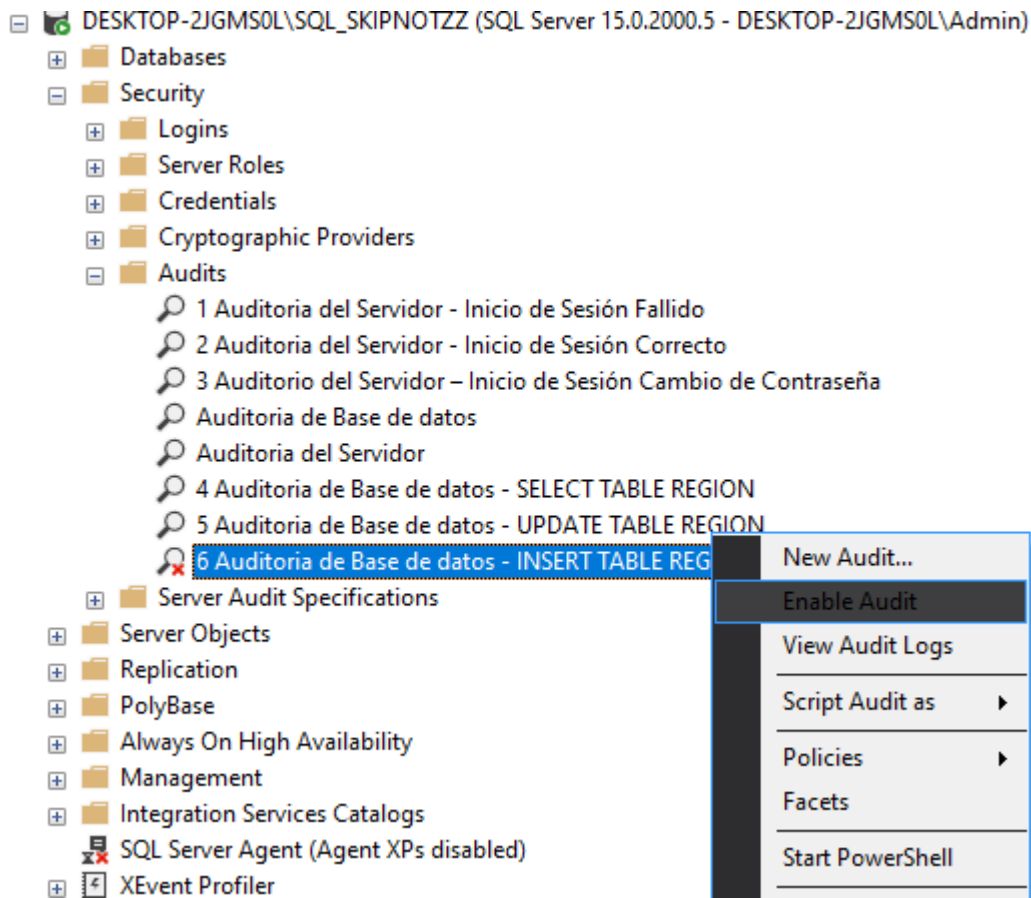
☒ Unlimited

☐ Reserve disk space

OK

Cancel

Help



Create Database Audit Specification

Ready

Select a page: General

Script Help

Name: Evento Insert REGION

Audit: 6 Auditoría de Base de datos - INSERT TABLE REGION

Actions:

	Audit Action Type	Object Class	Object Schema	Object Name	Principal Name
1	INSERT	OBJECT	dbo	Region	acceso
2					

Connection: DESKTOP-2JGMSQL\Skip NOTZZ [DESKTOP-2JGMSQL\Admin]

View connection properties

Progress: Ready

OK Cancel Help

Security

- Users
- Roles
- Schemas
- Asymmetric Keys
- Certificates
- Symmetric Keys
- Always Encrypted Keys
- Database Audit Specifications
  - Evento de Selección
  - Evento Select REGION
  - Evento Update REGION
  - Evento Insert REGION
- Security Policies

New Database Audit Specification...

Enable Database Audit Specification

Script Database Audit Specification as

Policy

Enable Database Audit Specification

Success

1 Total  
1 Success

Details:

Action	Status	Message
Enable Database Audit Specification 'E...	Success	

Close

```
3  
4 INSERT INTO Region (RegionID, RegionDescription)  
5 VALUES ('5', 'Verificar el nuevo registro')
```

100 %

Messages

(1 row affected)

Completion time: 2022-05-02T21:17:47.3221835-06:00

DESKTOP-2JGMS0L\SQL\_SKIPNOTZZ (SQL Server 15.0.2000.5 - DESKTOP-2JGMS0L\Admin)

Databases

Security

Logins

Server Roles

Credentials

Cryptographic Providers

Audits

1 Auditoria del Servidor - Inicio de Sesión Fallido

2 Auditoria del Servidor - Inicio de Sesión Correcto

3 Auditorio del Servidor - Inicio de Sesión Cambio de Contraseña

Auditoria de Base de datos

Auditoria del Servidor

4 Auditoria de Base de datos - SELECT TABLE REGION

5 Auditoria de Base de datos - UPDATE TABLE REGION

6 Auditoria de Base de datos - INSERT TABLE

Server Audit Specifications

Server Objects

Replication

PolyBase

Always On High Availability

Management

Integration Services Catalogs

SQL Server Agent (Agent XPs disabled)

XEvent Profiler

New Audit...

Disable Audit

View Audit Logs

Script Audit as

Policies

Facets

Start PowerShell

Log File Viewer - DESKTOP-2JGMSQL\SQL\_SKIPNOTZZ

Select logs

☒ Audit Collection

☐ Auditoria del Servidor

☐ Auditoria de Base de datos

☐ 1 Auditoria del Servidor - Inicio de Se

☐ 2 Auditoria del Servidor - Inicio de Se

☐ 3 Auditorio del Servidor - Inicio de Se

☐ 4 Auditoria de Base de datos - SELE

☐ 5 Auditoria de Base de datos - UPD

☒ 6 Auditoria de Base de datos - INSE

☐ Windows NT

Load Log

Export

Refresh

Filter ...

Search ...

Stop

Help

Log file summary: No filter applied

Date	Event Time	Server Instance Name	Action ID	Class Type	Sequence Number	Succeeded	Permission Bit Mask	Col
3/5/2022 03:17:47	03:17:47.3141910	DESKTOP-2JGMSQL\SQL_SKIPNOTZZ	INSERT	TABLE	1	True	0x00000000000000000000000000000008	Fal
3/5/2022 03:15:22	03:15:22.5195840	DESKTOP-2JGMSQL\SQL_SKIPNOTZZ	AUDIT SESSION CHANGED	SERVER AUDIT	1	True	0x00000000000000000000000000000000	Fal

Selected row details:

3/5/2022 03:17:47

Audit Collection (6 Auditoria de Base de datos - INSERT TABLE REGION)

Event Time

03:17:47.3141910

Server Instance Name

DESKTOP-2JGMSQL\SQL\_SKIPNOTZZ

Action ID

INSERT

Class Type

TABLE

Sequence Number

1

Succeeded

True

Permission Bit Mask

0x00000000000000000000000000000008

Column Permission

False

Session ID

61

Server Principal ID

277

Database Principal ID

8

Target Server Principal ID

0

Target Database Principal ID

0

Object ID

1637580872

Session Server Principal Name

Creador

Server Principal Name

Creador

Server Principal SID

0x1E99C44C6CF8E5439665205D279367F3

Database Principal Name

acceso

Target Server Principal Name

NULL

Target Server Principal SID

NULL

Target Database Principal Name

Northwind

Database Name

Northwind

Schema Name

dbo

Object Name

Region

Statement

INSERT INTO Region(RegionID,RegionDescription)

VALUES (5,'Verificar el nuevo registro')

Additional Information

File Name

C:\Base de datos\6%\5Auditoria\5de\5Base\5de\5datos\5-%S\INSERT\STABLE\5REGION\_34E6AC6C-F2C0-4AAF-8D5A-B01EBB1DF5AB\_0\_132960213224960000.sqlaudt

File Offset

7580

User Defined Event ID

0

User Defined Information

Sequence Group ID

0x00CAA9317E3D7346B8A908F1D5D5F697

Transaction ID

895735

Client IP

local machine

Application Name

Microsoft SQL Server Management Studio - Query

Affected Rows

0

Responsible Rows

0

Status

Last Refresh:

2/5/2022 21:18:19

Filter: None

View filter settings

Progress

Done (2 records).

Close