

Database Laboratory Work #1

Title: Database Creation and Maintenance

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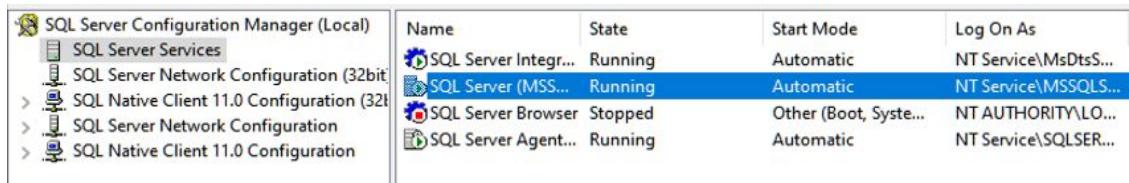
Prerequisites: Computer, SQL Installer.

Objectives: Install and configure SQL Server 2017.

Tasks: Install SQL Server tool. Selecting type of authentication SQL.
Create 3 logins of users.

Implementation:

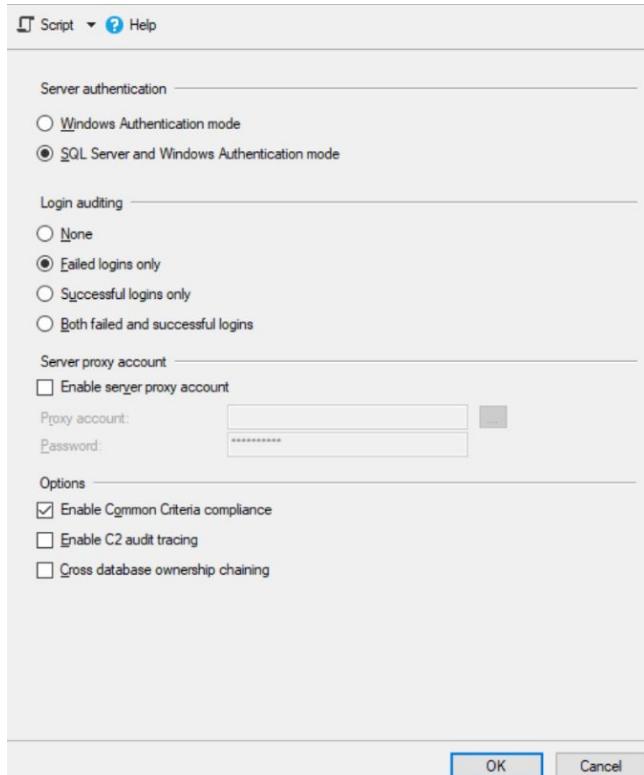
- Configuration management.



The screenshot shows the 'SQL Server Configuration Manager (Local)' interface. On the left, there's a tree view with nodes like 'SQL Server Services', 'SQL Server Network Configuration (32bit)', 'SQL Native Client 11.0 Configuration (32bit)', 'SQL Server Network Configuration', and 'SQL Native Client 11.0 Configuration'. On the right, a table lists four services: 'SQL Server Integration...', 'SQL Server (MSS...)', 'SQL Server Browser', and 'SQL Server Agent...'. The 'SQL Server (MSS...)' service is selected and highlighted in blue. The table columns are 'Name', 'State', 'Start Mode', and 'Log On As'.

Name	State	Start Mode	Log On As
SQL Server Integrat...	Running	Automatic	NT Service\MsDtsS...
SQL Server (MSS...)	Running	Automatic	NT Service\MSSQLS...
SQL Server Browser	Stopped	Other (Boot, Syste...	NT AUTHORITY\LO...
SQL Server Agent...	Running	Automatic	NT Service\SQLSER...

- Server is successfully installed.



The screenshot shows the 'Server authentication' configuration dialog. It includes sections for 'Server authentication' (radio buttons for 'Windows Authentication mode' and 'SQL Server and Windows Authentication mode'), 'Login auditing' (radio buttons for 'None', 'Failed logins only', 'Successful logins only', and 'Both failed and successful logins'), 'Server proxy account' (checkbox 'Enable server proxy account' and fields for 'Proxy account:' and 'Password' with a masked input), and 'Options' (checkboxes for 'Enable Common Criteria compliance', 'Enable C2 audit tracing', and 'Cross database ownership chaining'). At the bottom are 'OK' and 'Cancel' buttons.

- First user: read and write HumanResources scheme.

Script ▾  Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	AdventureWorks		
<input checked="" type="checkbox"/>	AdventureWorks2017	HumanR	HumanResources
<input type="checkbox"/>	AdventureWorksDW2017		
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input type="checkbox"/>	tempdb		

Guest account enabled for: AdventureWorks2017

Database role membership for: AdventureWorks2017

<input type="checkbox"/> db_accessadmin
<input type="checkbox"/> db_backupoperator
<input checked="" type="checkbox"/> db_datareader
<input checked="" type="checkbox"/> db_datawriter
<input type="checkbox"/> db_ddladmin
<input type="checkbox"/> db_denydatareader
<input type="checkbox"/> db_denydatawriter
<input type="checkbox"/> db_owner
<input type="checkbox"/> db_securityadmin
<input checked="" type="checkbox"/> public

OK Cancel

- Second user: read “Sales” from AW2017 and write to AWDW2017.

Script ▾ ? Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	AdventureWorks		
<input checked="" type="checkbox"/>	AdventureWorks2017	SaleUser	Sales
<input checked="" type="checkbox"/>	AdventureWorksDW2017	SaleUser	db_owner
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input type="checkbox"/>	tempdb		

Guest account enabled for: AdventureWorksDW2017

Database role membership for: AdventureWorksDW2017

<input type="checkbox"/> db_accessadmin
<input type="checkbox"/> db_backupoperator
<input type="checkbox"/> db_datareader
<input type="checkbox"/> db_datawriter
<input type="checkbox"/> db_ddladmin
<input type="checkbox"/> db_denydatareader
<input type="checkbox"/> db_denydatawriter
<input checked="" type="checkbox"/> db_owner
<input type="checkbox"/> db_securityadmin
<input checked="" type="checkbox"/> public

OK Cancel

Script ▾ ? Help

Users mapped to this login:

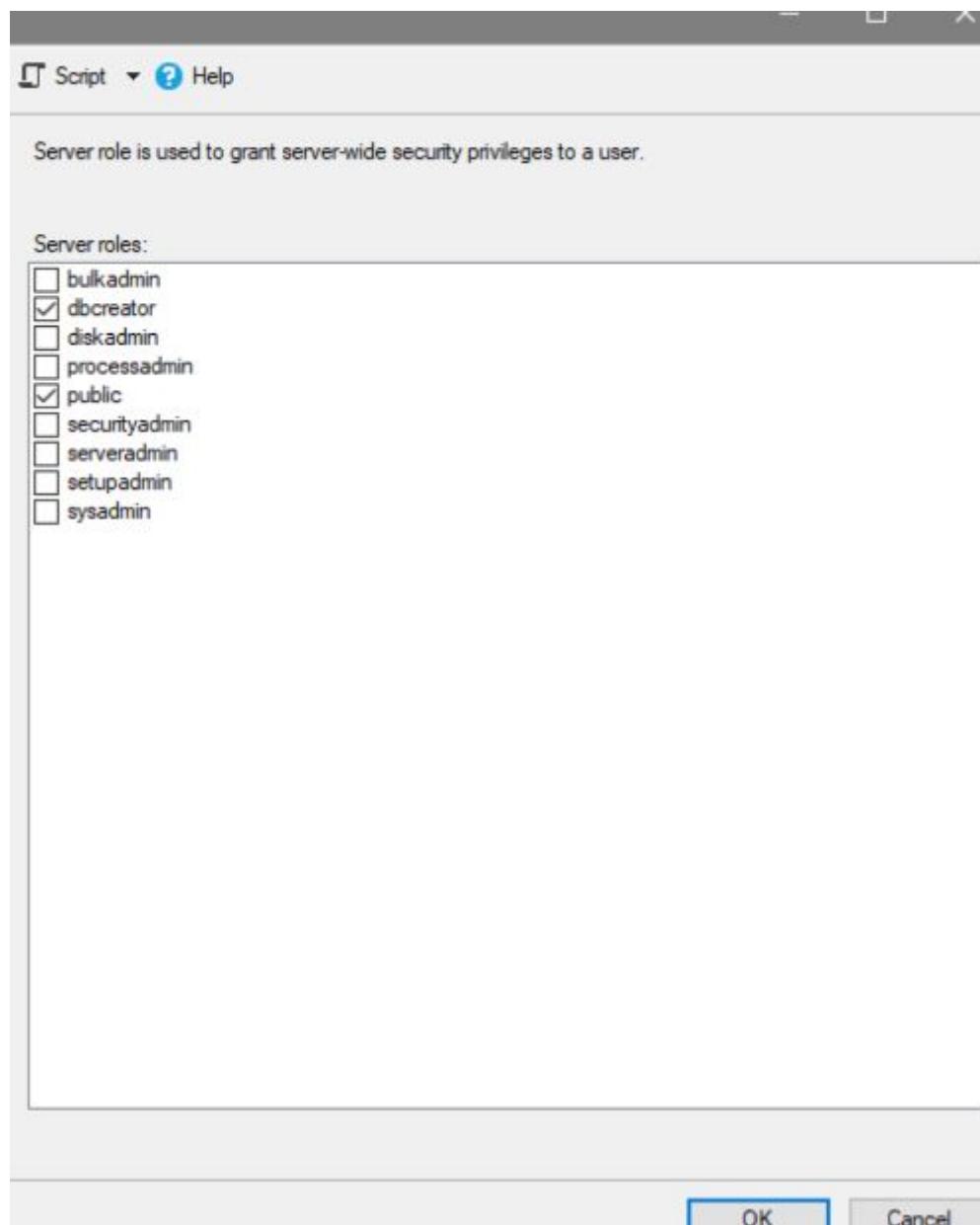
Map	Database	User	Default Schema
<input type="checkbox"/>	AdventureWorks		
<input checked="" type="checkbox"/>	AdventureWorks2017	SaleUser	Sales
<input checked="" type="checkbox"/>	AdventureWorksDW2017	SaleUser	db_owner
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input type="checkbox"/>	tempdb		

Guest account enabled for: AdventureWorksDW2017

Database role membership for: AdventureWorksDW2017

<input type="checkbox"/> db_accessadmin
<input type="checkbox"/> db_backupoperator
<input type="checkbox"/> db_datareader
<input type="checkbox"/> db_datawriter
<input type="checkbox"/> db_ddladmin
<input type="checkbox"/> db_denydatareader
<input type="checkbox"/> db_denydatawriter
<input checked="" type="checkbox"/> db_owner
<input type="checkbox"/> db_securityadmin
<input checked="" type="checkbox"/> public

- Third user: server dbcreator role.



Conclusion:

This laboratory work was useful in learning how to create databases and manage them, create databases and create users with different roles.