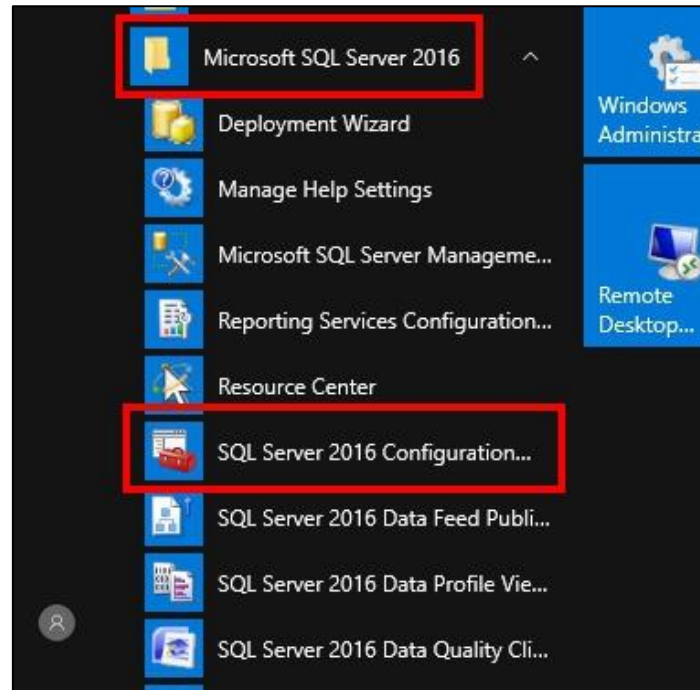
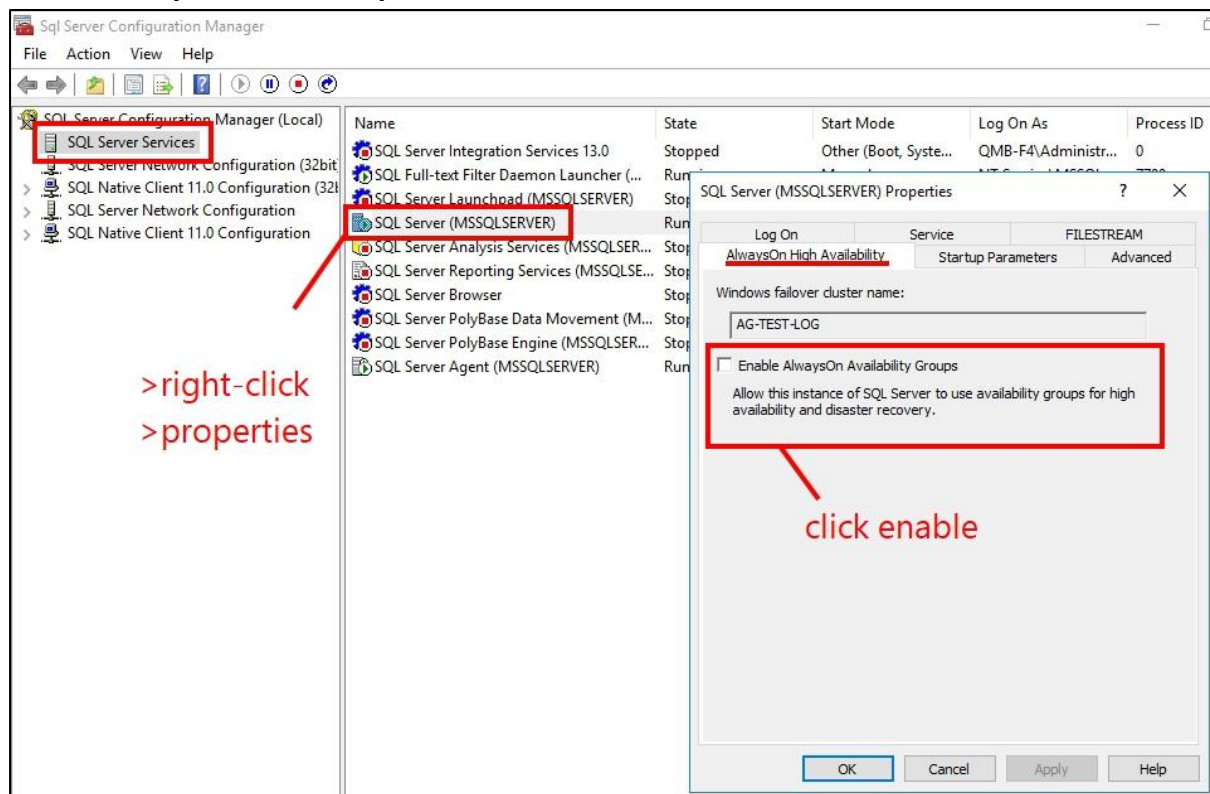


How to AlwaysOn IP

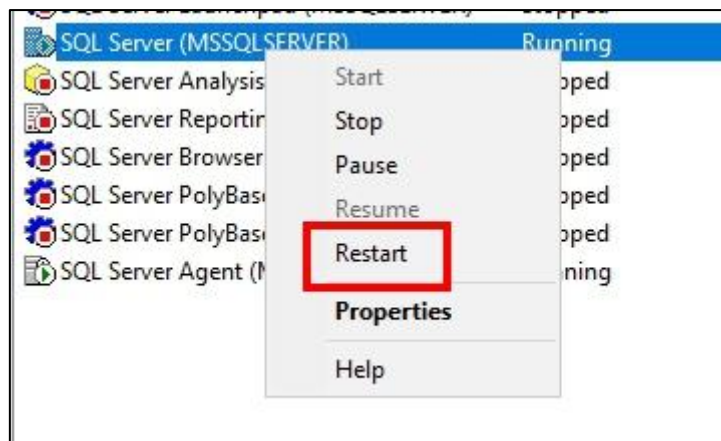
1. เปิดโปรแกรม SQL Server 2016 Configuration



2. SQL server >> คลิกขวาที่ SQL Server (MSSQLSERVER) properties >> เลือก **Enable AlwaysOn Availability** >> OK

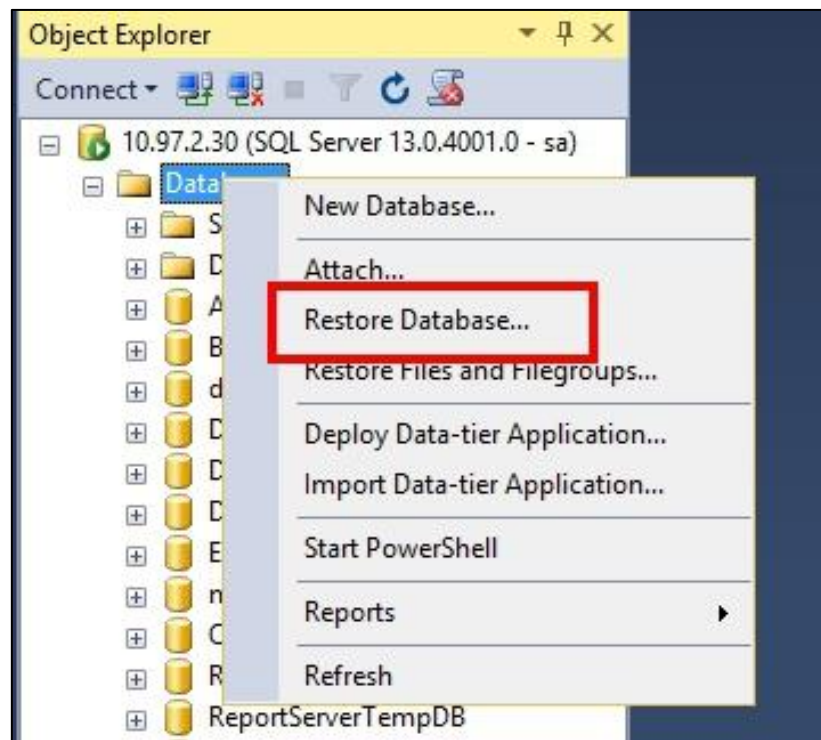


3. คลิกขวา **SQL Server (MSSQLSERVER)** กด **Restart** (ทำทั้ง 2 เครื่อง)

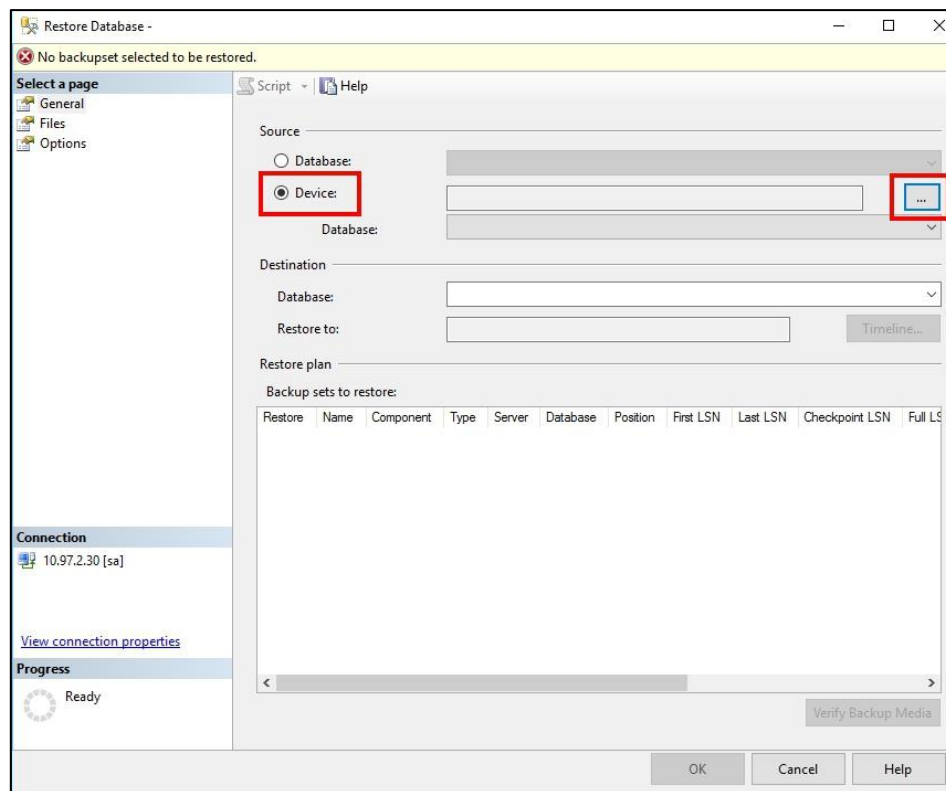


Restore Database

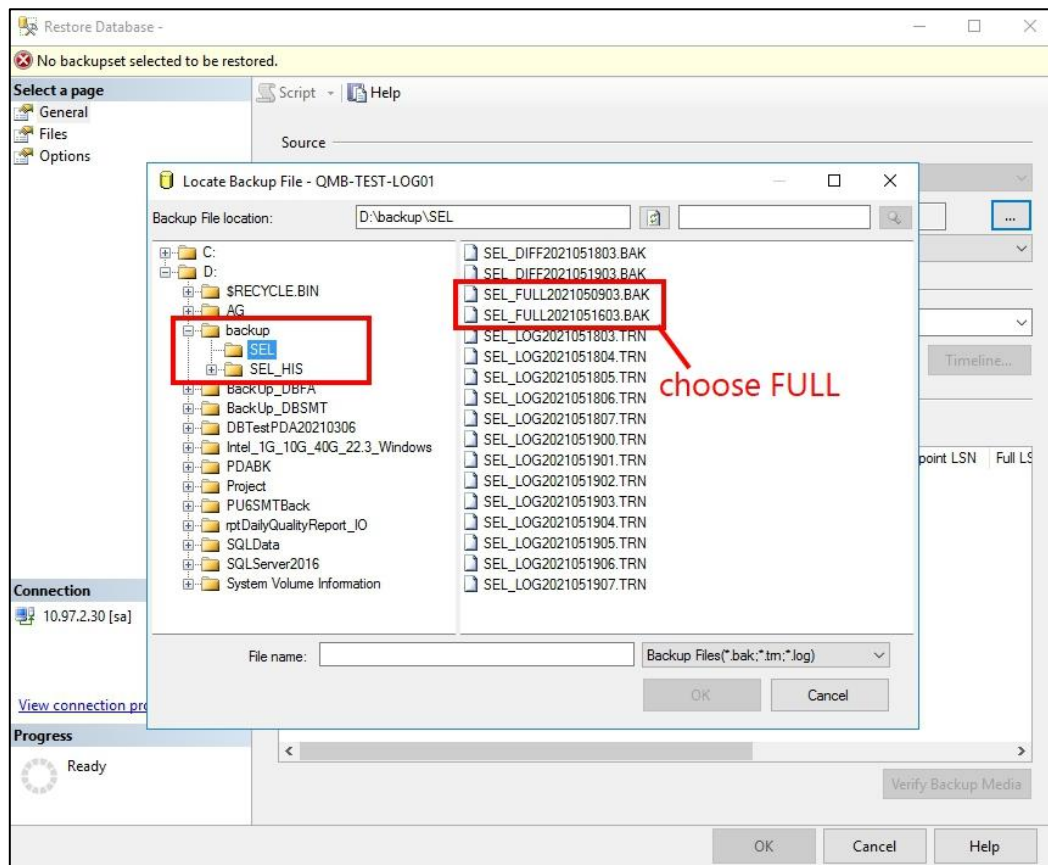
1. คลิกขวาที่ **Database** เลือก **Restore Database..**

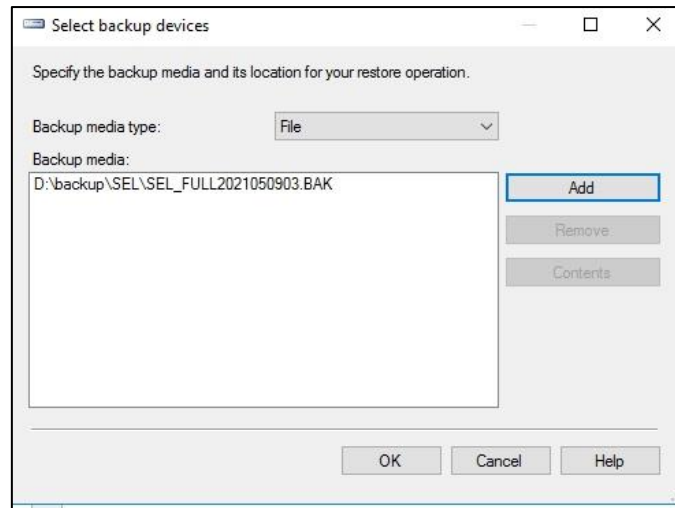


2. ในแถบ **General** เลือก **Devices** แล้วกด ... (ค้นหา)

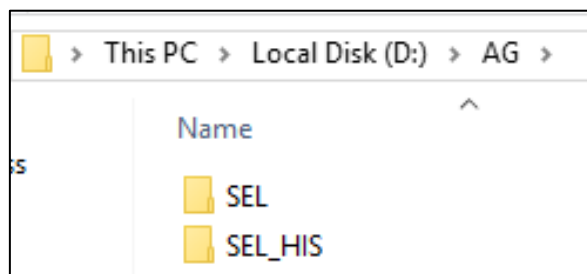
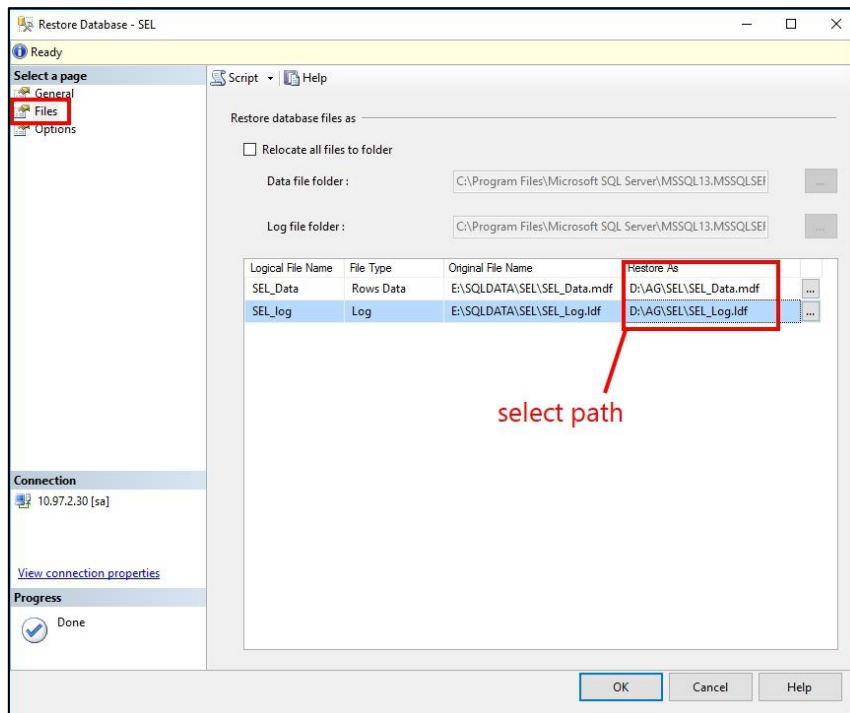


3. เลือกไฟล์ที่ต้องการ **Restore** (หากมีหลายDBให้ทำทีละDB)

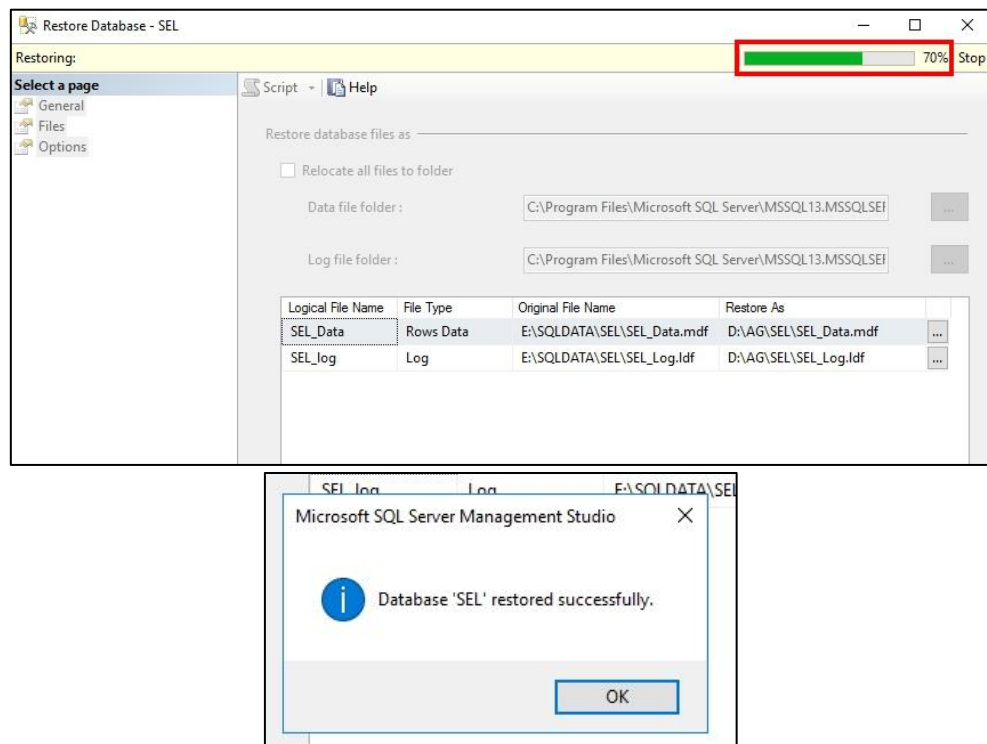




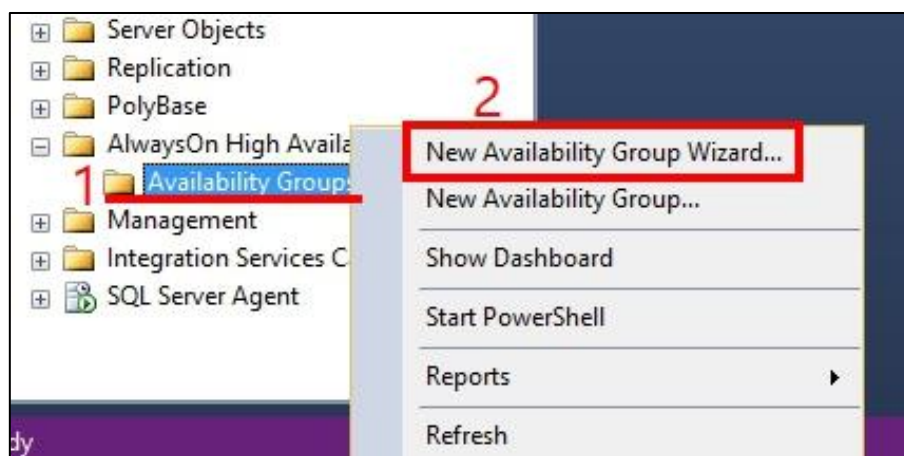
4. ในแถบ Files ให้เลือก Path ที่ต้องการจะ Restore เช่น D:\AG\SEL



5. รอนจนกว่าจะ Restore เสร็จ



6. คลิกขวาที่ **Availability Groups** แล้วเลือก **New Availability Wizard**



7. ตั้งชื่อ Availability Groups เช่น AG-PU4-TEST

The screenshot shows the 'New Availability Group' wizard at the 'Specify Availability Group Name' step. The left sidebar contains a list of steps: Introduction, Specify Name (selected), Select Databases, Specify Replicas, Select Data Synchronization, Validation, Summary, and Results. The main area is titled 'Specify an availability group name.' and contains a text box labeled 'Availability group name:' with the value 'AG-PU4-TEST' entered. Below the text box is a checkbox labeled 'Database Level Health Detection' which is unchecked. A red box highlights the text box and the checkbox. Below the main area, the text 'ex: AG-PU4-TEST' is displayed in red.

ex: AG-PU4-TEST

8. เลือก Database ที่ต้องการ synchronize

The screenshot shows the 'New Availability Group' wizard at the 'Select Databases' step. The left sidebar contains a list of steps: Introduction, Specify Name, Select Databases (selected), Specify Replicas, Select Data Synchronization, Validation, Summary, and Results. The main area is titled 'Select user databases for the availability group.' and contains a table listing user databases on the instance of SQL Server. The table has columns: Name, Size, Status, and Password. The 'SEL' and 'SEL_HIS' databases are selected, indicated by checked checkboxes. A red box highlights the 'SEL' and 'SEL_HIS' rows. The 'Refresh' button is located at the bottom right of the table area. The '< Previous' and 'Next >' buttons are at the bottom of the wizard.

Name	Size	Status	Password
<input type="checkbox"/> ABC	16.0 MB	Full backup is required	
<input type="checkbox"/> BookStores	216.0 MB	Full backup is required	
<input type="checkbox"/> dbStore	16.0 MB	Full backup is required	
<input type="checkbox"/> DWConfiguration	16.0 MB	Full backup is required	
<input type="checkbox"/> DWDiagnostics	1.0 GB	Full recovery mode is re...	
<input type="checkbox"/> DWQueue	16.0 MB	Full recovery mode is re...	
<input type="checkbox"/> Employee	16.0 MB	Full backup is required	
<input type="checkbox"/> mydb	16.0 MB	Full backup is required	
<input type="checkbox"/> QSMS	117.0 GB	Meets prerequisites	
<input type="checkbox"/> ReportServer	16.0 MB	Full backup is required	
<input type="checkbox"/> ReportServerTempDB	16.0 MB	Full recovery mode is re...	
<input checked="" type="checkbox"/> SEL	20.2 GB	Meets prerequisites	
<input checked="" type="checkbox"/> SEL_HIS	69.9 GB	Meets prerequisites	
<input type="checkbox"/> SM1	30.1 GB	Meets prerequisites	
<input type="checkbox"/> Standard	16.0 MB	Full backup is required	

9. Add Replicas

The screenshot shows the 'New Availability Group' wizard, specifically the 'Specify Replicas' step. The left sidebar contains a list of steps: Introduction, Specify Name, Select Databases, Specify Replicas (highlighted), Select Data Synchronization, Validation, Summary, and Results. The main area is titled 'Specify an instance of SQL Server to host a secondary replica.' and has tabs for Replicas, Endpoints, Backup Preferences, and Listener. The 'Replicas' tab is active, showing a table with one replica: QMB-TEST-LOG01, Initial Role: Primary, Automatic Failover (Up to 3): No, Synchronous Commit (Up to 3): No, and Readable Secondary: No. Below the table, there are three buttons: 'Add Replica...' (highlighted with a red box), 'Add Azure Replica...', and 'Remove Replica'. At the bottom, there is a 'Summary for the replica hosted by QMB-TEST-LOG01' section, which states: 'Replica mode: Asynchronous commit. This replica will use asynchronous-commit availability mode and support only forced failover (with possible data loss). Readable secondary: No. In the secondary role, this availability replica will not allow any connections.'

Server Instance	Initial Role	Automatic Failover (Up to 3)	Synchronous Commit (Up to 3)	Readable Secondary
QMB-TEST-LOG01	Primary	<input type="checkbox"/>	<input type="checkbox"/>	No

Add Replica... Add Azure Replica... Remove Replica

Summary for the replica hosted by QMB-TEST-LOG01

Replica mode: Asynchronous commit
This replica will use asynchronous-commit availability mode and support only forced failover (with possible data loss).

Readable secondary: No
In the secondary role, this availability replica will not allow any connections.

10. เชื่อมต่อ Database อีกเซิร์ฟเวอร์

The screenshot shows the 'Connect to Server' dialog box. The title bar says 'Connect to Server'. The main heading is 'SQL Server'. The 'Server type' dropdown is set to 'Database Engine'. The 'Server name' dropdown is set to '10.97.2.31' (highlighted with a red box). The 'Authentication' dropdown is set to 'SQL Server Authentication'. The 'Login' dropdown is set to 'sa'. The 'Password' field is empty. There is a 'Remember password' checkbox which is unchecked. At the bottom, there are four buttons: 'Connect' (highlighted with a blue box), 'Cancel', 'Help', and 'Options >>'. Below the dialog box, there is a 'Summary for the replica hosted by QMB-TEST-LOG01' section, which is partially visible and shows 'Replica mode: Asynchronous commit'.

Connect to Server

SQL Server

Server type: Database Engine

Server name: 10.97.2.31

Authentication: SQL Server Authentication

Login: sa

Password:

☐ Remember password

Connect Cancel Help Options >>

Summary for the replica hosted by QMB-TEST-LOG01

Replica mode: Asynchronous commit

11. ในแถบ Readable Secondary เลือก Yes ทั้งสองเซิร์ฟเวอร์

Instance	Initial Role	Automatic Failover (Up to 3)	Synchronous Commit (Up to 3)	Readable Secondary
T-LOG01	Primary	<input type="checkbox"/>	<input type="checkbox"/>	No
T-LOG02	Secondary	<input type="checkbox"/>	<input type="checkbox"/>	No

12. เลือก path ที่สร้างไว้ กด Next

Select your data synchronization preference.

☒ **Full**
Starts data synchronization by performing full database and log backups for each selected database. These databases are restored to each secondary and joined to the availability group.

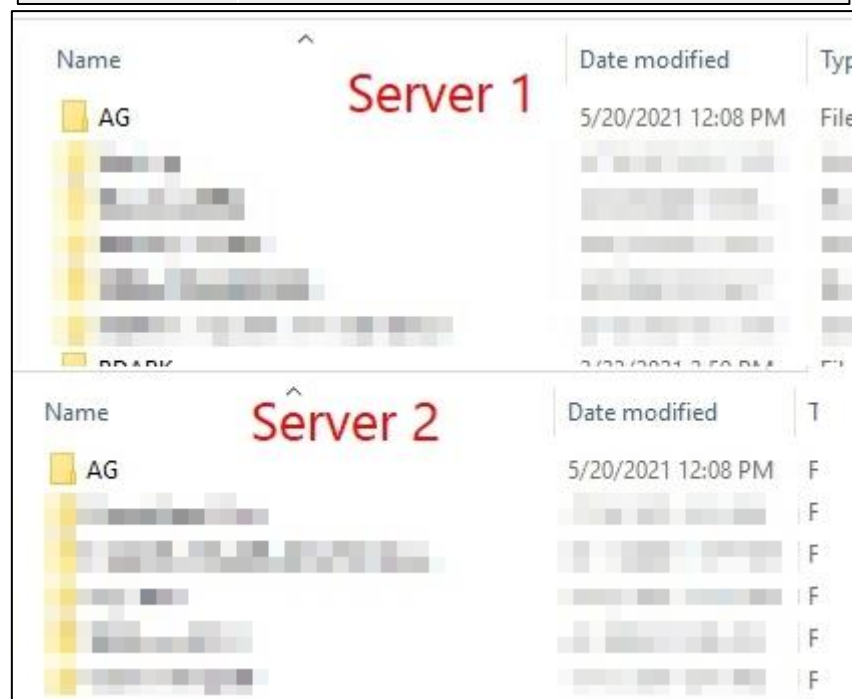
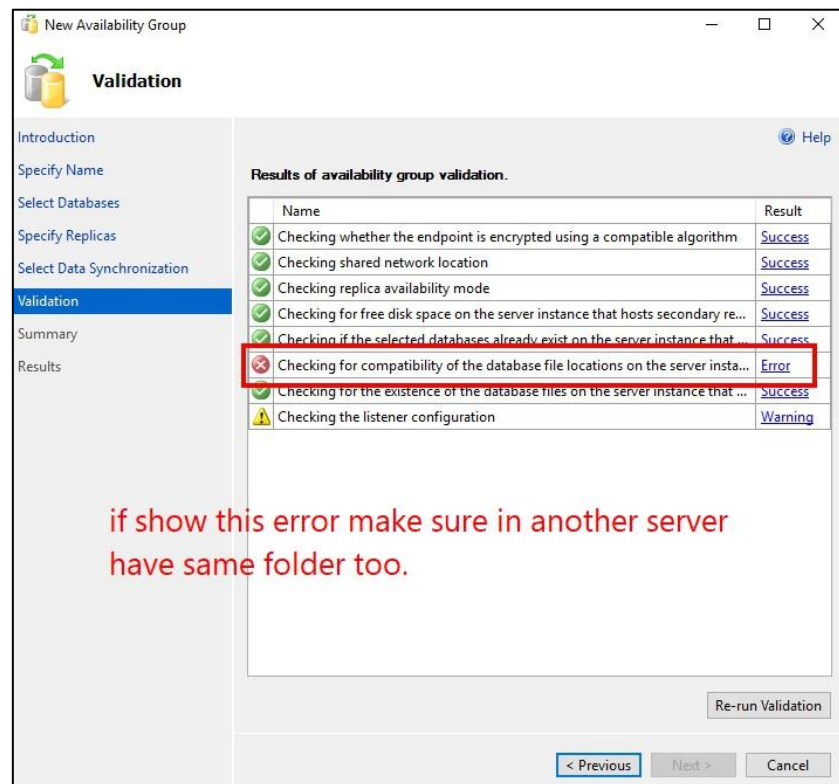
Specify a shared network location accessible by all replicas:

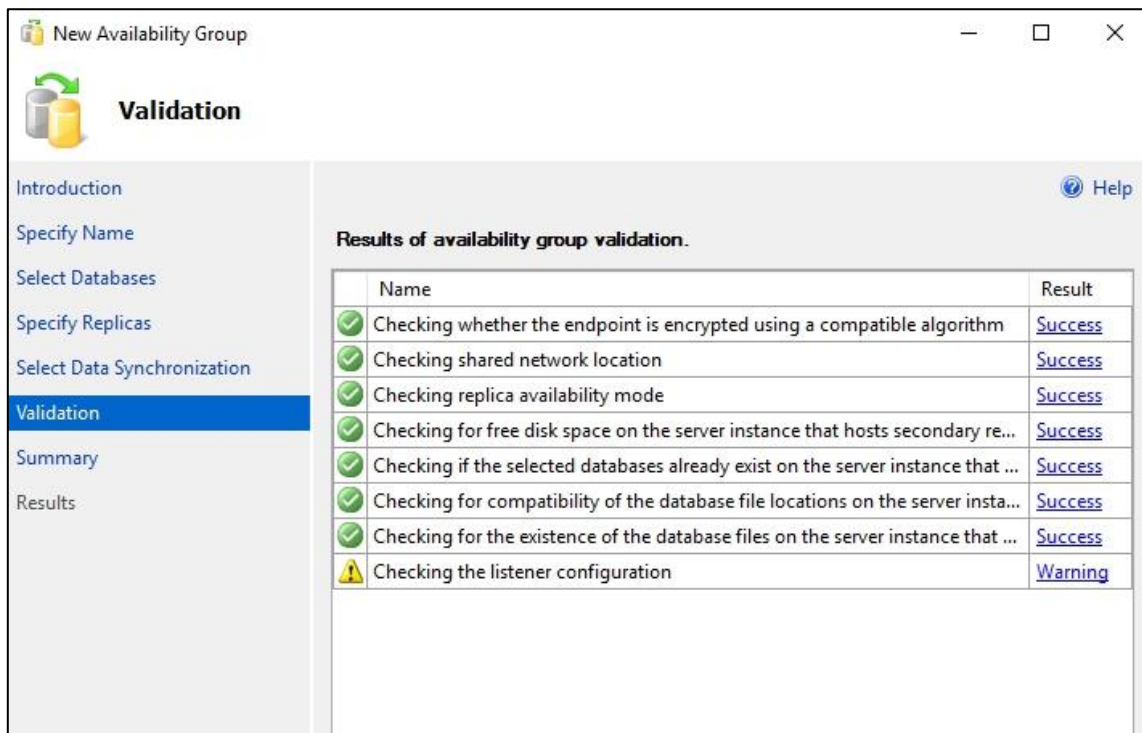
☐ **Join only**
Starts data synchronization where you have already restored database and log backups to each secondary server. The selected databases are joined to the availability group on each secondary. This action will be skipped for Azure replicas.

☐ **Skip initial data synchronization**
Choose this option if you want to perform your own database and log backups of each primary database.

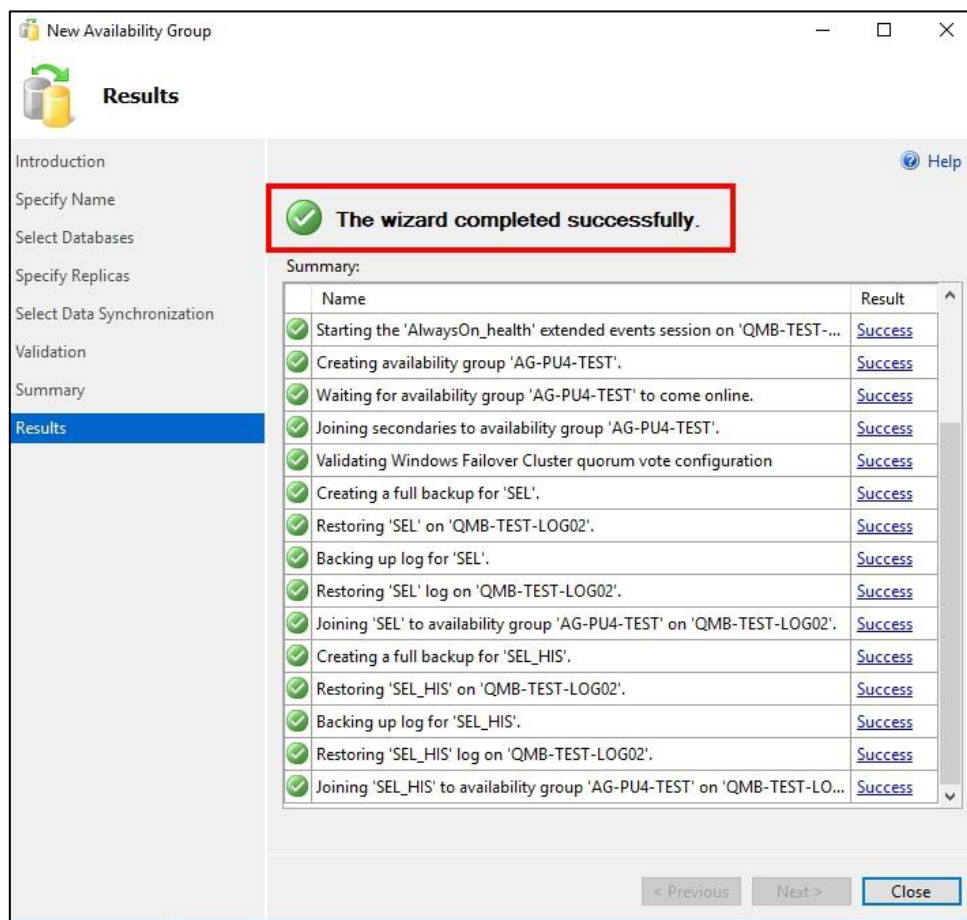
< Previous **Next >** Cancel

13. หากขึ้น **error** ตามภาพให้ชี้แจงทั้งสองเซฟเวอร์ว่ามีไฟล์เดสคอปที่เหมือนกันหรือไม่ ถ้าไม่มีให้สร้างไฟล์เดสคอปที่ชื่อเหมือนกัน

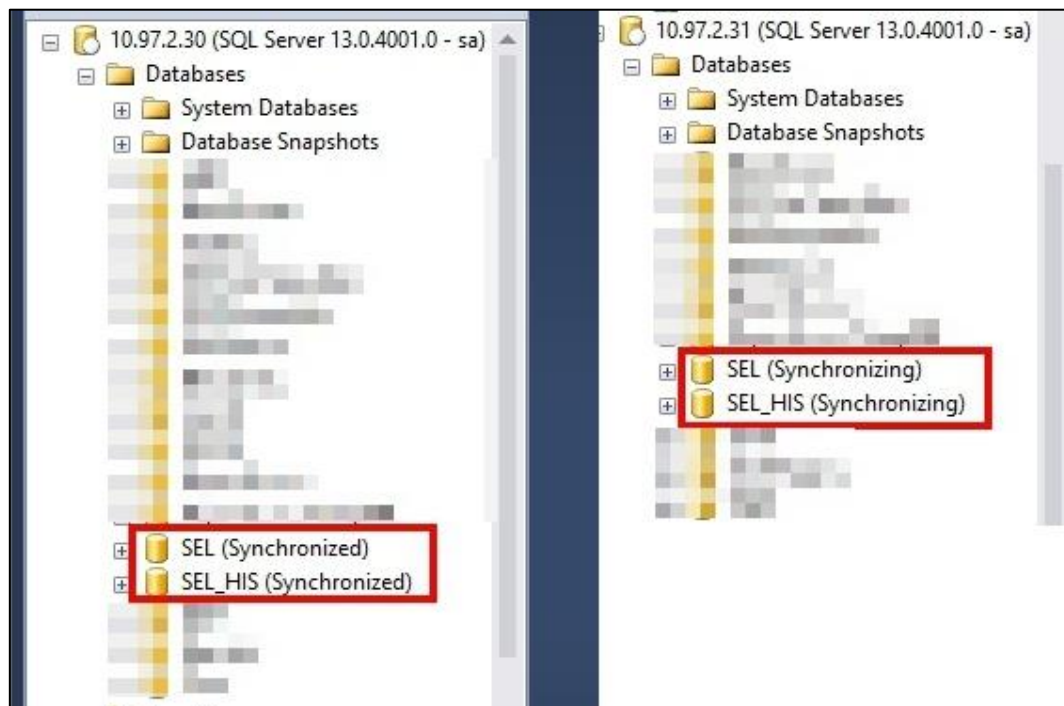




14. รอกันกว่าจะ synchronize เสร็จ



15. ตรวจสอบ Database ทั้งสองเซิร์ฟเวอร์ว่ามีการ synchronized หรือไม่



16. คลิกขวาที่ Availability Group Listener >> Add Listener



17. ตั้ง Listener DNS Name, port:1433, Network Mode: static จากนั้นกด Add

New Availability Group Listener

Select a page
General

Script Help

Listener DNS Name: AGL-PU4-TEST

Port: 1433

Network Mode: Static IP

Subnet	IP Address
--------	------------

1

2 Add... Remove

OK Cancel

Connection
Server: 10.97.2.30
Connection: sa
[View connection properties](#)

Progress
Ready

18. ตั้ง listener IP

Add IP Address

Subnet 10.97.2.0/24

Address

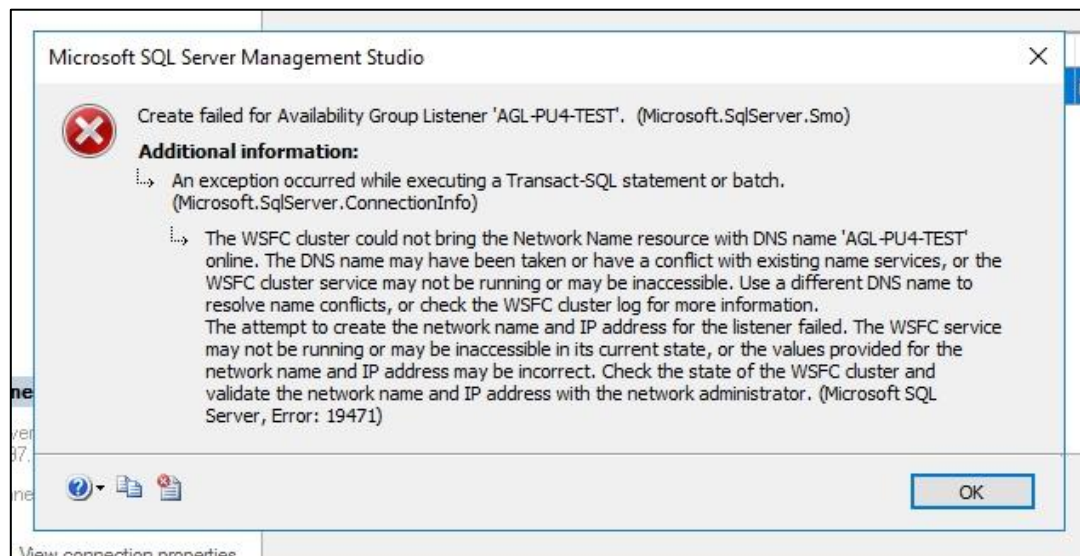
IPv4 Address 10.97.2.33

Subnet Mask 255.255.255.0

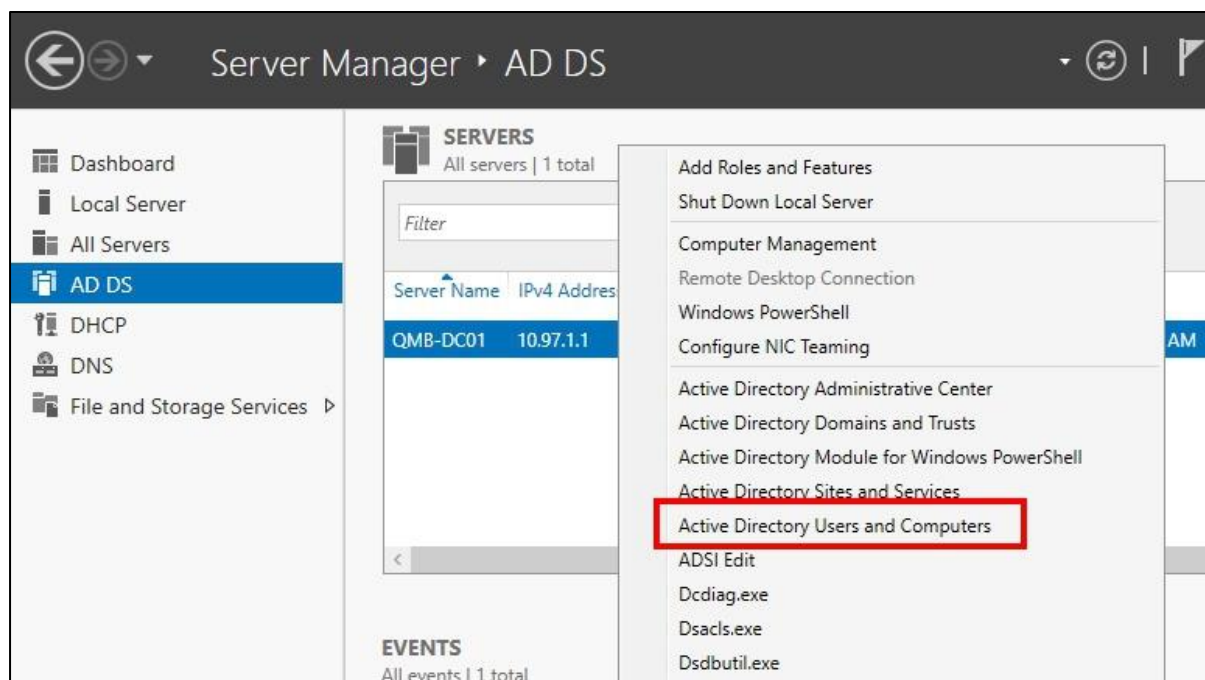
IPv6 Address

OK Cancel Help

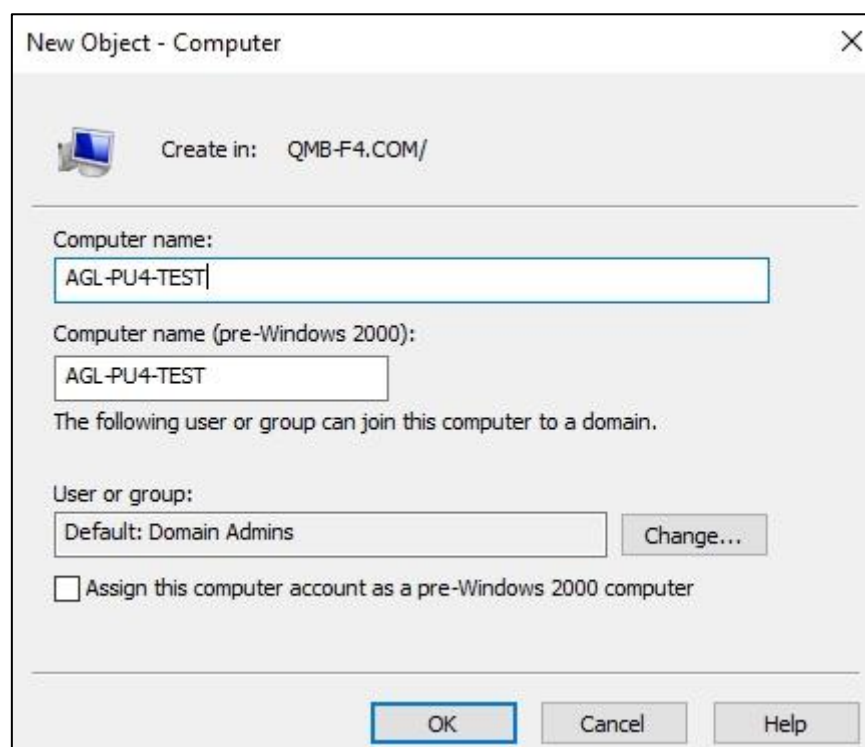
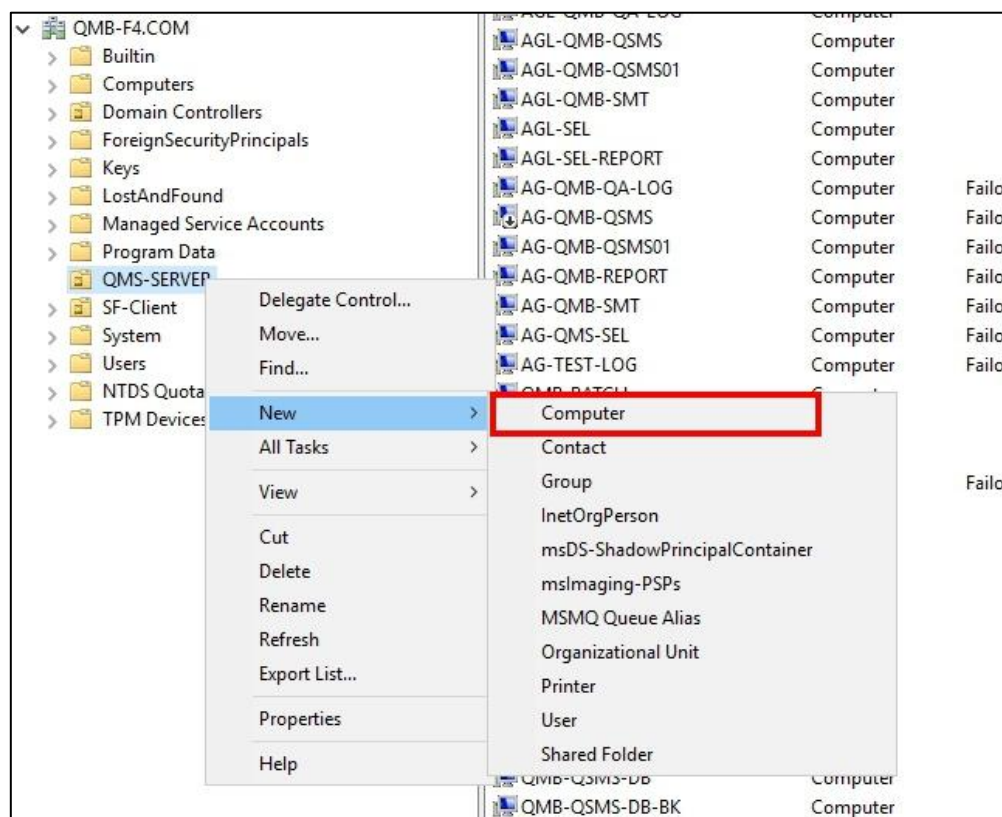
19. หากขึ้น error ต้องสร้างคอมพิวเตอร์ชื่อเหมือน Listener ใน (DC Server 10.97.1.1)



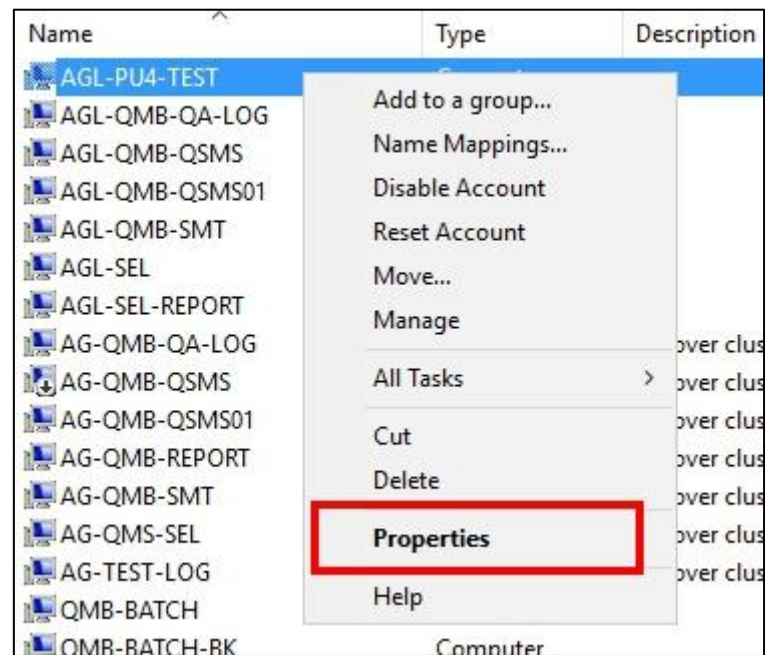
20. เข้า Active Directory Users and Computers



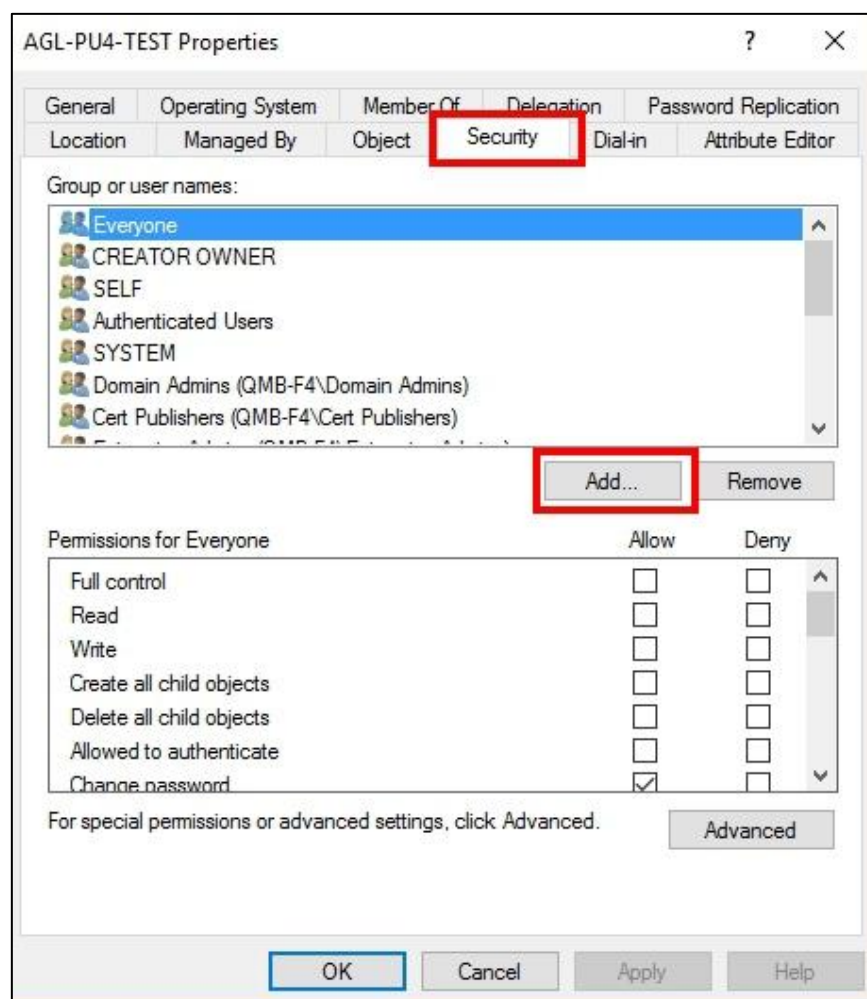
21. คลิกขวาที่ QMS-SERVER > New > Computer



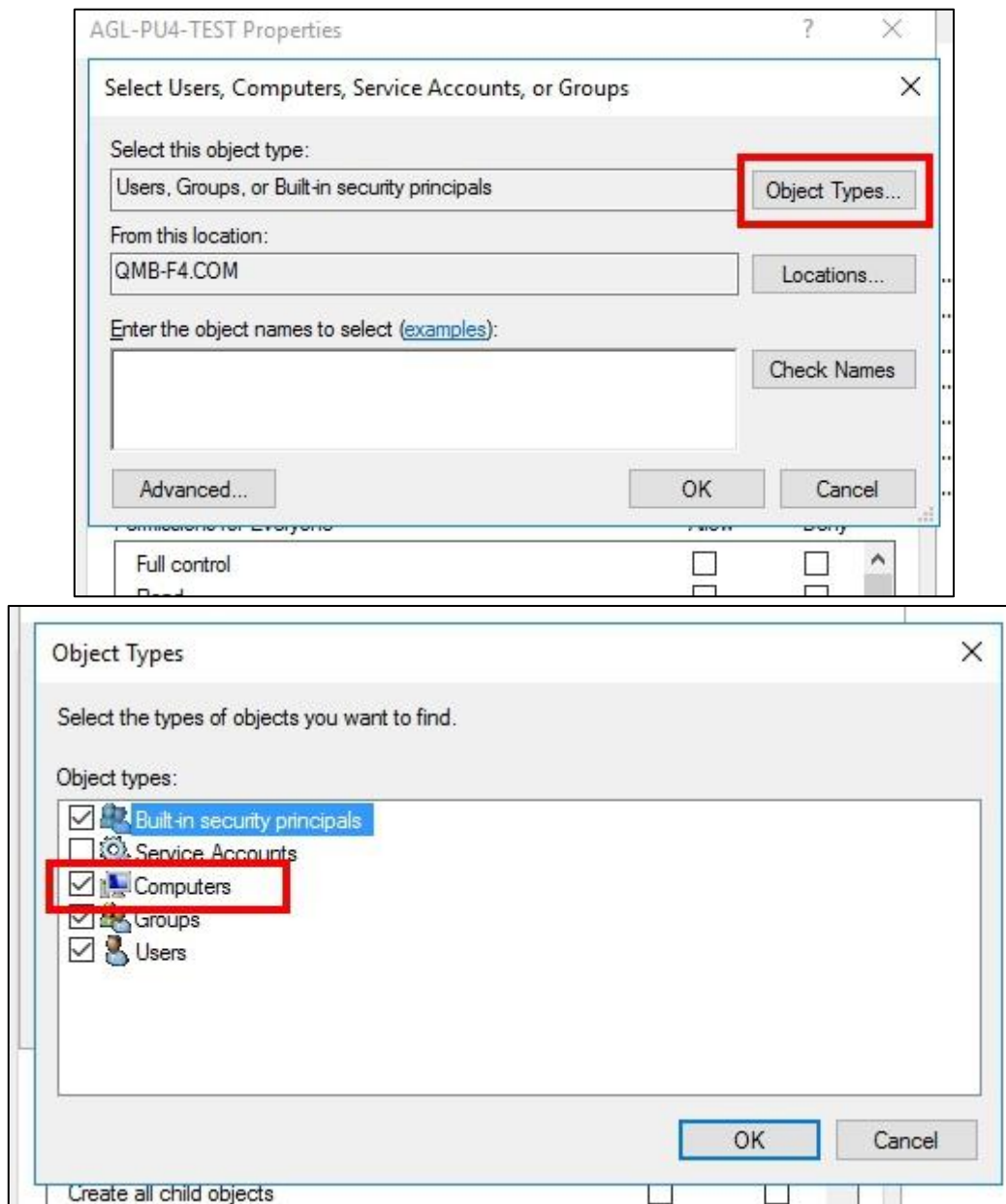
22. คลิกขวาที่คอมพิวเตอร์ที่เพิ่งสร้าง เลือก properties



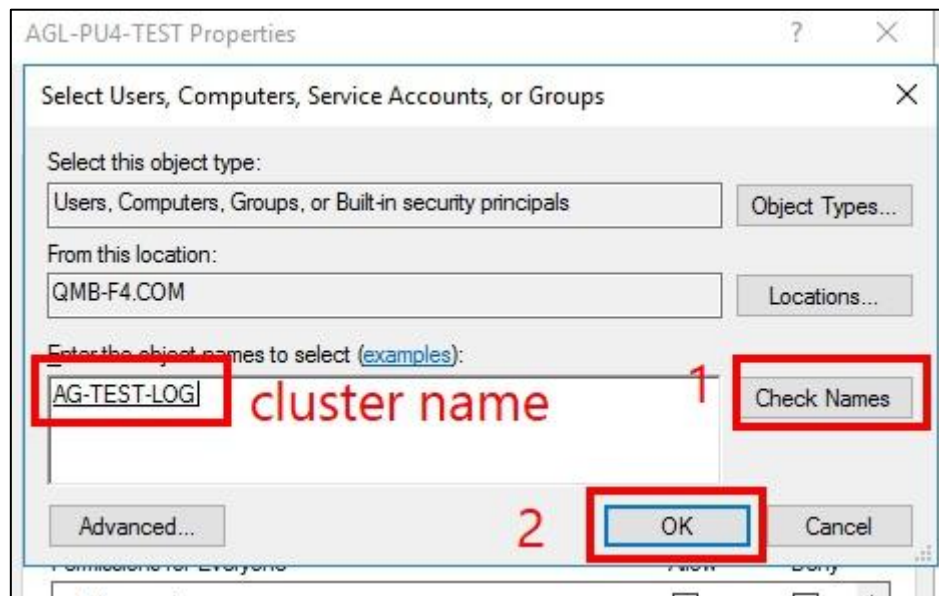
23. แถบ Security กด Add



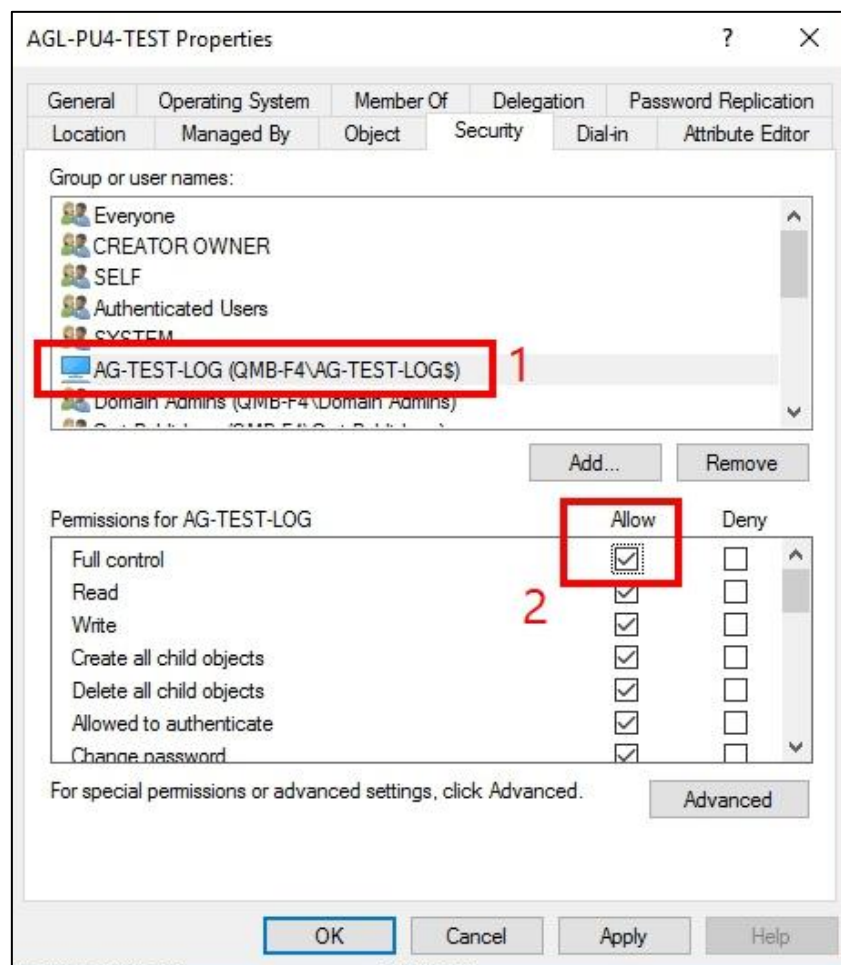
24. คลิกที่ objects type แล้วเลือก computer



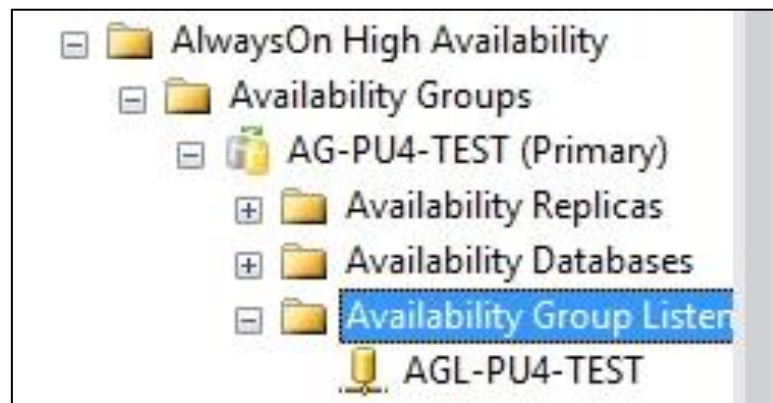
25. ใส่ชื่อ Cluster



26. ให้ permission กับคอมพิวเตอร์ที่สร้าง



27. กลับไป Add listener อีกครั้งแล้วกด OK



28. ตรวจสอบ listener ip ว่าขึ้นหรือไม่

