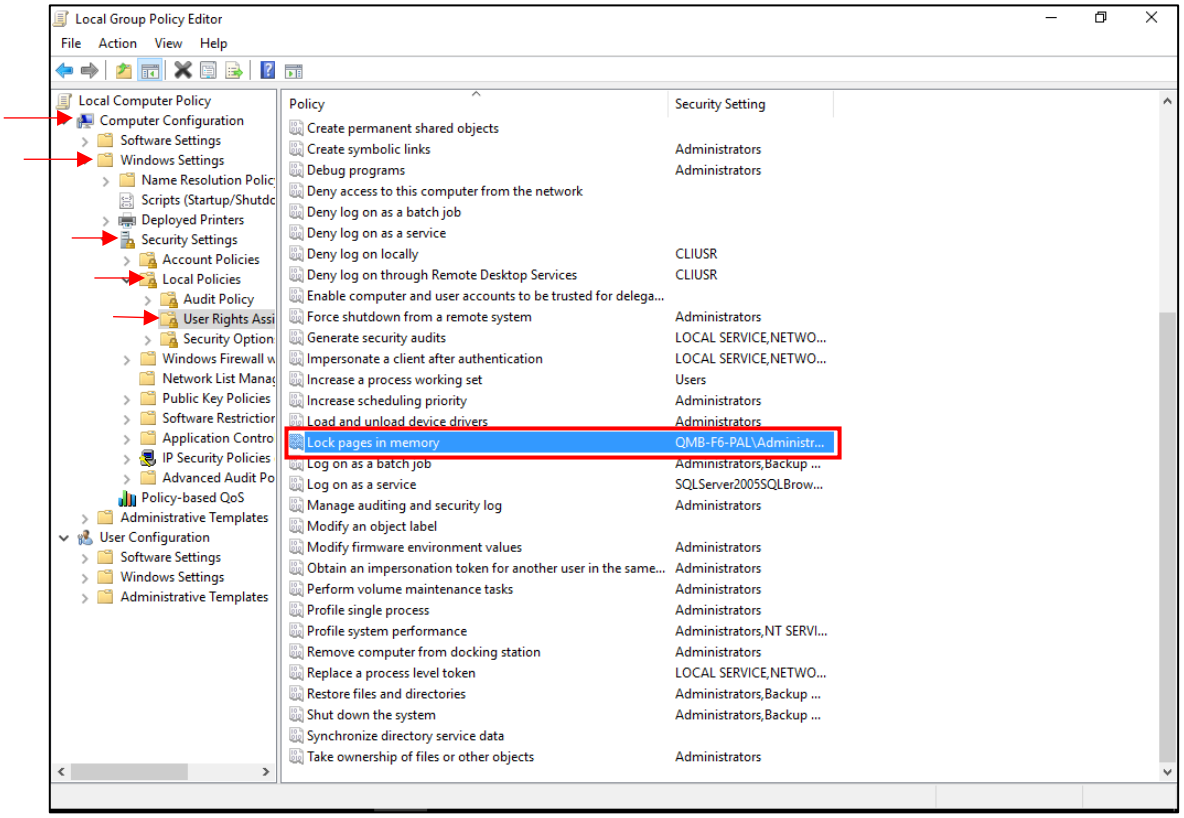
SQL SERVER 2016 CHECK LIST

Set up "lock pages in memory" Windows account

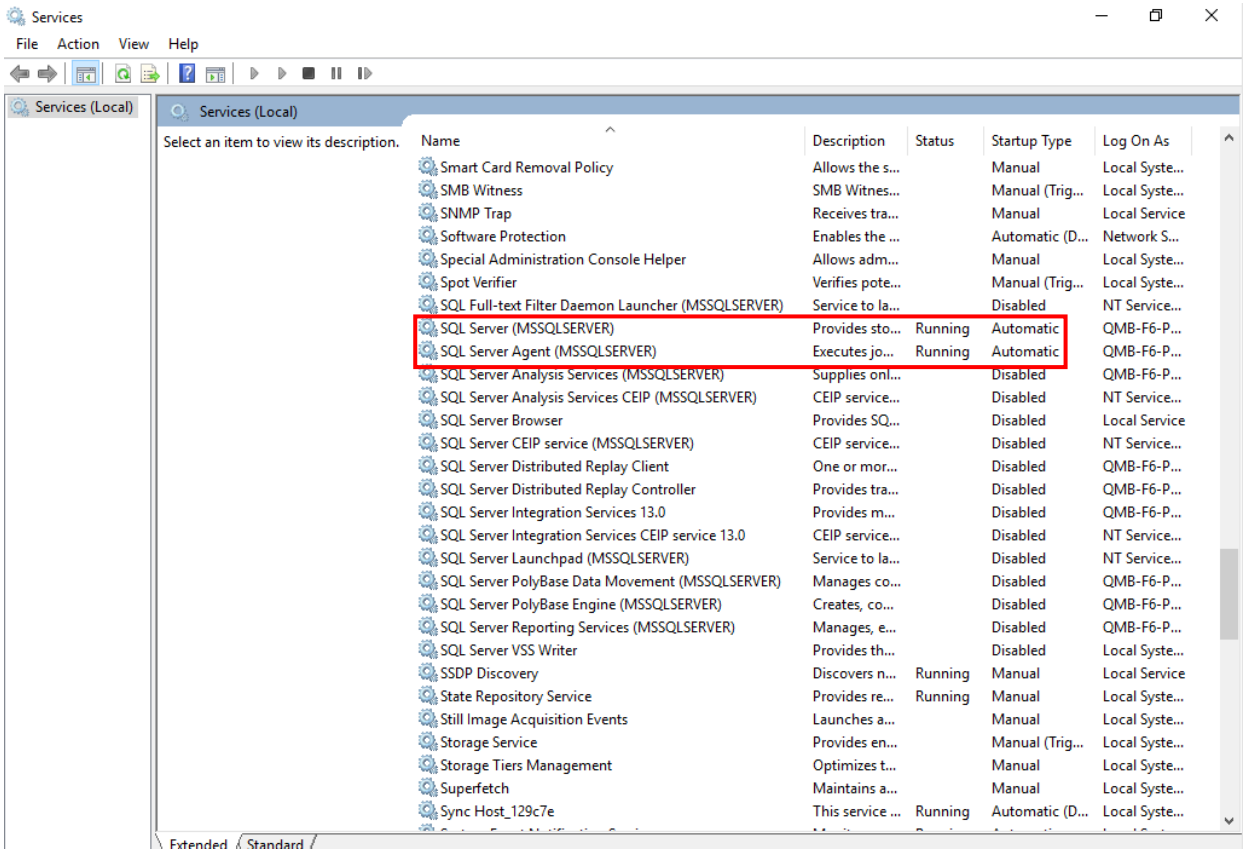
1. Run "**gpedit.msc**" -> **Computer Configuration** -> **Windows Setting** -> **Security Setting** -> **Local Policy** -> **User Right Assignment**
2. Choose **lock pages in memory** and make sure the "Security Setting" is Windows **administrator**
3. If no, right click and select property and "add User or Group"



Services Accounts Services must be Administrator

The 2 service under **Services** the authority must be Administrator

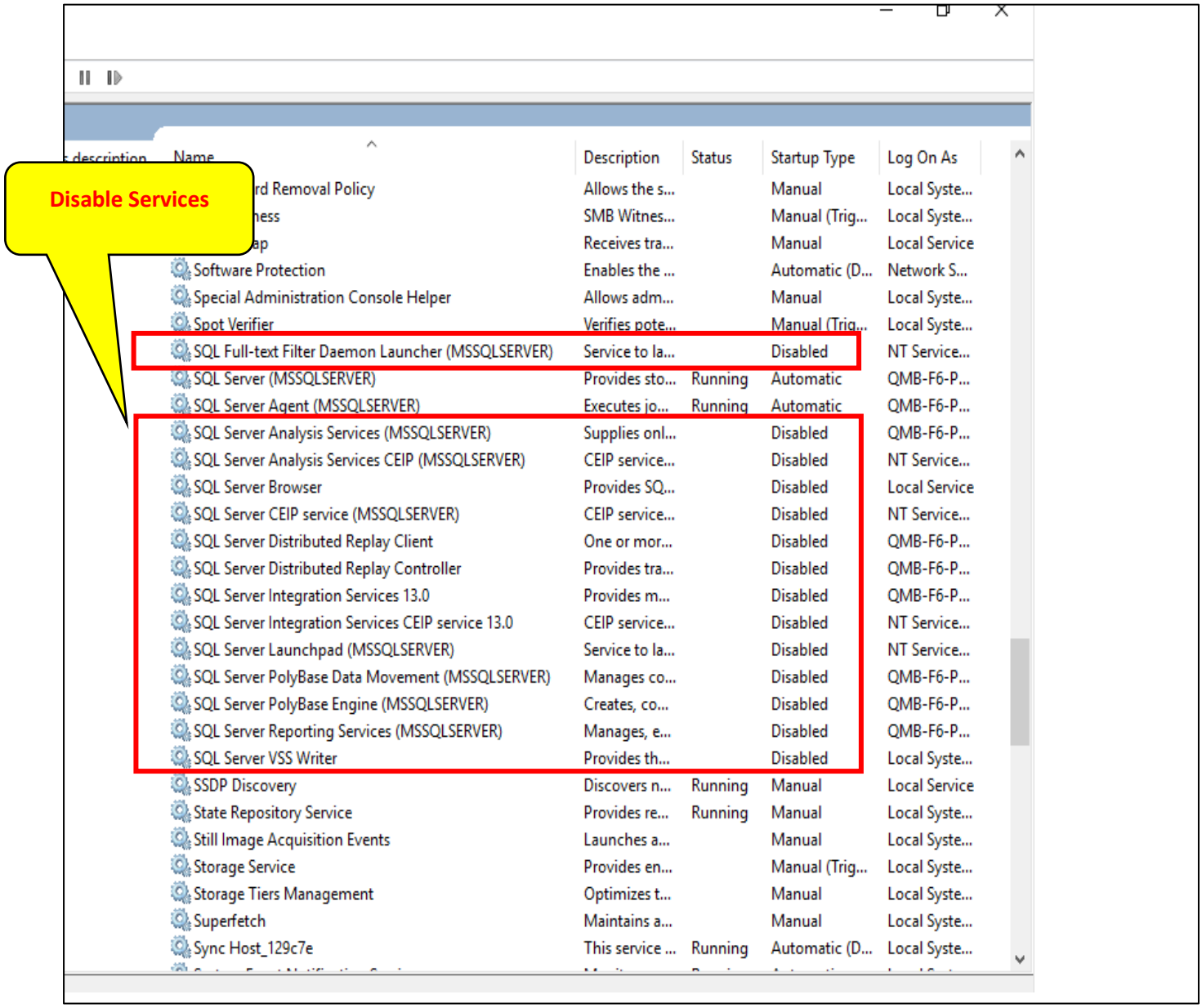
1. **SQL Server (MSSQLSERVER)**
2. **SQL Server Agent (MSSQLSERVER)**
3. Set up the 2 services Startup Type is **"Automatic"**



Disable SQL Services

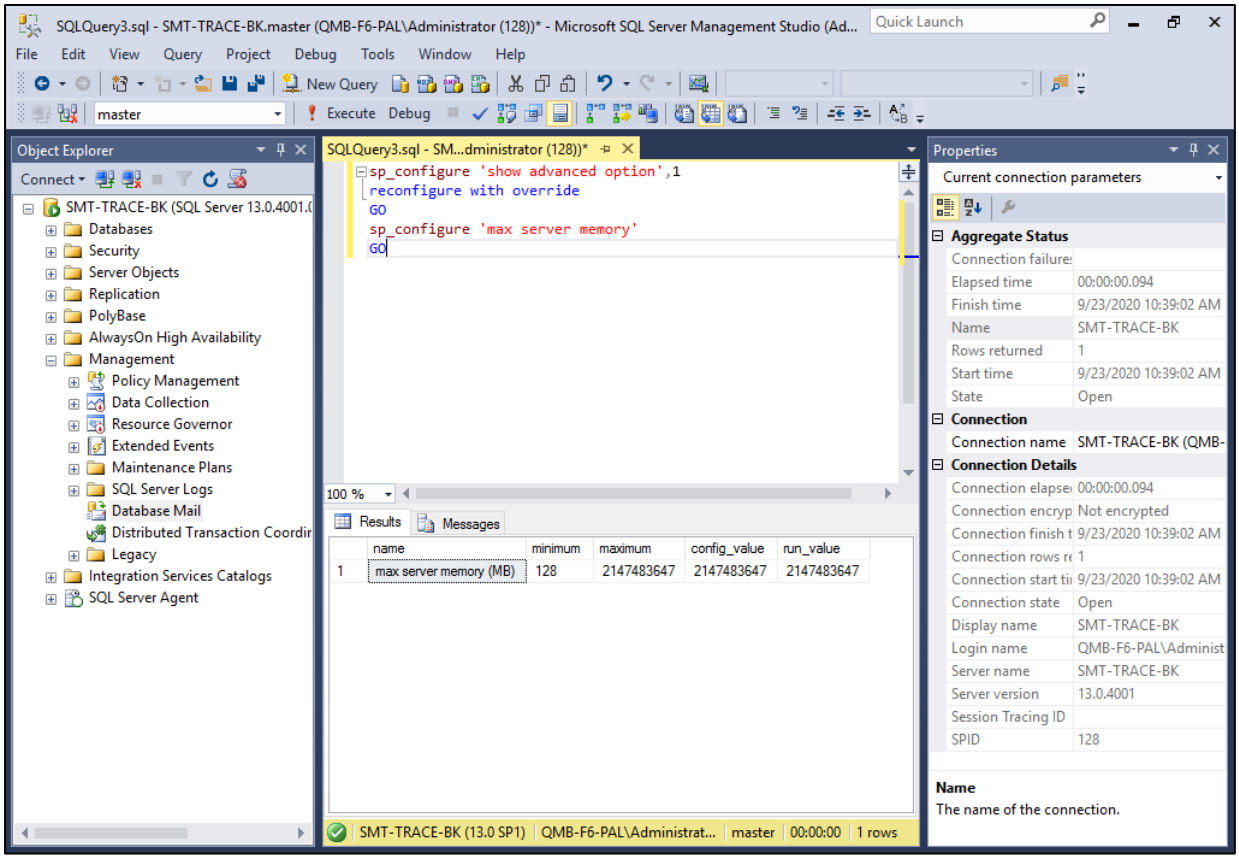
Besides SQL Server (MSSQLSERVER), SQL Server Agent (MSSQLSERVER), other SQL Services Startup Type must be **"Disabled"**

1. SQL Server VSS Writer
2. SQL Server Reporting Services (MSSQLSERVER)
3. SQL Server Poly Engine (MSSQLSERVER)
4. SQL Server PolyBase Data Movement
5. SQL Server Launchpad (MSSQLSERVER)
6. SQL Server Integration Services CEIP
7. SQL Server Integration Services 13.0
8. SQL Server Distributed Replay Controller
9. SQL Server Distributed Replay Client
10. SQL Server CEIP Services
11. SQL Server Browser
12. SQL Server Analysis Service CEIP
13. SQL Server Analysis Service(MSSQLSERVER)
14. SQL Full-text Filter Daemon Launcher (MSSQLSERVER)


Disable Services
Name
Description
Status
Startup Type
Log On As
rd Removal Policy
Allows the s...
Manual
Local Syste...
ness
SMB Witnes...
Manual (Trig...
Local Syste...
ap
Receives tra...
Manual
Local Service
Software Protection
Enables the ...
Automatic (D...
Network S...
Special Administration Console Helper
Allows adm...
Manual
Local Syste...
Spot Verifier
Verifies pote...
Manual (Trig...
Local Syste...
SQL Full-text Filter Daemon Launcher (MSSQLSERVER)
Service to la...
Disabled
NT Service...
SQL Server (MSSQLSERVER)
Provides sto...
Running
Automatic
QMB-F6-P...
SQL Server Agent (MSSQLSERVER)
Executes jo...
Running
Automatic
QMB-F6-P...
SQL Server Analysis Services (MSSQLSERVER)
Supplies onl...
Disabled
QMB-F6-P...
SQL Server Analysis Services CEIP (MSSQLSERVER)
CEIP service...
Disabled
NT Service...
SQL Server Browser
Provides SQ...
Disabled
Local Service
SQL Server CEIP service (MSSQLSERVER)
CEIP service...
Disabled
NT Service...
SQL Server Distributed Replay Client
One or mor...
Disabled
QMB-F6-P...
SQL Server Distributed Replay Controller
Provides tra...
Disabled
QMB-F6-P...
SQL Server Integration Services 13.0
Provides m...
Disabled
QMB-F6-P...
SQL Server Integration Services CEIP service 13.0
CEIP service...
Disabled
NT Service...
SQL Server Launchpad (MSSQLSERVER)
Service to la...
Disabled
NT Service...
SQL Server PolyBase Data Movement (MSSQLSERVER)
Manages co...
Disabled
QMB-F6-P...
SQL Server PolyBase Engine (MSSQLSERVER)
Creates, co...
Disabled
QMB-F6-P...
SQL Server Reporting Services (MSSQLSERVER)
Manages, e...
Disabled
QMB-F6-P...
SQL Server VSS Writer
Provides th...
Disabled
Local Syste...
SSDP Discovery
Discovers n...
Running
Manual
Local Service
State Repository Service
Provides re...
Running
Manual
Local Syste...
Still Image Acquisition Events
Launches a...
Manual
Local Syste...
Storage Service
Provides en...
Manual (Trig...
Local Syste...
Storage Tiers Management
Optimizes t...
Manual
Local Syste...
Superfetch
Maintains a...
Manual
Local Syste...
Sync Host_129c7e
This service ...
Running
Automatic (D...
Local Syste...

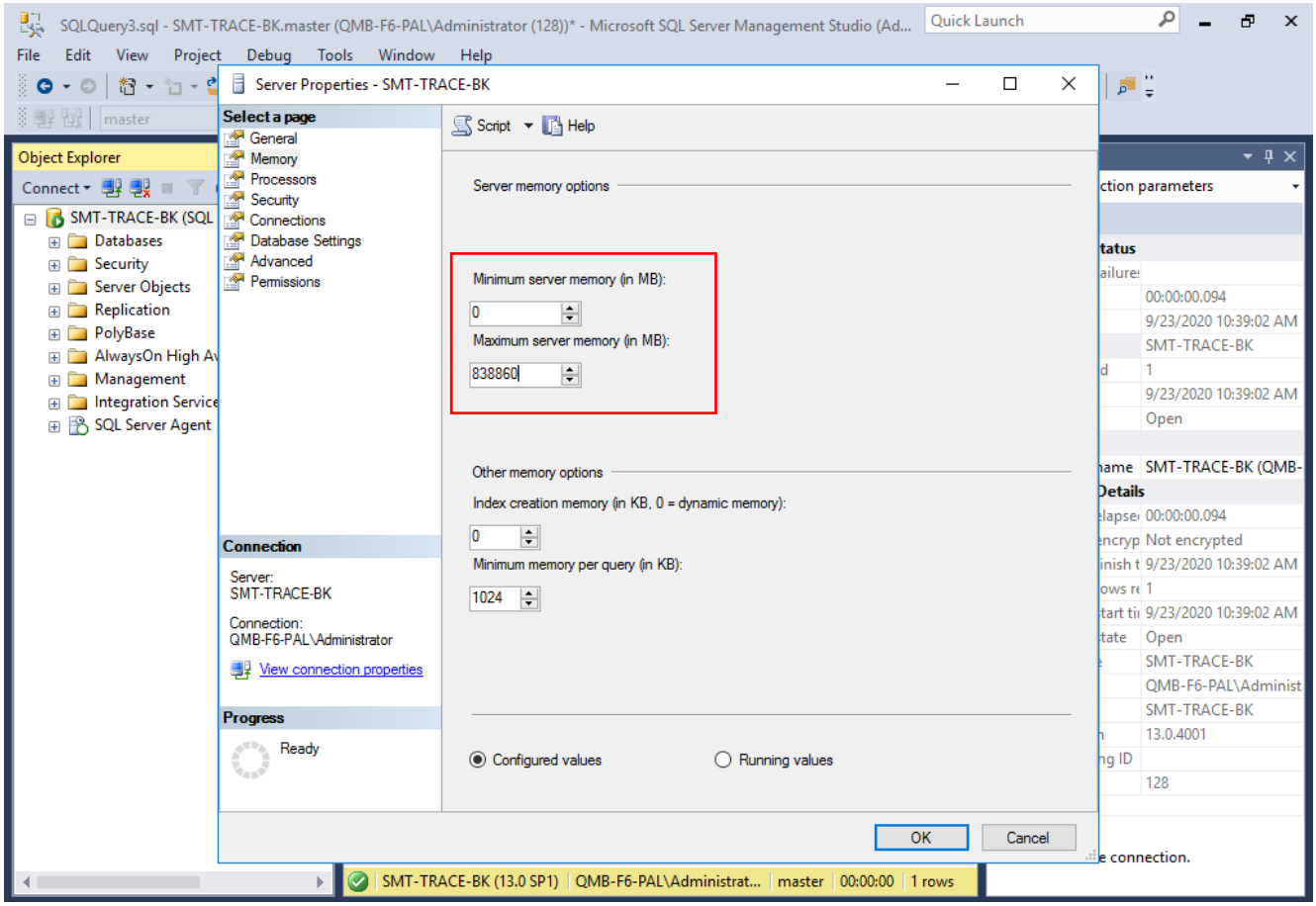
Check SQL memory

```
sp_configure 'show advanced option',1
reconfigure with override
GO
sp_configure 'max server memory'
GO
```



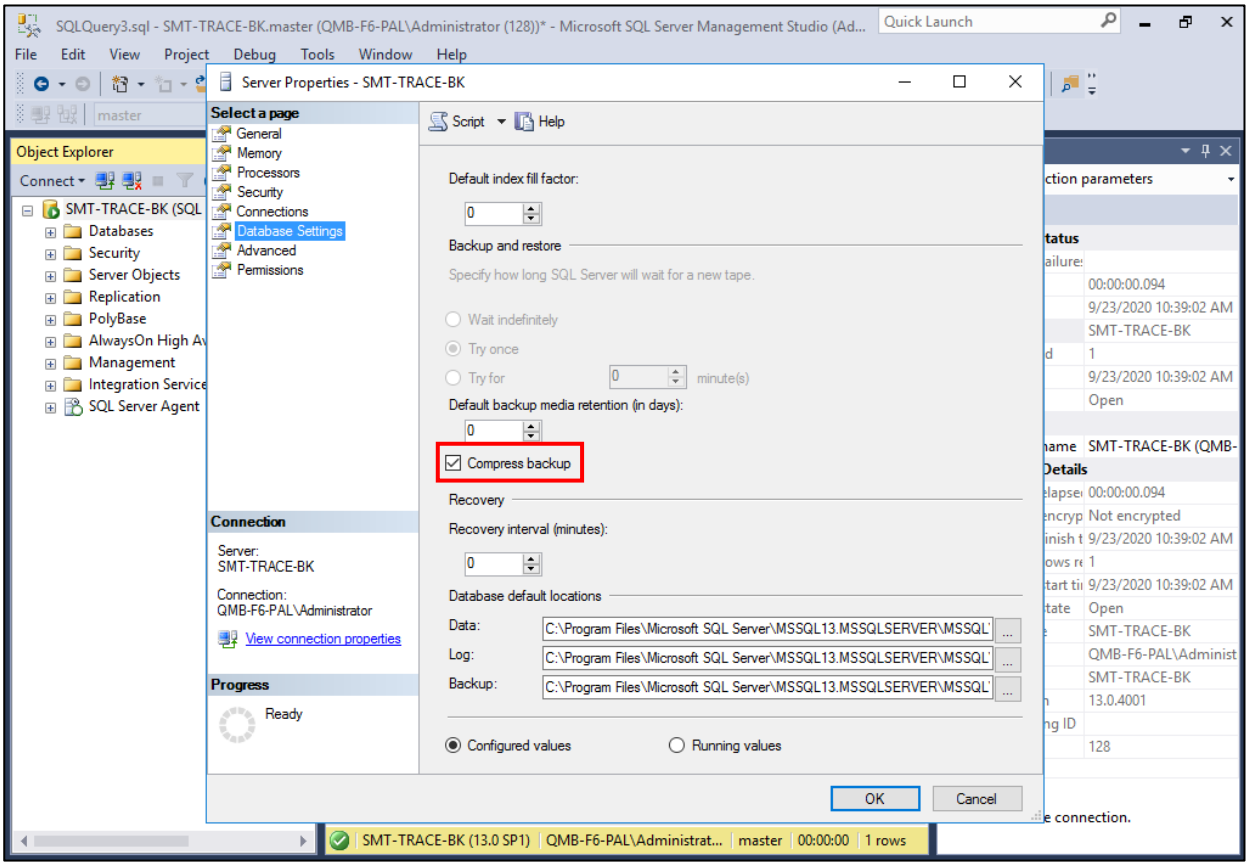
Server Memory

1. Right click at Server database -> Properties -> Memory
2. Choose Maximum **server memory (in MB) for 80 %** of RAM (Ex: at the picture have Ram 1024 GB use 80 % = 819 GB RAM(MB)*80 / 100 = 80%)
3. press OK



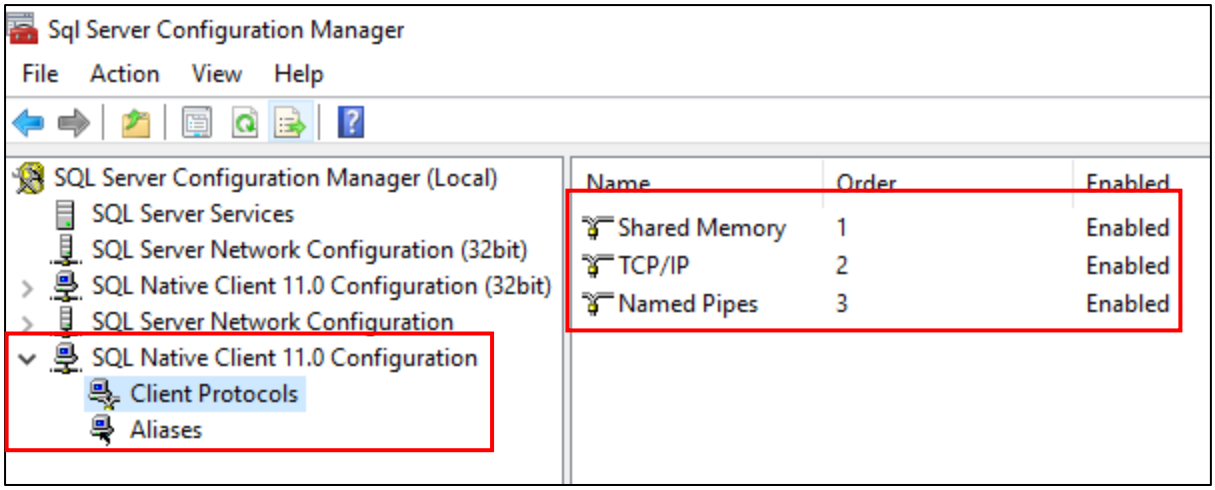
Check Compress backup setting

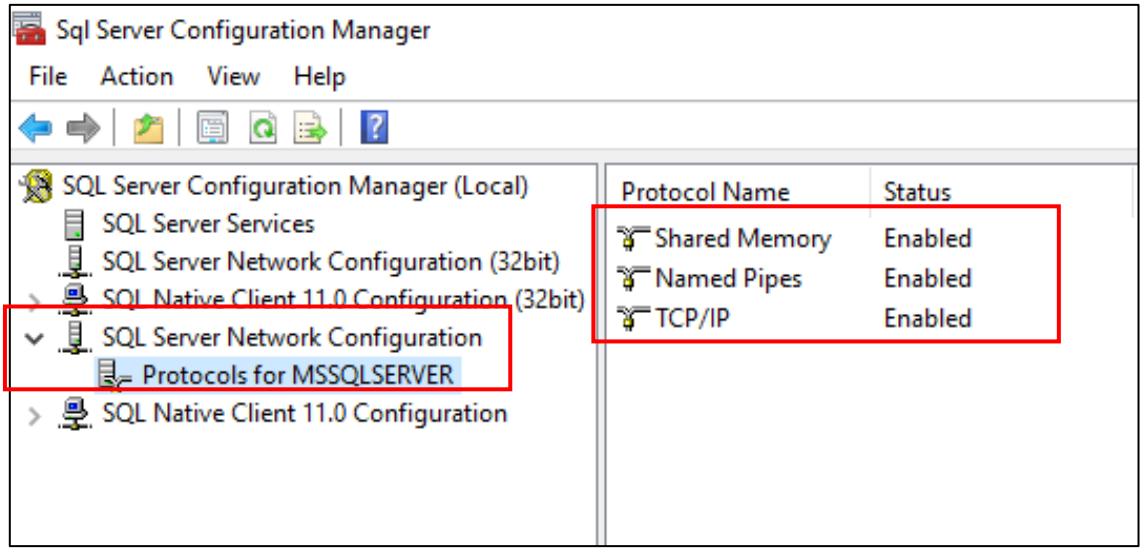
1. DB Server right click and select Properties ->Database Setting
2. make sure the **"Compress backup"** is checked



Check "Name Pipes" and "TCP/IP" must be Enable

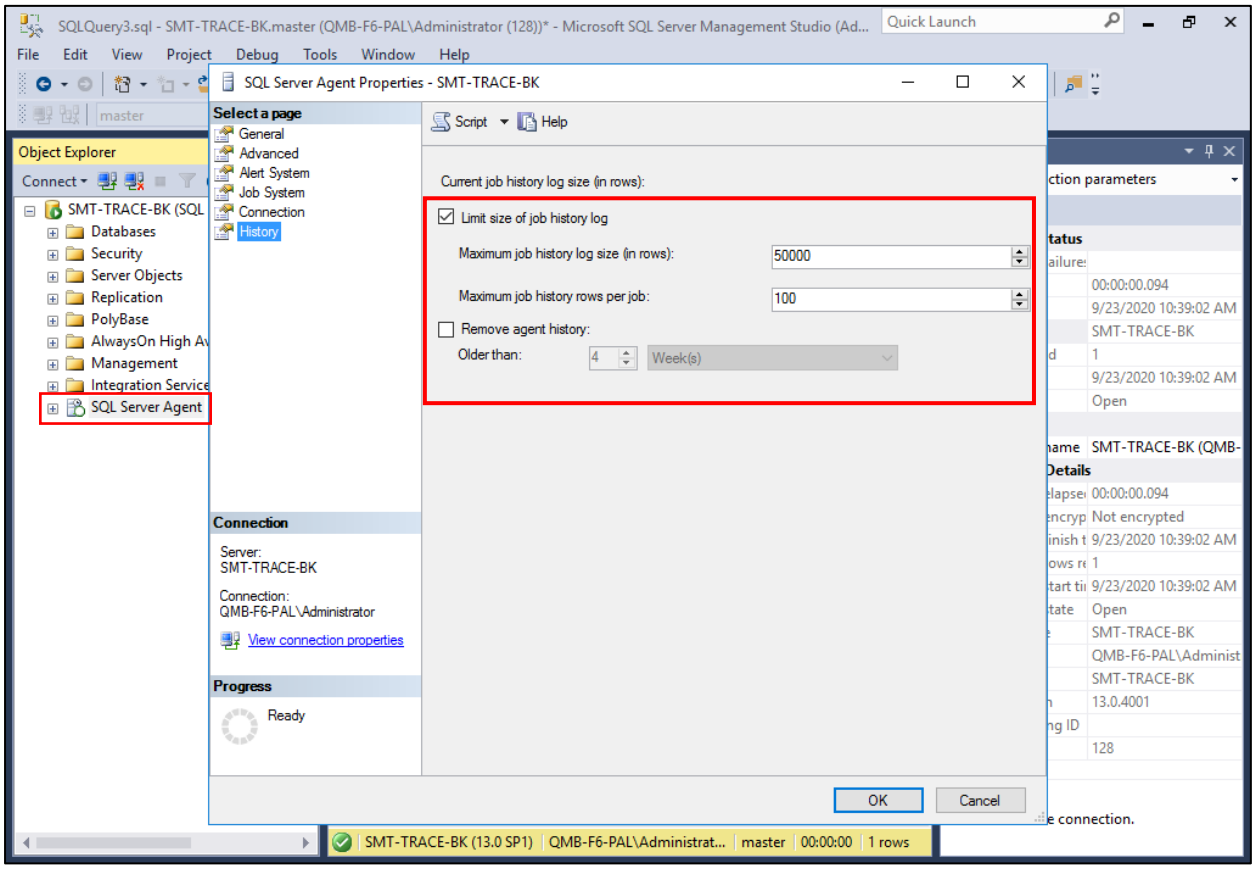
1. Open **SQL Server 2016 Configuration Management**
2. Choose SQL Server Network configuration ->protocols for MSSQLSERVER, and make sure **"Name Pipes" and "TCP/IP"** is **Enable**
3. Choose SQL Native Client 11.0 configuration -> Client protocols, and make sure **"Name Pipes" and "TCP/IP"** is **Enable.**





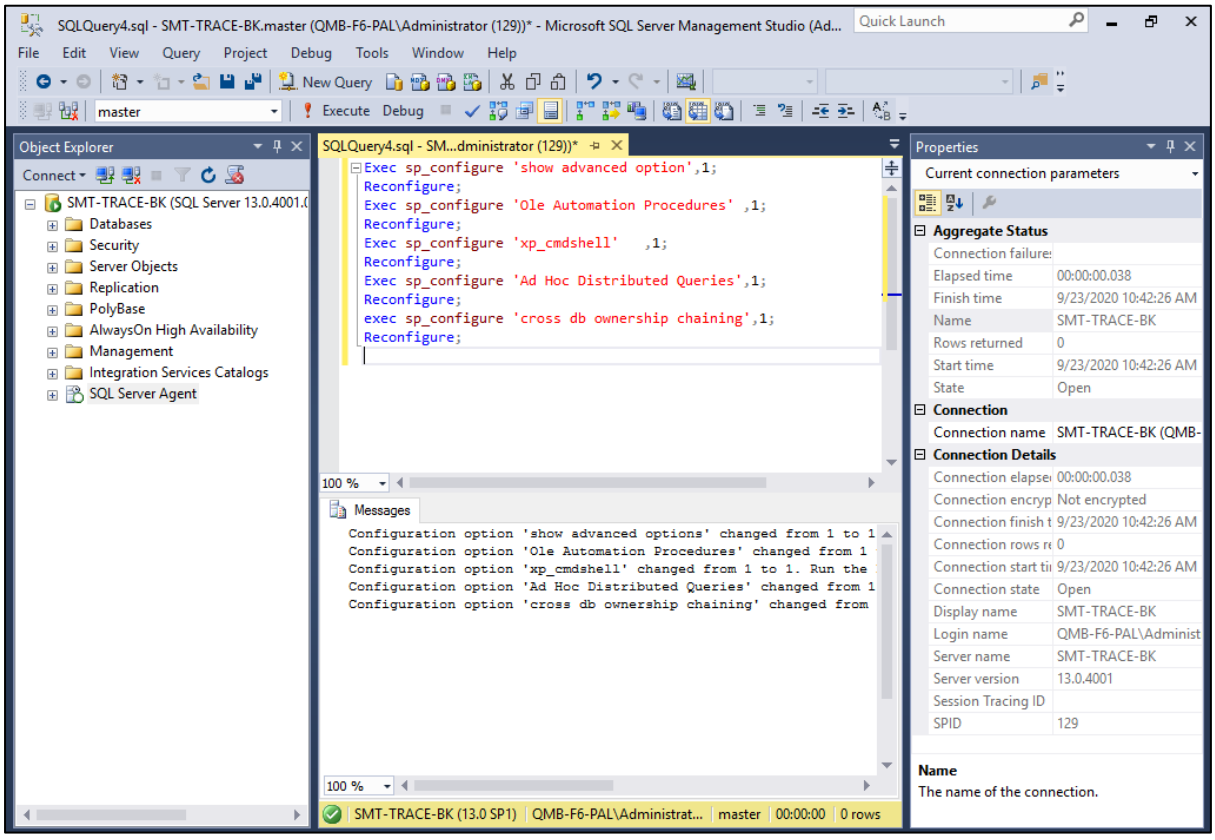
Check "SQL Agent" Job History keep quantity

1. Open **Microsoft SQL Server Management Studio**, and right click **SQL Server Agent and choose property**
2. Select History
3. Set Max Job History **Size is 50000**
4. Set Max Job History for Per Job is **100**



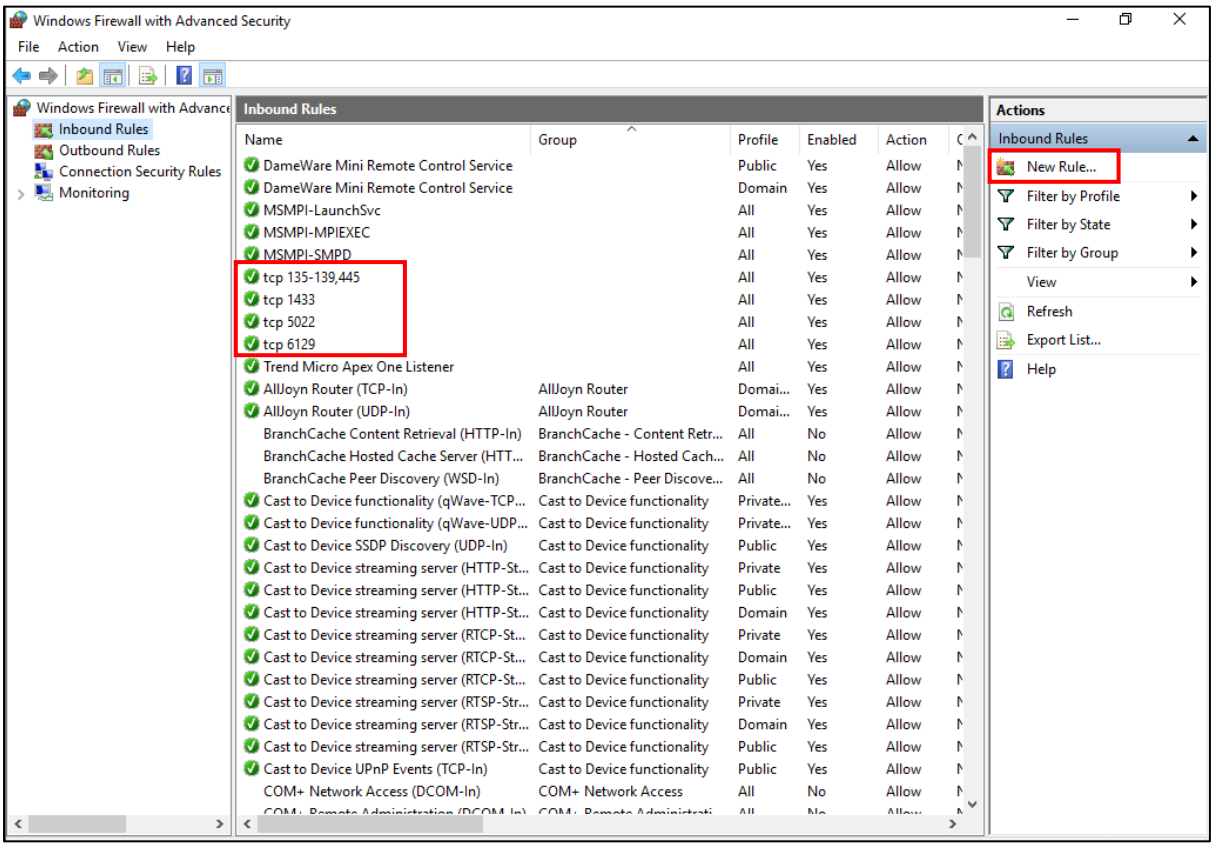
Open High Level setting

```
Exec sp_configure 'show advanced option ' ,1;
Reconfigure;
Exec Sp_configure 'Ole Automation Procedures' ,1;
Reconfigure;
Exec sp_configure 'xp_cmdshell ' ,1;
Reconfigure;
Exec sp_configure 'Ad Hoc Distributed Queries' ,1;
Reconfigure;
Exec sp_configure 'cross db ownership chaining' ,1;
Reconfigure;
```



Check Firewall

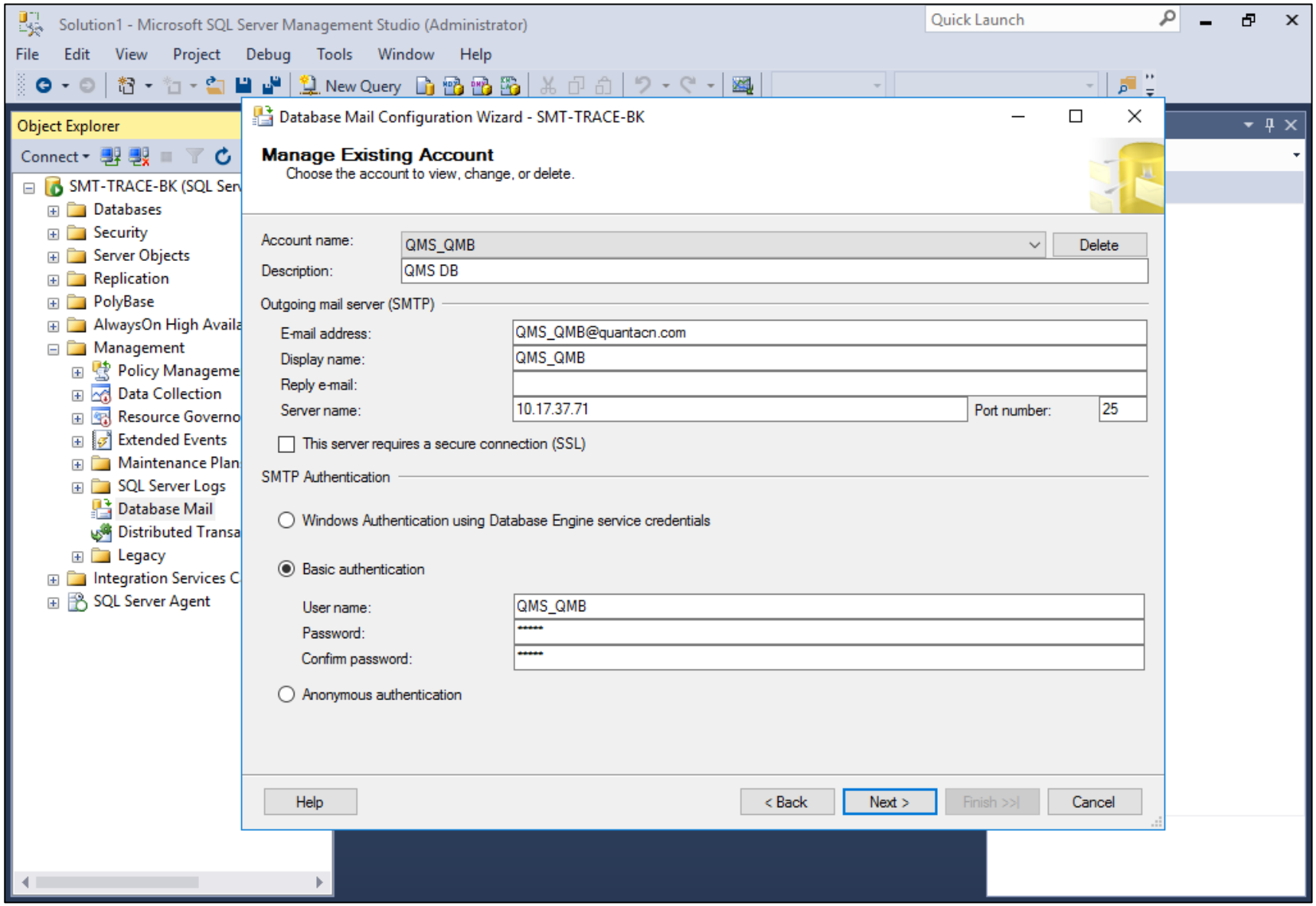
1. Run "**Windows Firewall with Advanced Security**"
2. Check "**Inbound Rules**" and select "**New Rule**",
   - tcp 135-139,445
   - tcp 1433
   - tcp 5022
   - tcp 6129



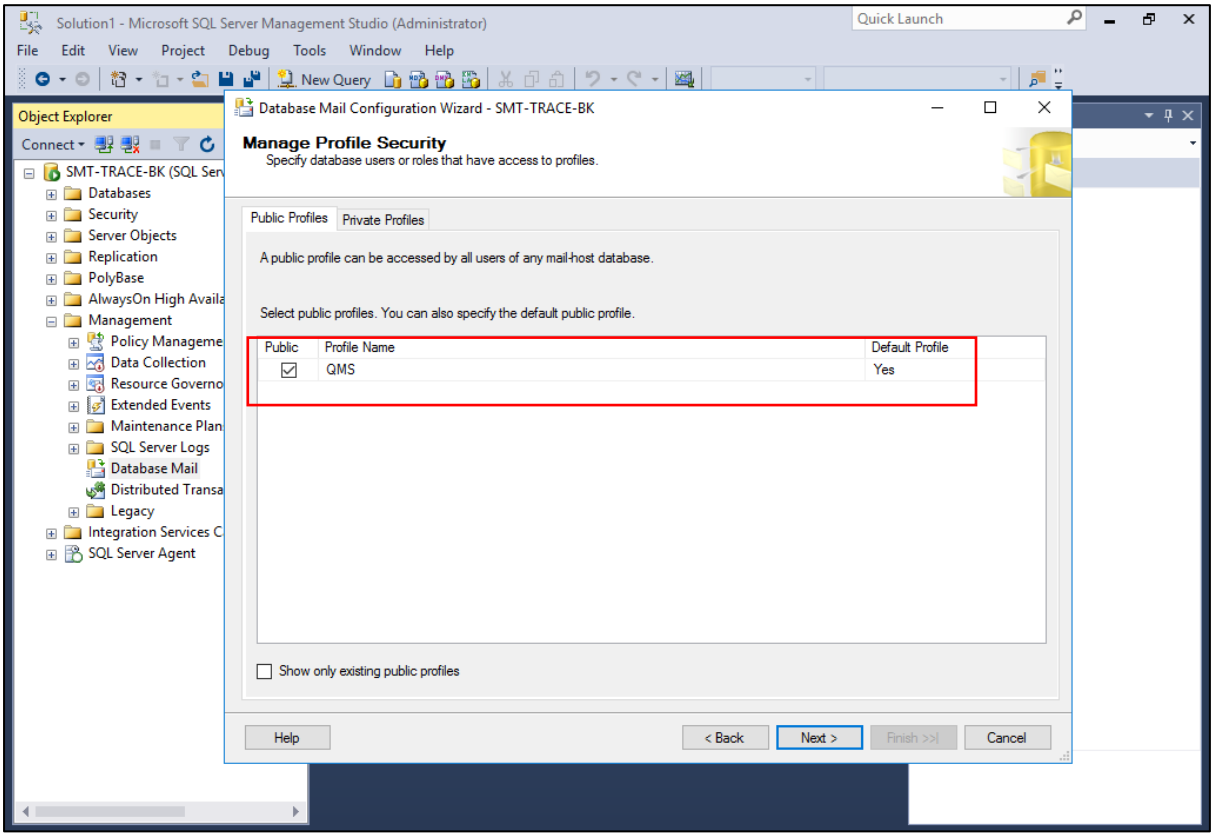
DB Mail Setting

1. Open **Microsoft SQL Server Management Studio**, spread Management and right click **Database Mail** and select "**Configure Database Mail**"
2. Select "**Manage Database Mail accounts and profiles**" and press Next
3. Select "**Create a new account**" and press Next
4. Keying the info as below:
   Account name: **QMS_QMB**
   Description: **QMB DB**
   Email address: **QMS_QMB@quantacn.com**
   Display name: **QMS_QMB**
   Server name: **10.17.37.71** Port number: **25**
   Select Basic authentication
   Username: **QMS_QMB**
   password: **QWER1234!@#$**
5. Press **Next**

Note: If server name not working try to use **10.96.22.39**


Solution1 - Microsoft SQL Server Management Studio (Administrator)
Quick Launch
File Edit View Project Debug Tools Window Help
New Query
Object Explorer
Connect
SMT-TRACE-BK (SQL Serv
Databases
Security
Server Objects
Replication
PolyBase
AlwaysOn High Availa
Management
Policy Manageme
Data Collection
Resource Governo
Extended Events
Maintenance Plan
SQL Server Logs
Database Mail
Distributed Transa
Legacy
Integration Services C
SQL Server Agent
Database Mail Configuration Wizard - SMT-TRACE-BK
Manage Existing Account
Choose the account to view, change, or delete.
Account name:
QMS_QMB
Delete
Description:
QMS DB
Outgoing mail server (SMTP)
E-mail address:
QMS_QMB@quantacn.com
Display name:
QMS_QMB
Reply e-mail:
Server name:
10.17.37.71
Port number:
25
This server requires a secure connection (SSL)
SMTP Authentication
Windows Authentication using Database Engine service credentials
Basic authentication
User name:
QMS_QMB
Password:
Confirm password:
Anonymous authentication
Help
< Back
Next >
Finish >>|
Cancel

6. Right click **Database Mail** and select "**Set up Database Mail by performing the following tasks**" and press Next
7. **Key in Profile name: QMS** and press "Add"
8. Accounting Name choose **QMS_QMB** and press OK
9. press Next



Send Test E-Mail from Database Mail

1. Open Microsoft SQL Server Management Studio, spread Management and right click **Database Mail** and select "**Send Test E-Mail**"
2. Choose "**QMS**" on Database Mail profile and key in your email address on To, finally press "**Send test E-mail**"
3. Go to your mailbox to see this e-mail is success or not.