**Workshop on MS SQL Server On Linux Day 2**

**Environment:**

Domain Name: abc.com

Domain server FQDN:Dc.abc.com  
Domain Ip: 10.0.0.50

**Today Agenda:**

* **Installing sql server on cent os**
* **Configuring windows authentication.**
* **Connecting from ssms and also using windows authentication**

**Step By step:**

1. Let's check if mssql-server repository already exists?

ls /etc/yum.repos.d | grep mssql-server.repo

OR

yum repolist

2. If it does, we need to check contents of this repository and remove that, otherwise we will face issues during the install

cat /etc/yum.repos.d/mssql-server.repo

rm -rf /etc/yum.repos.d/mssql-server.repo

3.Configure and Download SQL Server Repository

sudo curl -o /etc/yum.repos.d/mssql-server.repo https://packages.microsoft.com/config/rhel/7/mssql-server-2017.repo

4.Install SQL Server using below commands

yum install -y mssql-server

5. Configure SQL Server and Setup SA password

sudo /opt/mssql/bin/mssql-conf setup

6. Restart SQL Server Services

systemctl restart mssql-server

7. Configure repository and install Sqlcmd and other Tools to internally connect to newly installed SQL Server

sudo curl -o /etc/yum.repos.d/msprod.repo https://packages.microsoft.com/config/rhel/7/prod.repo

sudo yum install -y mssql-tools unixODBC-devel

8.Set Environment Tools to your Path Environment

echo 'export PATH="$PATH:/opt/mssql-tools/bin"' >> ~/.bash\_profile;echo 'export PATH="$PATH:/opt/mssql-tools/bin"' >> ~/.bashrc;source ~/.bashrc

9. Connect to SQL Server using sqlcmd tool

sqlcmd -S localhost -U SA -P Zoom@@123

10. Enable Firewall port 1433

sudo firewall-cmd --zone=public --add-port=1433/tcp --permanent;firewall-cmd --reload;sudo firewall-cmd --zone=public --add-port=5022/tcp --permanent;firewall-cmd --reload

11. Enable and start SQL Server Agent services

sudo /opt/mssql/bin/mssql-conf set sqlagent.enabled true

12.Restart the ms sql service

systemctl restart mssql-server.service

=====================================

13.Create SQL Server Service Account in Your Active Directory Domain

UserName= mssql

PasswordExpire= never

14.Setting ServicePrincipalName (SPN) for SQL Server Service account on Your Domain Conroller

setspn -A MSSQLSvc/node21.abc.com:1433 mssql

setspn -A MSSQLSvc/node22.abc.com:1433 mssql

15.Checking KVNO (Key Version Number) number for AD Account-usually its 2

kinit mssql@ABC.COM

kvno MSSQLSvc/node21.abc.com:1433

kvno MSSQLSvc/node22.abc.com:1433

16. Creating SQL Keytab File (AD Account with password must set this up) using ktutil

ktutil

for node21

ktutil: addent -password -p MSSQLSvc/node21.abc.com:1433@ABC.COM -k 2 -e aes256-cts-hmac-sha1-96

ktutil: addent -password -p MSSQLSvc/node21.abc.com:1433@ABC.COM -k 2 -e rc4-hmac

ktutil: wkt /var/opt/mssql/secrets/mssql.keytab

quit

for node22

ktutil

ktutil: addent -password -p MSSQLSvc/node22.abc.com:1433@ABC.COM -k 2 -e aes256-cts-hmac-sha1-96

ktutil: addent -password -p MSSQLSvc/node22.abc.com:1433@ABC.COM -k 2 -e rc4-hmac

ktutil: wkt /var/opt/mssql/secrets/mssql.keytab

quit

17. Setting up Proper permission (ownership)

chown mssql:mssql /var/opt/mssql/secrets/mssql.keytab;chmod 400 /var/opt/mssql/secrets/mssql.keytab

18. Configuring SQL Server to Point to KeyTab File

sudo /opt/mssql/bin/mssql-conf set network.kerberoskeytabfile /var/opt/mssql/secrets/mssql.keytab

19. Restarting SQL Server Services

systemctl restart mssql-server.service

22.Try to connect with ssms