

SQL SERVER 2012 – INSTALLATION FOR WINDOWS SERVER CORE

One of the most important new features in the **SQL Server 2012** release is the ability to run it on **Windows Server Core**. Server Core is perfect for back-end infrastructure applications such as **SQL Server**.

It provides all the **Windows Server** core services but lacks the graphical management shell, which you don't really need on a server box.

Running on the leaner Server Core requires less overhead, but more importantly, it's also more secure because it has a smaller attack vector and requires significantly less patching. Microsoft says that Server Core reduces the need for patching by almost 60 percent over a full Windows Server installation.

It's important to note that the Server Core implementation in **Windows Server 2012** (*originally code-named Windows Server 8*) will be significantly easier to use than the current Windows Server 2008 R2 implementation. Unlike that version, where you have to choose either a full installation or a **Server Core** installation, the upcoming **Windows Server 2012 Server Core** has an installation option that you can switch on and off.

Here's a guide to the steps for creating a **SQL Server 2012** installation for **Windows Server Core**.

1. Perform the basic Server Core configuration with sConfig.

If this is the first time you've used the Server Core system, you'll need to use these options on the **Server Configuration** tool interface to perform the basic server setup: **8) Network Settings, 1) Domain/Workgroup, 2) Computer Name**.

Then select **4) Configure Remote**, followed by **2) Enable Windows PowerShell**.

2. Enable Windows PowerShell and the .NET Framework on Server Core.

To enable **PowerShell 2.0** and the **.NET Framework 4.0**, run the following commands:

```
DISM /Online /Enable-Feature /FeatureName: NetFx2-ServerCore
DISM /Online /Enable-Feature /FeatureName: NetFx3-ServerCore
DISM /Online /Enable-Feature /FeatureName: MicrosoftWindowsPowerShell
dotnetFx40_Full_x86_x64_SC.exe /passive /promptrestart
```

3. Open the Server Core firewall ports for SQL Server using netsh.

Run the following commands in the Server Core command prompt:

```
netsh firewall set portopening TCP 1433 "SQLServer"  
netsh firewall set portopening TCP 1434 "SQL Admin Connection"
```

Depending on which **SQL Server** features you're using, you might need to open more ports. For more information you can refer to the **MSDN** article "[Configure the Windows Firewall to Allow SQL Server Access.](#)"

4. Run the SQL Server command-line installation.

Run the following command for the **Server Core** command prompt:

```
<path to setup>Setup.exe /qs /ACTION=Install /FEATURES=  
  SQLEngine,Replication /INSTANCENAME=MSSQLSERVER  
/SQLSVCACCOUNT="<DomainName\UserName>"  
  /SQLSVCPASSWORD="<StrongPassword>"  
/SQLSYSADMINACCOUNTS="<DomainName\UserName>"  
  /AGTSVCACCOUNT="NT AUTHORITY\Network Service"  
  /TCPENABLED=1 /IACCEPTSQLSERVERLICENSETERMS
```

Note that the parameters can change depending on the features you want to install. You can refer to the **Microsoft** article "[Install SQL Server 2012 on Server Core.](#)"

5. Enable SQL Server remote access.

Run **SQLCMD** from the Server Core command prompt. Then run the following commands in the **SQLCMD** window:

```
EXEC sys.sp_configure N'remote access', N'1'  
GO  
RECONFIGURE WITH OVERRIDE  
GO
```