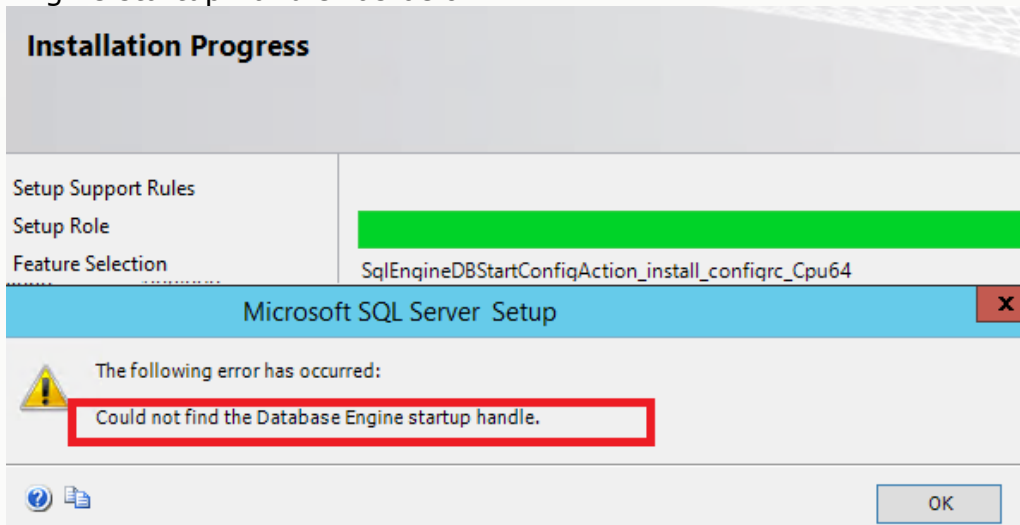




# Windows failed to install SQL Server and show "Could not find the Database Engine startup handle".

## Scenario:

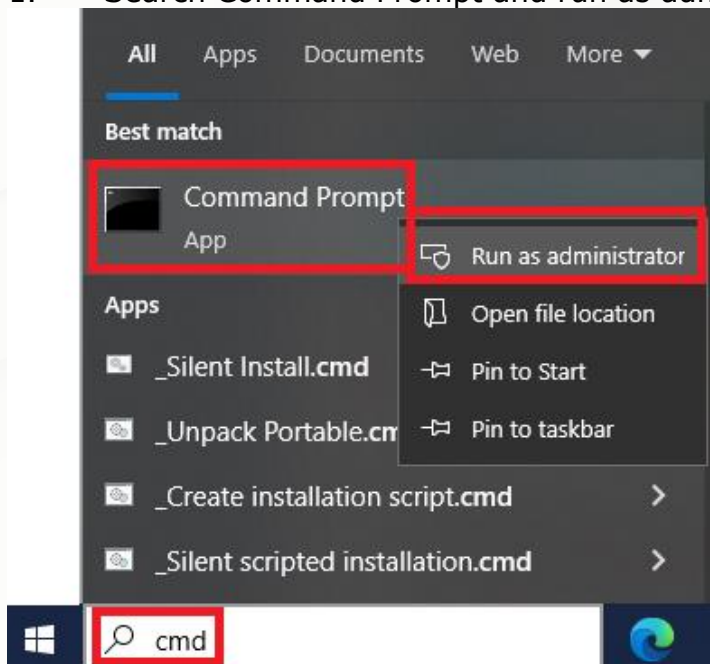
Windows failed to install SQL Server and show error message "Could not find the Database Engine startup handle" as below



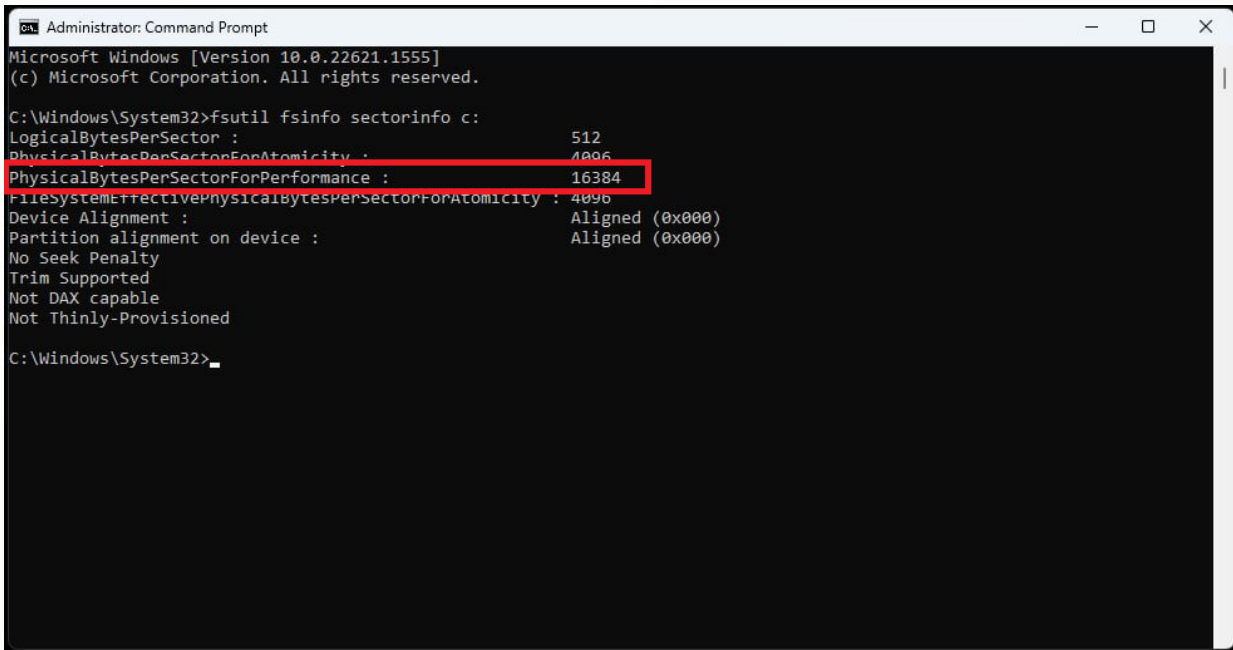
This is because on systems running Windows 11, some new storage devices and device drivers expose a disk sector size larger than the supported 4 KB sector size. When this happens, SQL Server cannot start because of the unsupported file system because SQL Server currently supports sector storage sizes of 512 bytes and 4 KB.

You can confirm that you are experiencing this specific issue by following step:

1. Search Command Prompt and run as administrator



2. Copy this command **fsutil fsinfo sectorinfo C:** and run in command prompt.
3. You can see the values for PhysicalBytesPerSectorForPerformance is greater than 4kb size.



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.22621.1555]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>fsutil fsinfo sectorinfo c:
LogicalBytesPerSector : 512
PhysicalBytesPerSectorForAtomicity : 4096
PhysicalBytesPerSectorForPerformance : 16384
FileSystemEffectivePhysicalBytesPerSectorForAtomicity : 4096
Device Alignment : Aligned (0x000)
Partition alignment on device : Aligned (0x000)
No Seek Penalty
Trim Supported
Not DAX capable
Not Thinly-Provisioned

C:\Windows\System32>
```

## Solution

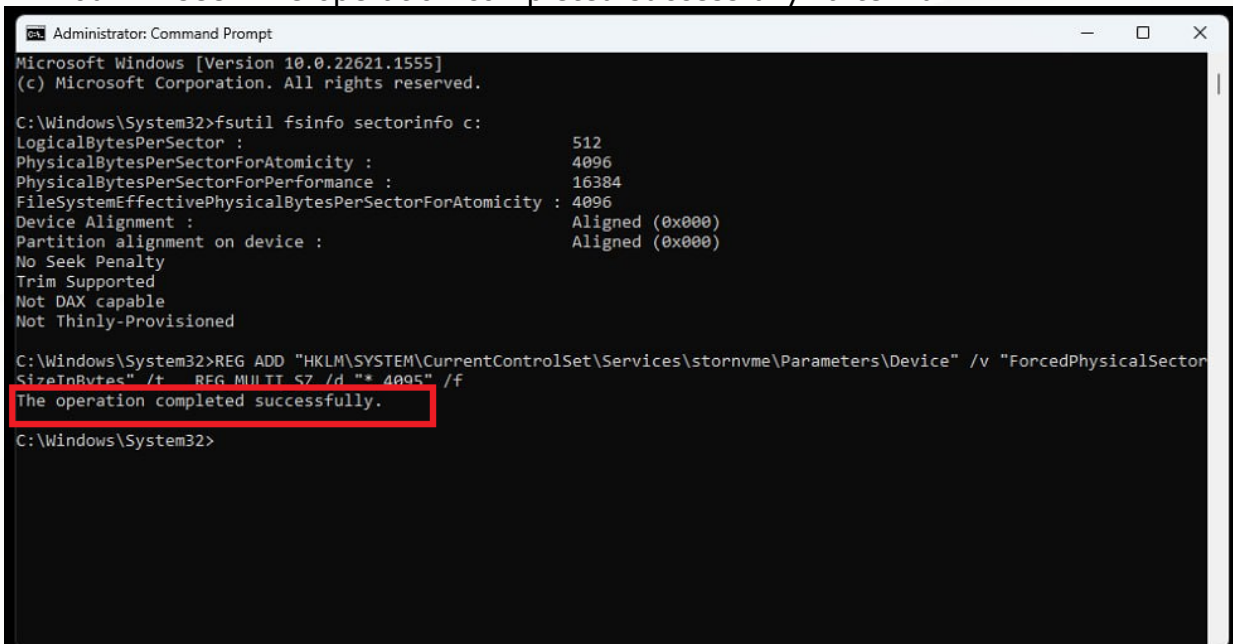
To resolve this issue, have to update the values of PhysicalBytesPerSectorForPerformance = 4 KB.

1. Copy below command and run in Command Prompt to update the values

### REG ADD

**"HKLM\SYSTEM\CurrentControlSet\Services\stornvme\Parameters\Device" /v "ForcedPhysicalSectorSizeInBytes" /t REG\_MULTI\_SZ /d "\* 4095" /f**

2. You will see "The operation completed successfully" after run.



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.22621.1555]
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C:\Windows\System32>fsutil fsinfo sectorinfo c:
LogicalBytesPerSector : 512
PhysicalBytesPerSectorForAtomicity : 4096
PhysicalBytesPerSectorForPerformance : 16384
FileSystemEffectivePhysicalBytesPerSectorForAtomicity : 4096
Device Alignment : Aligned (0x000)
Partition alignment on device : Aligned (0x000)
No Seek Penalty
Trim Supported
Not DAX capable
Not Thinly-Provisioned

C:\Windows\System32>REG ADD "HKLM\SYSTEM\CurrentControlSet\Services\stornvme\Parameters\Device" /v "ForcedPhysicalSectorSizeInBytes" /t REG_MULTI_SZ /d "* 4095" /f
The operation completed successfully.

C:\Windows\System32>
```

3. Restart PC and Install SQL Server again