

SQL SERVER DBA KNOWLEDGE DOCUMENT

Knowledgebase Document		Date	3 rd September, 2025
KB Title	Identifying SQL Server Instance Uptime		
KB Number	KB_DBA_01.0		
Department	MSSQL DBA		
KB Prepared By (Author)	Sayan Dey		
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KB Reviewed By			
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CHANGE HISTORY

KB Number	Effective Date	Significant Changes	Previous KB Number
KB_DBA_01.0	Identifying SQL Server Instance Uptime	Initial Creation	

KB Number	Author	Reviewer
KB_DBA_01.0	Sayan Dey	

Introduction

SQL Server uptime is a critical parameter that helps Database Administrators (DBAs) track the stability, availability, and performance of SQL Server instances. Knowing when a SQL Server instance was last restarted is essential for troubleshooting performance issues, validating maintenance activities, or ensuring compliance with business continuity policies. This document provides various methods to identify SQL Server instance uptime using built-in tools and logs.

KB Purpose

The purpose of this document is to provide SQL Server DBAs with a centralized reference to check SQL Server instance uptime. The document:

- Explains different approaches (Dashboard, Event Viewer, Error Logs).
- Provides step-by-step instructions for each method.
- Ensures DBAs can validate instance restarts after patching, configuration changes, or unexpected outages.
- Serves as a knowledge base for operational and troubleshooting tasks.

Scope

This knowledge document covers:

- SQL Server versions supported by SQL Server Management Studio (SSMS) reports.
- Windows Event Viewer method for tracking SQL Server service startup events.
- SQL Server Error Log analysis through SSMS and T-SQL.
- Practical guidance for day-to-day DBA tasks related to uptime validation.

📌 Out of Scope:

- Advanced third-party monitoring solutions (e.g., Grafana, SCOM, SolarWinds).
- Automated alerting mechanisms for uptime monitoring.
- High Availability/Disaster Recovery uptime tracking (Always On, Failover Clustering).

Definitions

When appropriate, a list of definitions should be included for terms used in the KB. Acronyms and abbreviations should be explained at the point of use within the KB and not listed in this section.

Sr. No.	Term	Definition
1	SQL Server Uptime	The process of determining how long SQL Server has
	Identification	been running since the last restart or failover.
2	SQL Server Start Time	The exact date and time when the SQL Server service
		was last started.
3	sys.dm_os_sys_info	A dynamic management view (DMV) that provides SQL
		Server instance-level information, including the service
		start time.

4	sys.dm_os_process_host_info	A DMV that returns process and host-related details,
		useful to validate the SQL Server process start time.
5	Error Log Start Entry	The SQL Server error log records the exact time when
		the SQL Server service starts, which can be used to
		confirm uptime.
6	Tempdb Creation Time	Since tempdb is recreated every time SQL Server
		restarts, its creation time can indicate the server start
		time.
7	SQL Server Service Restart	The event when the SQL Server service stops and starts
		again, resetting uptime.

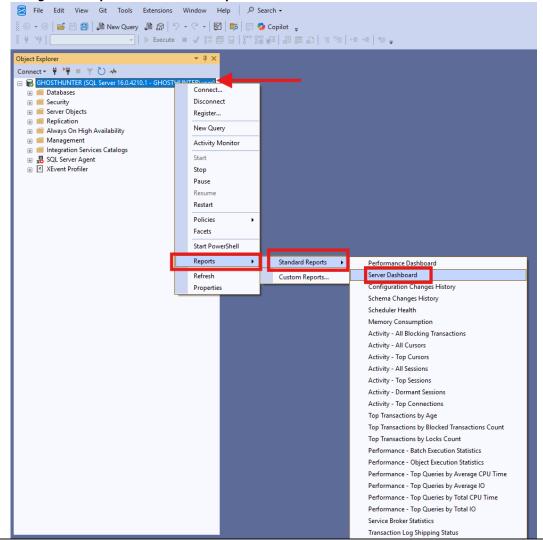
Procedure

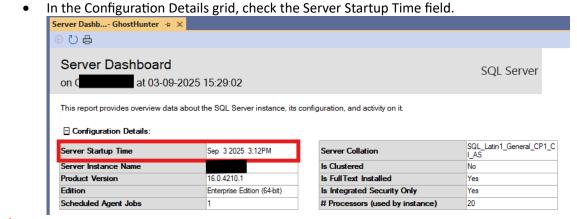
SQL Server uptime can be identified using multiple methods depending on the requirement. The following approaches are commonly used by DBAs:

Method 1: SQL Server Monitoring Dashboard

SQL Server Management Studio (SSMS) provides a built-in Server Dashboard report that displays instance uptime. Steps:

- Open SSMS and connect to the SQL Server instance.
- Right-click on the SQL Server connection.
- Navigate to Reports → Standard Reports → Server Dashboard.



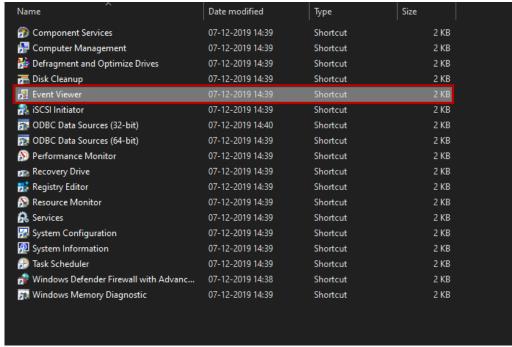


The time is displayed in HH:MM AM/PM format.

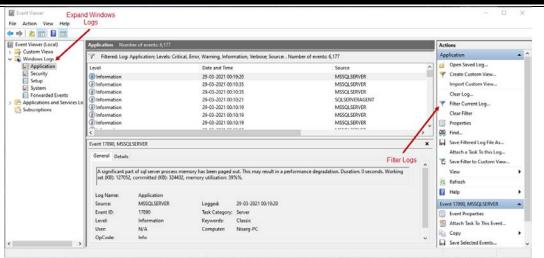
Method 2: Windows Event Viewer

SQL Server startup events are logged in the Windows Event Viewer. Steps:

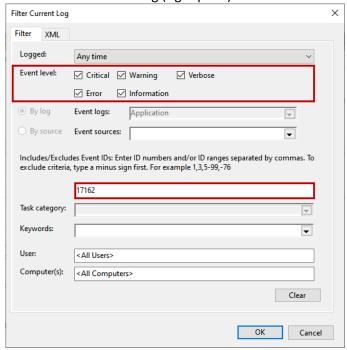
• Go to Control Panel → Administrative Tools → Event Viewer.



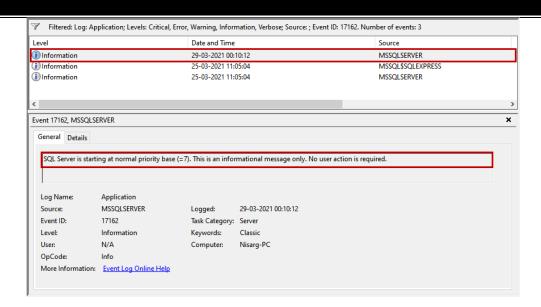
Expand Windows Logs → Application.



• Click on Filter Current Log (right pane).



- Enter Event ID: 17162 and click OK.
- Look for events where:
- Source: MSSQLSERVER
- Level: Information



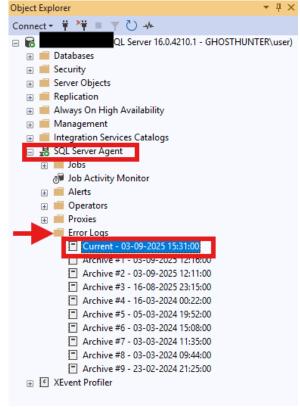
The event details will show the SQL Server instance startup time.

Method 3: SQL Server Error Log

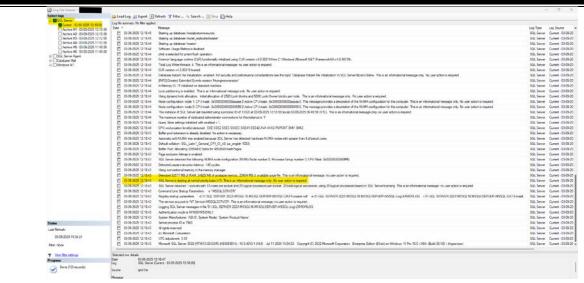
The SQL Server error log records service startup details every time the SQL Server instance restarts.

Option A: Using SSMS

- In SSMS, connect to the SQL Server instance.
- Expand Management → SQL Server Logs.



Click on Current Log.



Review entries that display the SQL Server startup time.

Option B: Using T-SQL

Run the following query in the master database:

USE master;

GO

EXEC xp_ReadErrorLog 0, 1, N'SQL', N'Starting';

Method 4: Query-Based Approach (Dynamic Management Views)

SQL Server provides system views that can also be used to check uptime. Please refer the SQL Server Up Time.sql file.



FORMS/TEMPLATES TO BE USED

Where Forms/Templates are referenced in the text, the numbers and titles are listed under this section.

Internal References

Insert relevant references as required, sufficient for the user to find the source document.

External References

https://www.sqlshack.com/different-ways-to-check-sql-server-uptime/

https://smarttechways.com/2025/01/19/check-the-uptime-of-sql-server-instance/

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