

HANA Service Health Check (M_SERVICES)

Objective

Verify that all critical SAP HANA database services are operational and available for business processing.

Operational Scenario

As part of the daily production health review, a service availability check was performed before business users began processing transactions. The objective was to identify any service-level issues that could impact system availability and proactively address them before user impact occurred.

Investigation

Investigation

The SAP HANA system view M_SERVICES was reviewed to validate the operational status and availability of database services supporting the SAP landscape.

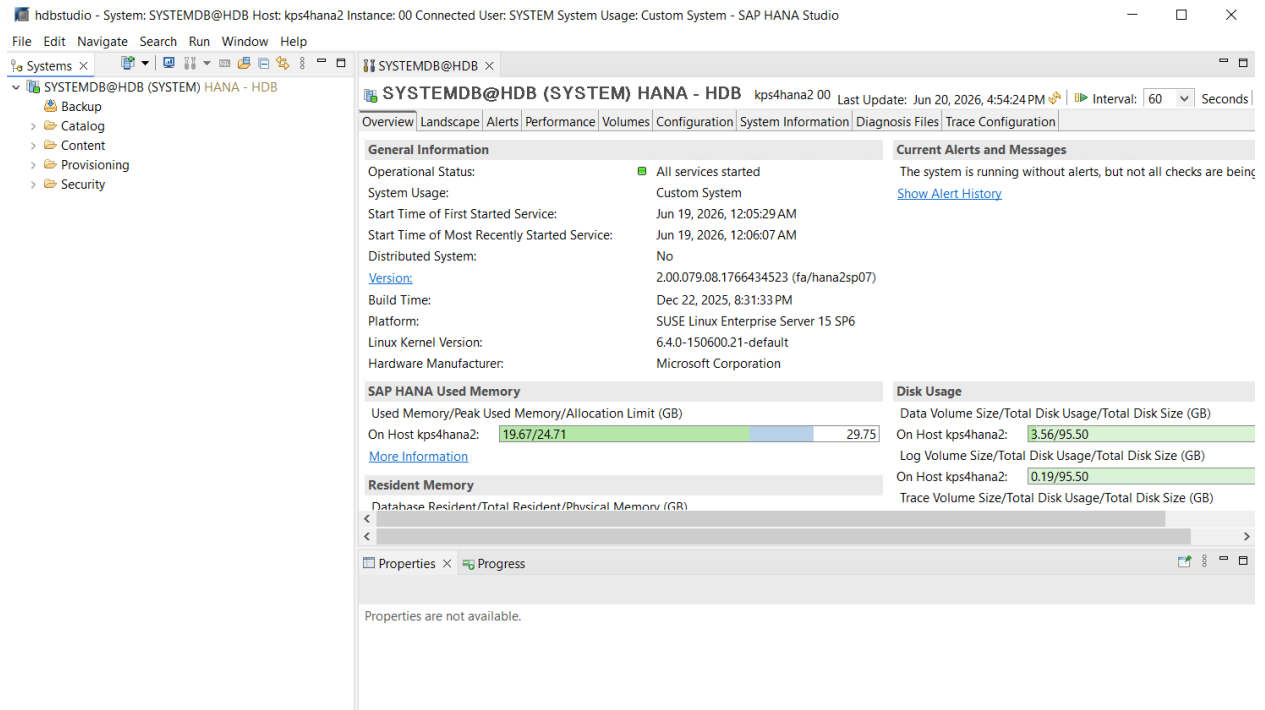
The review focused on confirming that critical HANA services were active and capable of supporting business processing activities.

The following query was executed:

```
SELECT  
  
SERVICE_NAME,  
  
ACTIVE_STATUS,  
  
PORT,  
  
HOST  
  
FROM M_SERVICES  
  
ORDER BY SERVICE_NAME;
```

Screenshot 1 – Connected SAP HANA System

step-1-hana-system-connection.png



Capture:

- SAP HANA Studio
- Connected HANA system
- System tree expanded

Purpose:

Demonstrates successful connectivity to the target SAP HANA database prior to performing administrative activities.

Screenshot 2 – M_SERVICES Health Check Results

step-2-m-services-health-check.png

The screenshot shows the SAP HANA Studio interface. The main window displays the SQL Console for the SYSTEMDB@HDB (SYSTEM) instance. A query has been executed, and the results are shown in a table format. The query is: `SELECT SERVICE_NAME, ACTIVE_STATUS, PORT, HOST FROM M_SERVICES ORDER BY SERVICE_NAME`. The results table has 5 rows and 4 columns: SERVICE_NAME, ACTIVE_STATUS, PORT, and HOST. The status of all services is 'YES'.

	SERVICE_NAME	ACTIVE_STATUS	PORT	HOST
1	compileserver	YES	30,010	kps4hana2
2	daemon	YES	30,000	kps4hana2
3	nameserver	YES	30,001	kps4hana2
4	preprocessor	YES	30,002	kps4hana2
5	webdispatcher	YES	30,006	kps4hana2

Statement 'SELECT SERVICE_NAME, ACTIVE_STATUS, PORT, HOST FROM M_SERVICES ORDER BY SERVICE_NAME' successfully executed in 2 ms 100 µs (server processing time: 0 ms 905 µs)
 Fetched 5 row(s) in 0 ms 100 µs (server processing time: 0 ms 0 µs)

Capture:

- SQL query
- Database connection
- SERVICE_NAME
- ACTIVE_STATUS
- PORT
- HOST
- Query results

Purpose:

Provides evidence that the M_SERVICES health check was executed and confirms the operational status of SAP HANA services.

Analysis

The M_SERVICES results were reviewed to verify the operational status of SAP HANA services.

Particular attention was given to the ACTIVE_STATUS column because service availability directly affects database accessibility and application processing.

The review confirmed that all listed services reported ACTIVE_STATUS = 'YES', indicating that they were operational at the time of analysis.

Any service reporting ACTIVE_STATUS = 'NO' would require immediate investigation due to the potential impact on system availability and business operations.

Findings

All services returned by the M_SERVICES query were operational at the time of review.

The compileserver, daemon, nameserver, preprocessor, and webdispatcher services all reported ACTIVE_STATUS = 'YES', confirming service availability across the reviewed SAP HANA environment.

No service outages, communication failures, or abnormal service conditions were identified during the analysis.

Business Impact

Service availability directly affects the ability of users and applications to access SAP systems.

Identifying service failures before business hours reduces operational risk and helps prevent unplanned downtime.

Lessons Learned

- Service health checks provide early visibility into database availability issues.
- Critical service failures can often be detected before users experience system disruption.
- Daily monitoring activities contribute to stable system operations.

Skills Demonstrated

- SAP HANA Administration
- SAP Basis Monitoring
- SQL Analysis
- Service Availability Validation
- Production Support Operations

