Backup Verification (M_BACKUP_CATALOG)

Overview

This case study documents how I verified recent SAP HANA backup operations using the `M_BACKUP_CATALOG` system view. The investigation was carried out to confirm that scheduled backup jobs completed successfully and that a recent recovery point was available if the database needed to be recovered.

Objective

Verify that recent SAP HANA backup operations completed successfully, review the backup history, and confirm that the database had a valid recovery point.

System Environment

Component	Details
SAP System	SAP S/4HANA Sandbox
Database	SAP HANA
Database View	M_BACKUP_CATALOG
Tool	SAP HANA Studio
Interface	SQL Console
Database	SYSTEMDB
User	SYSTEM

Business Scenario

Checking database backups is one of the regular tasks performed by a SAP BASIS administrator. Rather than assuming scheduled backups completed successfully, the backup catalog should be reviewed to confirm that recent backup jobs finished without errors and that recovery data is available if needed.

Investigation

To verify recent backup activity, I queried the `M_BACKUP_CATALOG` system view. This view stores the history of SAP HANA backup operations, including the backup type, execution status, and execution time.

During the investigation, I focused on three key areas:

- Backup Type (ENTRY_TYPE_NAME)
- Backup Status (STATE_NAME)
- Backup Start Time (SYS_START_TIME)

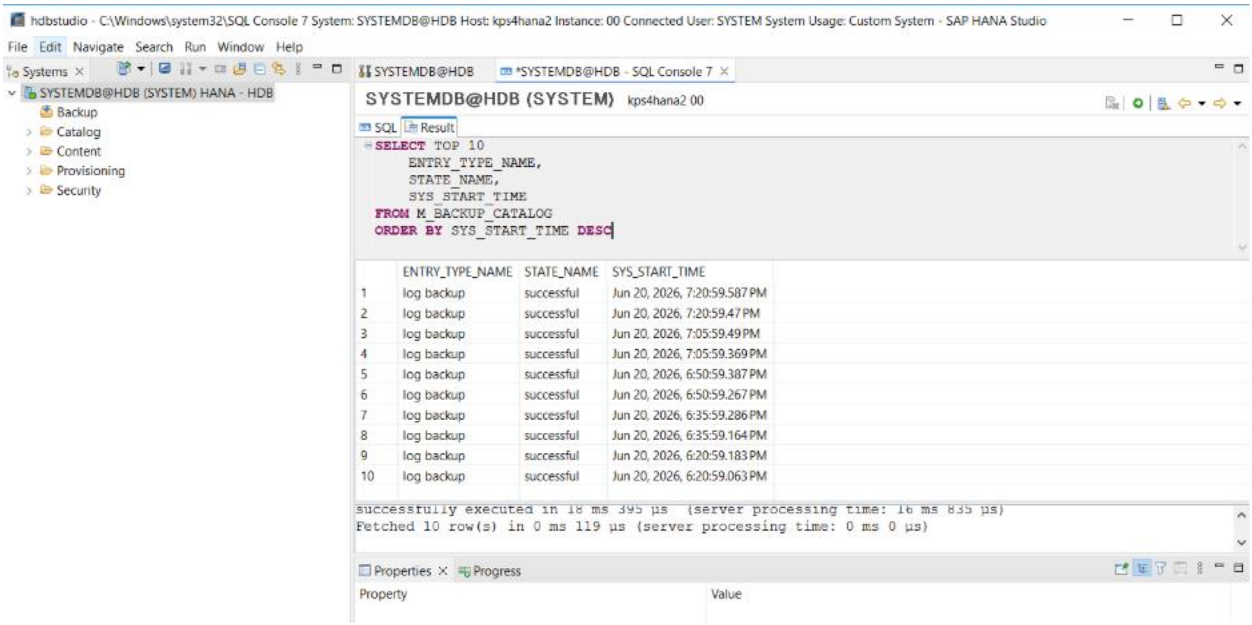
These values help confirm whether recent backup jobs completed successfully and whether the system has a valid recovery point.

SQL Query

```
SELECT TOP 10
    ENTRY_TYPE_NAME,
    STATE_NAME,
    SYS_START_TIME
FROM M_BACKUP_CATALOG
ORDER BY SYS_START_TIME DESC;
```

Evidence (Screenshot)

Screenshot 1 – Backup Catalog Verification



Observation

The query returned the most recent SAP HANA backup entries. Every record displayed a backup status of **"successful"**, and the timestamps confirmed that backup jobs were running at regular intervals. No failed or cancelled backup operations were found during the review.

Technical Findings

The investigation confirmed that:

- Recent SAP HANA backup jobs completed successfully.
- No failed or cancelled backup operations were identified.
- Backup timestamps showed that scheduled backups were running consistently.
- A recent recovery point was available.
- No immediate SAP BASIS action was required.

Analysis

I used the `M_BACKUP_CATALOG` system view because it provides a complete history of SAP HANA backup operations. Reviewing this information allowed me to verify that recent backup jobs completed successfully and that the database had a valid recovery point.

Although this investigation confirmed successful backups, backup verification is only one part of disaster recovery. Regular monitoring helps identify backup issues early and ensures recovery data is available when required.

Conclusion

The backup verification confirmed that recent SAP HANA backup operations completed successfully and that a valid recovery point was available. No failed or incomplete backup jobs were identified during the investigation, indicating that the backup process was operating as expected.

Key Takeaway

This investigation showed the importance of verifying backup completion rather than assuming scheduled jobs ran successfully. By reviewing the backup catalog, I confirmed that the backup process was working correctly and that recovery data was available if the database needed to be restored.

Skills Demonstrated

- SAP HANA Administration
- Backup Monitoring
- SQL Analysis
- Disaster Recovery Readiness
- SAP BASIS Operations

- System Health Verification
- Technical Investigation
- Technical Documentation