



Service Report

EarlyWatch ® Alert

Confidential

SAP System ID

ERP

Product

SAP S/4HANA 1909

Status

Productive

DB System

SAP HANA Database 2.00.046.00

Processed on SAP Solution Manager SMP

Release SOLUTION MANAGER 7.2

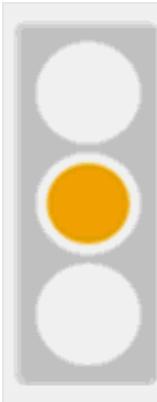
Service Tool 720 SP16

Service Content 14.01.2026

Analysis from	26.01.2026	Session No.	0010000013296
Until	01.02.2026	Installation No.	0021075820

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1 Service Summary



This EarlyWatch Alert session detected issues that could potentially affect your system. Please evaluate the recommendations.

Alert Overview

☒	Mainstream/extended maintenance/priority-one support (if offered) for your SAP product version has ended or will end soon.
☒	SAP HANA Database: The maintenance end for your HANA Database Support Package Stack is reached.
☒	Gateway Access Control List sec_info is not effective. Well-known attacks may endanger your system.
☒	SAP Software on this system is outdated. Support with SAP Security Notes is no longer ensured.
☒	SAP HANA database: User SYSTEM is active and valid.
☒	SAP HANA database: Support Package has run out of security maintenance. Support with SAP Security Notes is no longer ensured.
☒	Users with critical authorizations, which allow to do anything in client 000
☒	Users with critical authorizations, which allow to do anything in other client(s) than 000
☒	Users with critical authorizations, which should not be used in production in other client(s) than 000
⚠	With the SAP kernel of your ABAP system the stability or consistency is at risk.
⚠	We found more than 30 ABAP dumps in your system.
⚠	SAP HANA database: Parameters are not set in accordance with the recommendation.
⚠	SAP HANA database: Number of Records reaches recommended limit.
⚠	SAP HANA database: Memory consumption of tables exceeds 50% of usable memory.
⚠	SAP HANA database: Consistency checks are scheduled without the global consistency check.
⚠	SAP HANA database: Few SAP HANA dumps occurred on your system.
⚠	Standard users have default passwords in other client(s) than 000
⚠	TMSADM exists in another client than 000

To provide feedback on the alerts, please use the 'Hide and Snooze Alert' functionality in the [Solution Finder](#). You can hide alerts if you consider them irrelevant or snooze them if the recommendations are already in implementation. The blog [Hide and Snooze SAP EarlyWatch Alerts](#) explains how to use it and the required authorization "Manage Alert(s)" in SAP EarlyWatch Alert.

Note: If you send SAP EarlyWatch Alert data to SAP, this report can be viewed in "[SAP for Me](#)". One of the benefits of using [SAP EarlyWatch Alert Workspace](#) is receiving proactive alerts that are calculated in the workspace only and are not available in a Solution Manager. Do not miss any important findings: subscribe to notifications with just a few clicks on [Notification Activation](#). For detailed configuration options, read this [Best Practices](#) blog.

How to get access to the SAP EarlyWatch Alert apps is explained in [SAP Note 2520319](#). The following link to the [SAP EarlyWatch Alert Reports](#) app always opens up the latest report for this system. Similarly, this link to the [SAP EarlyWatch Alert Dashboard](#) shows you the analytical dashboard for this system. Specific links to analytical detail pages in [SAP EarlyWatch Alert Workspace](#) are included in the respective sections in this report.

The [EWA Status App](#) is your entry point for analysis if you are missing the current data in EarlyWatch Alert apps.

Check Overview

Topic Rating	Topic	Subtopic Rating	Subtopic
☒	Service Data Quality and Service Readiness		
		✓	Sending EarlyWatch Alert of ERP to SAP Backbone

Topic Rating	Topic	Subtopic Rating	Subtopic
		✓	Configuring ERP for SAP Note Assistant
		✗	Service Preparation of ERP
✗	Software Configuration for ERP	✗	SAP Application Release - Maintenance Phases
		✗	Security Risk Due to Outdated Support Packages
		✓	Database - Maintenance Phases
		✓	Operating System(s) - Maintenance Phases
		⚠	SAP Kernel Release
		✗	HANA Database Version for HRP
✓	Hardware Capacity		
✓	Workload Distribution ERP	✓	Workload by Application Module
		✓	DB Load Profile
✓	Performance Overview ERP		
⚠	SAP System Operating ERP	✓	Availability based on Collector Protocols
		⚠	Program Errors (ABAP Dumps)
		✓	Update Errors
		⚠	Table Reorganization
		✓	Critical Number Ranges
✗	Security	✓	
		✓	System Recommendations (HANA)
		✗	Maintenance Status of current SAP HANA Database Revision
		✓	SAP HANA System Privilege DATA ADMIN
		✓	SAP HANA Password Policy
		✓	SAP HANA Audit Trail
		✓	SAP HANA SQL Trace Level
		✓	SAP HANA Network Settings for Internal Services
		✓	SAP HANA Network Settings for System Replication Communication (listeninterface)
		✗	Activation Status and Validity of User SYSTEM
		✓	System Recommendations (ABAP)
		✗	Age of Support Packages
		⚠	Default Passwords of Standard Users
		✓	Control of the Automatic Login User SAP*
		✓	Protection of Passwords in Database Connections
		✓	ABAP Password Policy
		✗	RFC Gateway Security
		✓	Message Server Security
		✗	Critical authorizations, which allow to do anything

Topic Rating	Topic	Subtopic Rating	Subtopic
		☒	Critical authorizations, which should not be used in production
		⚠	Critical authorizations, which should only see very limited use in production
✓	Software Change and Transport Management of ERP		
		✓	Number of Changes
		✓	Emergency Changes
		✓	Failed Changes
⚠	Upgrade Planning	⚠	Compatibility Package Usage: Information for SAP Solution Manager
⚠	SAP HANA Database HRP	⚠	SAP HANA Stability and Alerts
		⚠	SAP HANA Database Configuration
		⚠	SAP HANA Resource Consumption
		✓	SAP HANA Workload and Performance
		⚠	Size and Growth
		⚠	Administration
⚠	SAP NetWeaver Gateway	⚠	MetaData Cache Activation
		✓	Logging Configuration
		✓	Gateway Error Logs
		⚠	Important Periodic Jobs

The check overview includes checks executed with a green result, which do not appear in the report.

Note: All recommendations in this report are based on our general experience. Test them before using them in your production system. Note that EarlyWatch Alert is an automatic service.

Note: If you have any questions about the accuracy of the checks in this report or the correct configuration of the SAP EarlyWatch Alert service, create a customer case under component SV-SMG-SER-EWA.

Note: If you require any assistance in resolving concerns about your system performance or if you require a technical analysis of other aspects of your system as highlighted in the report, please follow the instructions below:

Create a case using the [Get Support application in SAP for Me \(KBA 1296527 \)](#). Contact one of the [administrators](#) in your company if your S-user ID does not have the required authorizations.

Within case creation, select the system. From the menu, choose:

- *Product* : Customer Project-Based Solution

- *Component* : insert required component (for example, if you wish to open a case on the topic 'performance', please use component SV-PERF.)

If you need assistance, contact your local Customer Interaction Center (CIC) or SAP representative. Please refer to [SAP Note 560499](#) . For information about how to set the appropriate priority level, see [SAP Note 67739](#) .

1.1 Performance Indicators for ERP

The following table shows the relevant performance indicators in various system areas.

Area	Indicators	Value	Trend
System Performance	Active Users (>400 steps)	148	↘
	Avg. Availability per Week	100 %	↗

Area	Indicators	Value	Trend
	Avg. Response Time in Dialog Task	623 ms	↘
	Max. Dialog Steps per Hour	5892	↗
	Avg. Response Time at Peak Dialog Hour	529 ms	↗
	Avg. Response Time in RFC Task	400 ms	↘
	Max. Number of RFCs per Hour	57061	→
	Avg. RFC Response Time at Peak Hour	436 ms	↗
Hardware Capacity	Max. CPU Utilization on DB Server	3 %	→
	Max. CPU Utilization on Appl. Server	24 %	→
Database Performance	Avg. DB Request Time in Dialog Task	168 ms	↘
	Avg. DB Request Time for RFC	30 ms	↘
	Avg. DB Request Time in Update Task	65 ms	↗
Database Space Management	DB Size	4234.98 GB	→
	DB Growth Last Month	1523.95 GB	→

2 Landscape

2.1 Products and Components in current Landscape

Product

System	SAP Product	Product Version
ERP~ABAP	SAP S/4HANA	1909

Main Instances

Related System	Main Instance
ERP~ABAP	SAP S/4HANA Server

Databases

Related System	Database System	Database Version	DB ID
ERP~ABAP	SAP HANA Database	2.00.046.00	HRP

2.2 Servers in current Landscape

SAP Application Servers

System	Host	Instance Name	Logical Host	ABAP	JAVA
ERP~ABAP	azsaerpaas05	saperpaas05_ERP_00	saperpaas05	✓	
ERP~ABAP	azsaerpaas04	saperpaas04_ERP_00	saperpaas04	✓	
ERP~ABAP	azsaerpaas03	saperpaas03_ERP_00	saperpaas03	✓	
ERP~ABAP	azsaerpaas02	saperpaas02_ERP_00	saperpaas02	✓	
ERP~ABAP	azsaerpaas01	saperpaas_ERP_00	saperpaas	✓	
ERP~ABAP	azsaerppas01	saperppas_ERP_00	saperppas	✓	
ERP~ABAP	azsaerpaas06	saperpaas06_ERP_00	saperpaas06	✓	

DB Servers

Related System	Host	Logical Host (SAPDBHOST)
ERP~ABAP	azsahrpdb02	saphrphdb

Components

Related System	Component	Host	Instance Name	Logical Host
ERP~ABAP	ABAP SCS	saperpascspr	saperpascspr_ERP_10	saperpascspr

2.3 Hardware Configuration

Host Overview

Host	Hardware Manufacturer	Model	CPU Type	CPU MHz	Virtualization	Operating System	CPUs	Cores	Memory in MB
azsaerpaa s01	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8370C	2800	HYPER-V	SUSE Linux Enterprise Server 15 (x86_64)	8	4	64298
azsaerpaa s02	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8272CL	2600	HYPER-V	SUSE Linux Enterprise Server 15 (x86_64)	8	4	64298
azsaerpaa s03	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8370C	2800	HYPER-V	SUSE Linux Enterprise Server 15 (x86_64)	8	4	64298
azsaerpaa s04	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8370C	2800	HYPER-V	SUSE Linux Enterprise Server 15 (x86_64)	8	4	64298
azsaerpaa s05	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8370C	2800	HYPER-V	SUSE Linux Enterprise Server 15 (x86_64)	8	4	64298
azsaerpaa s06	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8272CL	2600	HYPER-V	SUSE Linux Enterprise Server 15 (x86_64)	8	4	64298
azsaerppa s01	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8272CL	2600	HYPER-V	SUSE Linux Enterprise Server 15 (x86_64)	8	4	64298
azsahrpdb 02	Microsoft Corporation	Virtual Machine[Hyper-V UEFI Release v4.1]	Xeon Platinum 8280L	2700	AZURE	SUSE Linux Enterprise Server 15 (x86_64)	128	64	3922949
saperpasc spr									

2.4 Transport Landscape

The information is extracted from the transport management system of ERP

Note: only real systems are considered, other systems are excluded.

The system role is determined based on the position of the system in the transport track. The first system is considered to

be the development system, the system(s) with the longest transport track with no systems in line behind it is (are) considered to be the productive system(s). All systems in between and on parallel, but shorter, tracks are considered to be test systems. Systems in which no transport connections were detected are considered standalone systems.

The column "Detected By" denotes whether the system role was determined using the rules (R) or master data (M).

The system number and link to the SAP EarlyWatch Alert Dashboard can be determined only for systems sending data to SAP.

Transport Track	Position	System Role	System ID	Installation Number	System Number	Detected By
ERDERP	1	Development	ERD	0021075820		R
ERDERP	2	Test	ERQ	0021075820		R
ERDERP	3	Production	ERP	0021075820	00000000800556053	R

3 Service Data Quality and Service Readiness

	<p>Configuration hints for optional service data are provided.</p> <p>The SAP S/4HANA system ERP is not fully prepared for delivery of future remote services.</p>
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Rating	Check Performed
✓	Sending EarlyWatch Alert of ERP to SAP Backbone
✓	Configuring ERP for SAP Note Assistant
✗	Service Preparation of ERP

3.1 Mainstream Maintenance for SAP Solution Manager

SAP Solution Manager is in mainstream maintenance until the **end of 2027**. SAP Cloud ALM is the go-to ALM platform for all SAP customers. It is recommended that you start the transition to SAP Cloud ALM now and complete it before 2028.

To build your roadmap for moving from SAP Solution Manager to SAP Cloud ALM, visit the transition center on [SAP Support Portal](#).

The recommended starting point for the transition is the [SAP Readiness Check for SAP Cloud ALM](#).

3.2 Sending EarlyWatch Alert of ERP to SAP Backbone

	<p>System ERP is prepared for SAP Support Backbone update sending EWA data on HTTPS through SAP S/4HANA 1909 ERP</p>
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All connections to SAP Support Backbone use https protocol only. For a how to, refer to [Connectivity to SAP](#).

The following table shows the latest data transmissions for system ERP:

Latest Service Data for System ERP Sent to SAP

Date (collected)	System	Sends EWA?	Kernel	Kernel	ST-PI	ST-PI	Destination	User	Ready for 2020	Dest. Functional?
02.02.2026	Solution Manager 7.2 SMP	no	753_REL 1500	✓	740 30	✓	HTTPS -> SAP	S-user	✗	✓
09.02.2026	SAP S/4HANA 1909 ERP	yes	777 800	✓	740 30	✓	SAP-SUPPORT_PORTAL HTTPS -> SAP	S-user	✓	

3.2.1 Configuring ERP for SAP Note Assistant

Configuration and Usage of Digitally Signed SAP Notes

Type	Finding	Further Information
✗	SNOTE is configured to connect with HTTPS to SAP using destination SAP-SUPPORT_PORTAL to SAP's Service market place and destination SAP-SUPPORT_NOTE_DOWNLOAD to SAP's File content management system	Guided Answer 'Options for Downloading Digitally Signed SAP Notes'

3.3 Service Data Quality



The service data is collected by the Service Data Control Center (SDCCN) or read from the Solution Manager's BW or Configuration and Change Database (CCDB).

Recommendation: To resolve issues with the service data quality, follow the hints and SAP Notes provided below.

3.3.1 Quality of Service Data in Solution Manager Diagonstics - BW

Prio.	Report Area affected	Details and Related Infocube	SAP Note
!	Workload of ABAP System ERP	No performance data is returned from BW InfoCube.Infocube: 0CCMSMTPH used in section 'Workload Overview ERP'	1840395

Legend for 'Priority' Column Above

Prio.	Explanation: Impact of Missing or Erroneous Data
!	An optional check was skipped.

3.4 Service Preparation of ERP

Rating	Check Performed
!	Service Preparation Check (RTCCTOOL)
!	Service Data Control Center of ERP
!	Hardware Utilization Data

In preparation for SAP services, ensure that connections, collectors, and service tools are up to date. These functionalities are explained in SAP Notes [91488](#) and [2253047](#).

3.4.1 Service Preparation Check (RTCCTOOL)

Before we can ship any services, the latest version of the SAP Service tools must be implemented in your system.

Report RTCCTOOL was last run on 02.02.2026. During the check, the tool detected issues for which a RED rating was set.

Overall Status	SAP Note	Topic	Tool Status	Manual Status
!	3482369	SAP note 3482369 for DVM	!	◊
!	3655353	SAP note 3655353 for DVM	!	◊
!	69455	Addon ST-A/PI 01X_731	!	◊
!	539977	ST-PI 740 Support Package 33	!	◊
✓	69455	Proc. after addon impl.	✓	◊
✓	69455	Switch on digital content verification	✓	◊
✓	69455	Allow Online data collectors	✓	◊
✓	539977	Addon ST-PI 740	✓	◊
✓	12103	Collectors and TCOLL	✓	◊
✓	207223	EWAlert setup	✓	◊

Recommendation: [SAP note 3482369 for DVM Inaccurate Table Size Determination in ST14 Analysis for HANA Systems](#) Please implement coding corrections from note 3482369 using SNOTE

[SAP note 3655353 for DVM ST-A/PI 01X: ST14 corrections for BW systems](#) Please implement coding corrections from note 3655353 using SNOTE

[Addon ST-A/PI 01X_731 "Servicetools for Applications Plug-In" for NetWeaver as of 7.31 \[your current version is one or two levels lower than the latest available\]](#) From <http://support.sap.com/supporttools>

->ST-A/PI->Installations&Upgrades download the installation ST-A/PI 01X_731. Upload to tx SAINT and install as per note 69455. Then restart report RTCCTOOL and choose 'List->Refresh from SAPNet'.

[ST-PI 740 Support Package 33 Addon supportpackage level 33 for ST-PI 740 for basis 7.40-757 \[your current patch is one to four levels lower than the latest available\]](#) Open <http://support.sap.com/supporttools> ->ST-PI Supportpck.->

ST-PI 740. Add patch SAPK-74033INSTPI (and predecessors if not yet implemented) to download basket. Release basket via Maintenance optimizer. Upload from frontend into transaction SPAM, define a queue and import the queue.



3.4.2 SDCC Destination Table

The table below summarizes the destinations configured in Service Data Control Center.

Finding	Details	Rating
There exists RFC destination SDCC_OSS to SAP Support Backbone.	Calls on RFC protocol to SAP Support Backbone are no more supported. You may delete destination SDCC_OSS	!
On this SAP S/4HANA system a Source System for Service Definitions is defined.	The Solution Manager is defined as Source System for Service Definitions. Find information about the Source System for Service Definitions flag in SAP Note SAP Note 1075827 .	✓
A Solution Manager ('BACK') destination exists.	This destination can establish a connection to SAP Support Backbone.	✓
There is a destination to SAP Support Backbone.		✓

Recommendation: Resolve the issue reported in the table.

3.4.3 Hardware Utilization Data

Host	Operating System	Performance Data
azsaerpaas01	SUSE Linux Enterprise Server 15 (x86_64)	OK
azsaerpaas02	SUSE Linux Enterprise Server 15 (x86_64)	OK
azsaerpaas03	SUSE Linux Enterprise Server 15 (x86_64)	OK
azsaerpaas04	SUSE Linux Enterprise Server 15 (x86_64)	OK
azsaerpaas05	SUSE Linux Enterprise Server 15 (x86_64)	OK
azsaerpaas06	SUSE Linux Enterprise Server 15 (x86_64)	OK
azsaerppas01	SUSE Linux Enterprise Server 15 (x86_64)	OK
azsahrpdb02	SUSE Linux Enterprise Server 15 (x86_64)	OK
saperpascspr	OS not detected	--

Hardware capacity checks could not be run successfully due to missing data. See SAP Note [1309499](#).

4 Software Configuration for ERP



We have listed important recommendations concerning the current software configuration on your system. These recommendations should be implemented at the earliest opportunity.

Your system's software versions are checked. If known issues with the software versions installed are identified, they are highlighted.

4.1 SAP Application Release - Maintenance Phases

SAP Product Version	End of Mainstream Maintenance	Status
SAP S/4HANA 1909	31.12.2024	

Rating Legend

Rating	Description
	Mainstream / Extended maintenance offered by SAP is available for the next 18 months or longer.
	Mainstream / Extended maintenance offered by SAP will end in 6 to 18 months.
	Mainstream / Extended maintenance offered by SAP has expired or will expire in the next 6 months.

SAP mainstream maintenance for your main product version has already expired or is about to expire on 31.12.2024!

Recommendation: We recommend urgently to upgrade your main product version. For more details see [SAP Support Portal - Maintenance](#).

Please note that this check, if created on your on-premise SAP Solution Manager, does not take account of extended maintenance options. In this case, **your main product version is checked for SAP mainstream maintenance only**, which might lead to invalid ratings, especially for SAP S/4HANA 1709, SAP S/4HANA 1809, and SAP S/4HANA 1909.

A complete verification, including your individual extended maintenance contracts, is only available via the SAP EarlyWatch Alert Workspace in [SAP for Me](#).

For general information about the SAP EarlyWatch Alert Workspace, read the SAP Knowledge Base Article [2520319](#) : How to access the SAP EarlyWatch Alert apps in SAP for Me.

Refer to the tab 'Maintenance' on the [Customer Insights Dashboard](#) for further information on the maintenance status of any additional add-on product versions in your system. To find more details and resources, navigate to the Product Availability Matrix by clicking on the add-on product version name here.

4.2 Security Risk Due to Outdated Support Packages

The chapter [Security](#) provides the following ratings regarding the maintenance status of implemented Support Packages:

Rating	Check	System ID
	Maintenance Status of current SAP HANA Database Revision	HRP
	Age of Support Packages	ERP

The Support Package level of your system has run out of security maintenance. For more information, see chapter [Security](#).

4.3 Support Package Maintenance - ABAP

The following table shows an overview of currently installed software components.

Support Packages

Software Component	Version	Patch Level	Latest Avail. Patch Level	Support Package	Component Description
AIFGEN	700	0			
EA-DFPS	804	1	13	SAPK-80401INEADFPS	EA-Defense Forces & Public Security
EA-HR	608	73	154	SAPK-60873INEAHR	SAP R/3 Enterprise Human Resource & Travel Extension
EA-PS	804	1	13	SAPK-80401INEAPS	SAP R/3 Enterprise Public Services
FI-CAX	804	1	13	SAPK-80401INFICAX	FI-CAX: Extended FI-CA
GBX01HR	600	15	19	SAPK-60015INGBX01HR	GBX01HR 600 (oData Base, HCM Fiori)
GBX01HR5	605	12	34	SAPK-60512INGBX01HR5	GBX01HR5
GRCPIERP	V1200_S4	4	13	SAPK-V1204INGRCPIERP	SAP GRC PlugIn for ERP
GRCPINW	V1200_750	9	31	SAPK-V1209INGRCPINW	SAP GRC Plug-in for NW
INSURANCE	804	1	13	SAPK-80401ININSURANC	INSURANCE SAP Insurance
IS-OIL	804	1	13	SAPK-80401INISOIL	SAP for Oil & Gas
IS-PRA	804	1	13	SAPK-80401INISPRA	IS-PRA
IS-PS-CA	804	1	13	SAPK-80401INISPSCA	IS-Public Sector Contract Accounting
IS-UT	804	1	13	SAPK-80401INISUT	IS-UT
MDG_APPL	804	1	13	SAPK-80401INMDGAPPL	MDG Applications
MDG_FND	804	1	13	SAPK-80401INMDGFND	MDG Foundation
MDG_UX	804	1	13	SAPK-80401INMDGUXT	MDG Additional User Interface
ODTFINCC	600	11	11	SAPK-60011INODTFINCC	Odtfincc
S4CORE	104	1	13	SAPK-10401INS4CORE	S4core
S4COREOP	104	1	13	SAPK-10401INS4COREOP	S/4HANA, On-Premise only parts.
S4CRM	204	1	13	SAPK-20401INS4CRM	SAP S/4HANA for customer management
S4FND	104	1	13	SAPK-10401INS4FND	S/4HANA Foundation, common parts.
SAP_ABA	75E	1	13	SAPK-75E01NSAPABA	SAP Anwendungsbasis
SAP_BASIS	754	1	13	SAPK-75401NSAPBAS	SAP Basis component
SAP_BW	754	1	13	SAPK-75401NSAPBW	SAP Business Warehouse
SAP_GWFND	754	2	13	SAPK-75402NSAPGWFND	SAP NetWeaver Gateway Foundation

Software Component	Version	Patch Level	Latest Avail. Patch Level	Support Package	Component Description
SAP_HR	608	73	154	SAPKE60873	SAP HR
SAP_UI	754	4	18	SAPK-75404INSAPUI	User Interface Technology
SRA004	600	11	11	SAPK-60011INSRA004	My Travel Requests
ST-A/PI	01W_731	2	2	SAPKITABC9	ST-A/PI Service Tools for Applications Plug-In
ST-PI	740	30	33	SAPK-74030INSTPI	Solution Tools Plugin
TJCFRGL	400	0			
TJCWFEC	FEC_V4_S4	0			
TJCWSP	CC_1_S4	0			
WINSHTLQ	78I	0			

4.4 Database - Maintenance Phases

Database Version	End of Standard Vendor Support*	Comment	Status	SAP Note
SAP HANA Database 2.0		Follows Application	✓	2378962

* Maintenance phases and duration for the DB version are defined by the vendor. Naming of the phases and required additional support contracts differ depending on the vendor. Support can be restricted to specific patch levels by the vendor or by SAP. Check in the referenced SAP Note(s) whether your SAP system requires a specific patch release to guarantee support for your database version.

4.5 Operating System(s) - Maintenance Phases

Host	Operating System	End of Standard Vendor Support*	End of Extended Vendor Support*	Comment	Status	SAP Note
saperpascspr					◆	
8 Hosts	SUSE Linux Enterprise Server 15 (x86_64)	31.07.2028	31.07.2031	Limited (LTSS)	✓	936887

* Maintenance phases and duration for the operating system version are defined by the vendor. Naming of the phases and required additional support contracts differ depending on the vendor. Support can be restricted to specific patch levels by the vendor or by SAP. Check in the referenced SAP Note(s) whether your SAP system requires a specific patch release to guarantee support for your operating system version.

The automatic determination of the used operating system version(s) of system ERP did not work correctly for at least one host. For more information and possible reasons, refer to the section 'Service Preparation and Data Quality of ERP'.

4.6 HANA Database Version for HRP

The following table shows your current/planned SAP HANA database version.

Please Note: There are different kinds of support packages:

| S: Standard HANA support package

| LTS: Long-term support package version

| V: Last support package for a HANA version

HANA Database Version



SID	SPS Stack	SP Revision	Maintenance Revision	In Maintenance ?	SAP Notes	Upgrade Information	Support Package Kind
HRP	2.00 SP 05	2.00.059.011	yes	⚡	2378962	✓	LTS

4.6.1 HANA Database Support Package Stack for HRP

The following table shows your current/planned SAP HANA database support package stack. For the current support package stack, the remaining number of days until the end of maintenance is calculated.

If you are on a standard HANA support package stack, upgrades should be planned and performed if the end of maintenance is within the next 90 days.

For a long-term support version or HANA version, upgrades should be planned and performed if the end of maintenance is within the next 180 days.

Support Package Stack

Current Version	Current Support Package Stack	Available Version	Available Support Package Stack	Maintenance end	Number of days until Maintenance End	Rating
2	05	2	08	31.12.2025	34-	⚡

The current HANA support package is no longer in maintenance or the SAP HANA version/long-term support version runs out of maintenance within the next 90 days.

Recommendation: Please develop a clear SAP HANA maintenance strategy ensuring that the HANA software is kept up to date. SAP HANA maintenance requires deployment and testing across the HANA landscape in a controlled and timely manner (for example, system and user testing in a development environment before updating a production environment).

4.7 SAP HANA: SQLDBC Version

4.7.1 SAP HANA: Installed SQLDBC Version

The following table shows your currently installed SAP HANA database client component version.

Instance Name	SQLDBC Version	Rating
7 Instances	2.08.016	✓

SAP Note	Description
1906576	HANA client and server cross-version compatibility
2339267	The SAP HANA client version and installation manifest file doesn't match currently available SAP HANA server version information

4.8 SAP HANA: Installed DBSL Version

The following table shows the DBSL version currently installed.

Instance	Current DBSL Release	Current DBSL Patch	Recommended DBSL Release	Recommended DBSL Patch	Rating
saperpaas06_ERP_00	777	800	777	05	✓
saperppas_ERP_00	777	800	777	05	✓
saperpaas_ERP_00	777	800	777	05	✓
saperpaas02_ERP_00	777	800	777	05	✓
saperpaas03_ERP_00	777	800	777	05	✓

Instance	Current DBSL Release	Current DBSL Patch	Recommended DBSL Release	Recommended DBSL Patch	Rating
saperpaas04_ERP_00	777	800	777	05	✓
saperpaas05_ERP_00	777	800	777	05	✓

Your installed SAP HANA DBSL meets the recommended requirement to access the SAP HANA database.

4.9 SAP Kernel Release

The following table lists all information about your SAP kernel(s) currently in use.

Instance(s)	SAP Kernel Release	Patch Level	Age in Months	OS Family
7 instances	777	800	11	Linux (x86_64)

4.9.1 Issues with current SAP Kernel

You may experience some problems with your SAP kernel installation.

SAP tests all SAP kernels that are released. However, a severe problem in your kernel patch level occurs in certain scenarios. For details and to check if your system is affected, see the respective SAP Note in the table below.

Recommendation: If the fix is necessary, follow the steps from the respective SAP Note. For general instructions on how to patch the kernel, see SAP Note [19466](#).

For all known kernel regressions in your kernel patch level, see SAP Note [1802333](#).

SAP Note	Short Text	Risk
3570995	STAT, RFC: too many statistic records after patch from note 3519589	⚠

4.9.2 Additional Remarks

SAP releases Support Package stacks (including SAP kernel patches) on a regular basis for most products (generally 2–4 times a year). We recommend that you base your software maintenance strategy on these stacks.

You should only consider using a more recent SAP kernel patch than that shipped with the latest Support Package Stack for your product if specific errors occur.

For more information, see SAP Service Marketplace at <https://support.sap.com/software/patches/stacks.html> (SAP Support Package Stack information) and <https://me.sap.com/softwarecenter/support/index> (Support Packages & patch information).

For each patch there is an SAP Note in which all known regressions for this level are listed. Find it using the keyword **KRNL777PL800** in the SAP Note search. For detailed information, see SAP Note [1802333](#) – Finding information about regressions in the SAP kernel.

5 Hardware Capacity



We have checked your system for potential CPU or memory bottlenecks and found that the hardware of your servers is sufficient for the current workload.

Note: Hardware capacity evaluation is based on hosts for which data is at least partially available.

5.1 Overview System ERP

General This analysis focuses on the workload during the peak working hours (**9-11, 13**) and is based on the hourly averages collected by SAPOS COL. For information about the definition of peak working hours, see SAP Note [1251291](#).

CPU If the average CPU load exceeds **75%**, temporary CPU bottlenecks are likely to occur. An average CPU load of more than **90%** is a strong indicator of a CPU bottleneck.

Memory If your hardware cannot handle the maximum memory consumption, this causes a memory bottleneck in your SAP system that can impair performance. The paging rating depends on the ratio of paging activity to physical memory. A ratio exceeding **25%** indicates high memory usage (if Java has been detected **0%**) and values above **50%** (Java **10%**) demonstrate a main memory bottleneck.

Server	Max. CPU load [%]	Date	Rating	RAM [MB]	Max. Paging [% of RAM]	Date	Rating	Analysis Start	Analysis End
azsaerpaa s05	12	26.01.2026	✓	64.298	0		✓	26.01.2026	01.02.2026
azsaerpaa s04	11	28.01.2026	✓	64.298	0		✓	26.01.2026	01.02.2026
azsaerpaa s03	18	01.02.2026	✓	64.298	1	30.01.2026	✓	26.01.2026	01.02.2026
azsaerpaa s02	15	28.01.2026	✓	64.298	0		✓	26.01.2026	01.02.2026
azsaerpaa s01	24	01.02.2026	✓	64.298	1	28.01.2026	✓	26.01.2026	01.02.2026
azsaerppa s01	20	01.02.2026	✓	64.298	1	26.01.2026	✓	26.01.2026	01.02.2026
azsaerpaa s06	13	29.01.2026	✓	64.298	0		✓	26.01.2026	01.02.2026
azsahrpdb 02	3	01.02.2026	✓	3.922.949	0		✓	26.01.2026	01.02.2026

Note: For virtualization or IaaS scenarios (for example, IBM PowerVM, VMware, Amazon AWS, ...) it is possible that the CPU rating for some hosts is YELLOW or RED, even though the utilization value is quite low. In this case, the relevant host could not use maximum usable capacity due to a resource shortage within the virtualized infrastructure (for example, IBM PowerVM: Shared Pool CPU utilization).

6 Business Key Figures

System errors or business exceptions can be a reason for open, overdue, or unprocessed business documents or long-lasting processes. SAP Business Process Analysis, Stabilization and Improvement offerings focus on helping you to find these documents (as it may directly or indirectly negatively impact business).

This section provides an example of indicators, and its findings are a basis of further SAP offerings. In the example below, the backlog of business documents is compared to daily or weekly throughput or set in relation to absolute threshold numbers.

It provides business information to discuss possible technical or core business improvement process potential.

SAP tools and methods can help to monitor and analyze business processes in more detail.

Find more information, see [here](#).

NOTE: Overdue or exceptional business documents are often caused by system errors, such as user handling issues, configuration or master data issues, or open documents on inactive organizational units or document types that can be included in the measurements. These documents are rarely processed further by the business departments and often do not have a direct impact on customer satisfaction, revenue stream, or working capital. Nevertheless, these documents can have negative impacts on other areas such as supply chain planning accuracy, performance (of other transactions, reports, or processes), and reporting quality.

For more information about this section, see [here](#). See "Which optional content can be activated in SAP EarlyWatch Alert?".

6.1 Reference Key Figures Measured Value Summary

The below values originate from reference key figures executed in your back-end system. A rating is given as the first criticality indicator for each value that may represent open, overdue, or exception documents. The rating can be based on the absolute number of references or relate to a certain business throughput. Note that a rating can be assigned only if a reference value is available (in the case of relative evaluation) or if the evaluation is based on an absolute number.

The following general rule of thumb applies to most ratings of application-related backlog key figures:

GREEN – the backlog is smaller than one day of typical daily throughput

YELLOW – the backlog is between one and five days of typical daily throughput

RED – the backlog is above five days of typical daily throughput

GRAY – standard evaluation is not possible due to missing reference value

Bear in mind that all assumptions and ratings in this presentation are based on our general experience with other customers and that the findings are not necessarily business-critical in your particular case. The key figures are further described in the [KPI Cloud Catalog](#).

Data collection status:

Data collection frequency (in months): 3

Rating	Business Area: Key Figure Short Name	Finding	#
☒	Finance: Overdue vendor payments (actual fiscal year) [K20]	11.912 open vendor items in Accounts Payable in the current were identified, whereby the due date for payment is .. (1.763 less than three months; 5.747 older than twelve months).Based on absolute numbers (GREEN[<100]; RED[>1000]).	
☒	Finance: Overdue customer payments (actual fiscal year) [K15]	9.785 open customer items in Accounts Receivable in the current were identified, whereby the due date for payment is .. (1.314 less than three months; 3.638 older than twelve months).Based on absolute numbers (GREEN[<100]; RED[>1000]).	
☒	Finance: Bank Statement Items not completed [K16]	97.410 bank statement items were identified that have not been fully posted (239 less than three months; 94.828 older than twelve months).Based on absolute numbers (GREEN[<10]; RED[>100]).	
✓	Order To Cash: Overdue Outbound Deliveries [K11]	1.086 outbound deliveries that are overdue by more than one day and that do not have goods issue po.. (486 less than three months; 303 older than twelve months).Based on 4017 created (max per week) (GREEN[<4017]; RED[>12051]).	
!	Order To Cash: Deliveries with overdue invoices [K12]	792 deliveries with overdue Invoices were identified (20 less than three months; 724 older than twelve months).Based on absolute numbers (GREEN[<100]; RED[>1000]).	

Rating	Business Area: Key Figure Short Name	Finding	#
✓	Order To Cash: Orders not billed (Order related billing) [K06]	2 open sales orders were identified that have not yet been billed or have only been partially billed (0 less than three months & 2 older than twelve months).Based on absolute numbers (GREEN[<10]; RED[>100]).	
✗	Order To Cash: Invoices not posted to FI [K14]	274 invoices that have not been posted to FI and that are older than one day were identified (1 less than three months & 259 older than twelve months).Based on absolute numbers (GREEN[<10]; RED[>100]).	
⚠	Order To Cash: Sales Order Schedule Line Items overdue [K04]	386 open sales order schedule line items were found that were not delivered or only partially delivered with at le.. (18 less than three months & 235 older than twelve months).Based on 109 created (max per week) (GREEN[<109]; RED[>545]).	
⚠	Order To Cash: Percentage of SL items initially not confirmed [K08]	5% of sales order schedule lines were rescheduled for two or more days – a total of 5 sales order.Based on absolute numbers (GREEN[<5]; RED[>20]).	
❖	Procure To Pay: Overdue Inbound Deliveries [K29]	266 overdue inbound deliveries were identified for which the delivery date is more than one day ago and no or only .. (97 less than three months & 99 older than twelve months).Based on 0 created (max per week).	
❖	Procure To Pay: Planned Orders with Planned Opening Date in the past (ext.) [K32]	3 planned orders (external procurement) were identified for which the planned opening date is in the past (0 less than three months & 3 older than twelve months).Based on 0 created (max per week).	
❖	Procure To Pay: Overdue PO items [K28]	3.914 purchase order items were identified that are overdue by more than 10 days and that are not yet completely deli.. (410 less than three months & 2.851 older than twelve months).Based on 0 PO items created (max per week).	
✓	Procure To Pay: Purchase Order Items without Final Invoice Indicator [K33]	2 purchase order items were identified that are more than 30 days and without a final invoice indicator (0 less than three months & 2 older than twelve months).Based on absolute numbers (GREEN[<100]; RED[>1000]).	
❖	Procure To Pay: Overdue Purchase Requisition Items [K27]	14 purchase requisition items were identified that are open and overdue by more than 10 days (0 less than three months & 14 older than twelve months).Based on 0 created (max per week).	
❖	Replenishment: Overdue Stock Transport Order Items w/o Outb. Del. Compl. [K35]	1.426 STO items were identified that are more than 10 days overdue and that have not yet been completely delivered (0 less than three months & 73 older than twelve months).Based on 0 created (max per week).	
❖	Replenishment: Overdue Stock Transport Order Schedule Lines [K34]	257.893 STO schedule lines were identified that are overdue by more than 10 days and that have not yet been completely .. (10.484 less than three months & 237.085 older than twelve months).Based on 0 created (max per week).	
✓	Warehouse Management: Outbound Transfer Order Items open [K39]	716 open picking transfer order (TO) items were found that were created more than three days ago but that still hav.. (0 less than three months & 1 older than twelve months).Based on 839 created (max per week) (GREEN[<839]; RED[>4195]).	
✗	Warehouse Management: Transfer Requirement Items open [K41]	30.181 open transfer requirement items (TR items) were identified that were created over three days ago and that still.. (0 less than three months & 30.178 older than twelve months).Based on 253 created (max per week) (GREEN[<253]; RED[>1265]).	

SAP Active Global Support provides several self-assessments or guided services to encourage customers to benefit from an SAP Business Process Analysis, Stabilization, or Improvement project.

6.2 SAP Business Process Analytics

With SAP Business Process Analytics in SAP Solution Manager, you can continuously analyze the above key figures and more than [750 additional out-of-the-box key figures](#) for continuous improvement potential in your SAP business processes.

[With SAP Business Process Analytics, you can perform the following functions:](#)

(1) Internal business process benchmarking (across organizational units, document types, customers, materials, and so on)



for a number of exceptional business documents and/or for the cumulated monetary value of these documents.

(2) Age analysis to measure how many open documents you have from the previous years or months.

(3) Trend analysis for these business documents over a certain time period.

(4) Create a detailed list for all of these exceptional business documents in the managed system, enabling a root cause analysis to find reasons why these documents are open, overdue, or erroneous.

SAP Business Process Analytics can help you to achieve the following main goals:

- Gain global transparency of business-relevant exceptions to control template adherence
- Improve process efficiency and reduce process costs by reducing system issues and eliminating waste (for example, user handling, configuration issues, and master data issues)
- Improve working capital (increase revenue, reduce liabilities and inventory levels)
- Ensure process compliance (support internal auditing)
- Improve supply chain planning (better planning results and fewer planning exceptions)
- Improve closing (fewer exceptions and less postprocessing during period-end closing)

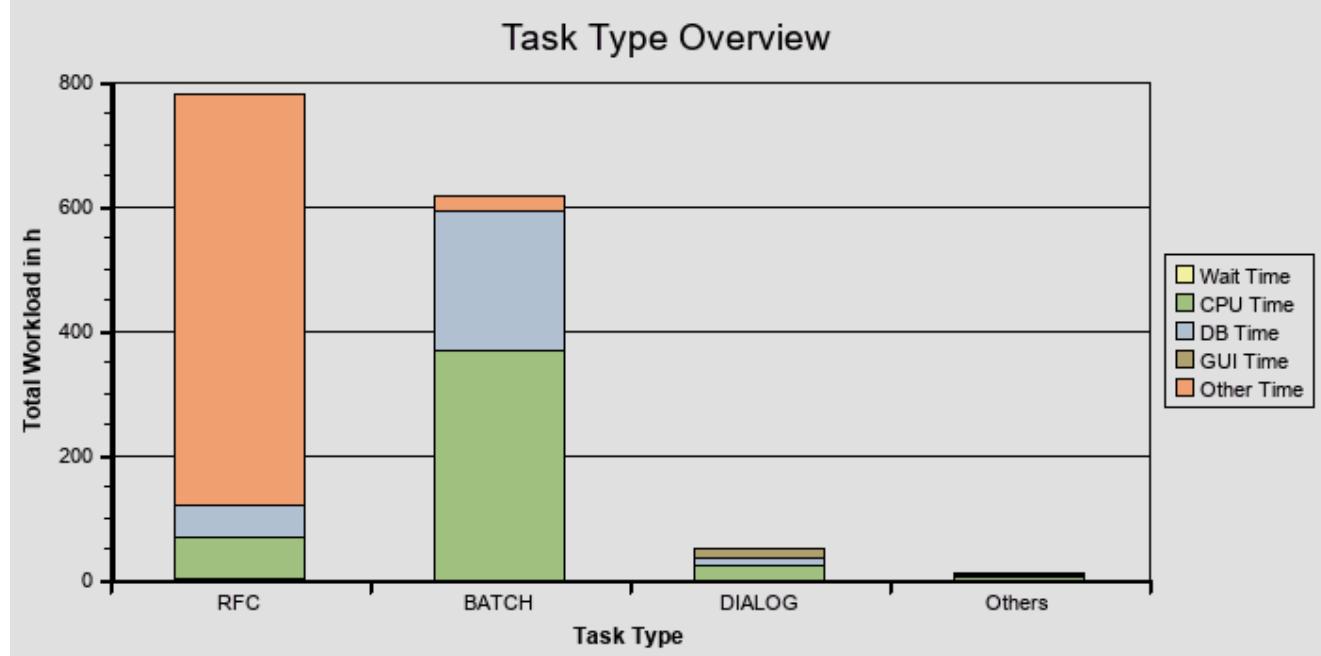
SAP also provides business process improvement methodology to help you identify and analyze improvement potential within your business processes using Business Process Analytics in SAP Solution Manager and visualize it for your senior management.

For more information, navigate to the following link: [here](#).

In general, SAP Active Global Support provides several self-assessments or guided services to encourage customers to benefit from an SAP Business Process Stabilization and/or Business Process Improvement project.

7 Workload of System ERP

This chart displays the main task types and indicates how their workload is distributed in the system. The table below lists the detailed KPIs.



Response Time Components In Hours

Task Type	Response Time	Wait Time	CPU Time	DB Time	GUI Time
RFC	779,2	0,4	66,5	53,9	0,0
BATCH	616,0	0,0	367,2	225,0	0,0
DIALOG	51,1	0,0	21,8	13,8	15,2
Others	10,7	0,0	3,8	4,2	0,0

7.1 Workload By Users

User activity is measured in the workload monitor. Only users of at least medium activity are counted as 'active users'.

Users	Low Activity	Medium Activity	High Activity	Total Users
dialog steps per week	1 to 399	400 to 4799	4800 or more	
measured in system	131	101	47	279

7.2 Workload Distribution ERP

The performance of your system was analyzed with respect to the workload distribution. We did not detect any major problems that could affect the performance of your SAP system.

7.2.1 Workload Distribution across ABAP Application Servers

To prevent a workload imbalance on one or more servers, we have analyzed the workload statistics for each SAP instance in your SAP production system.

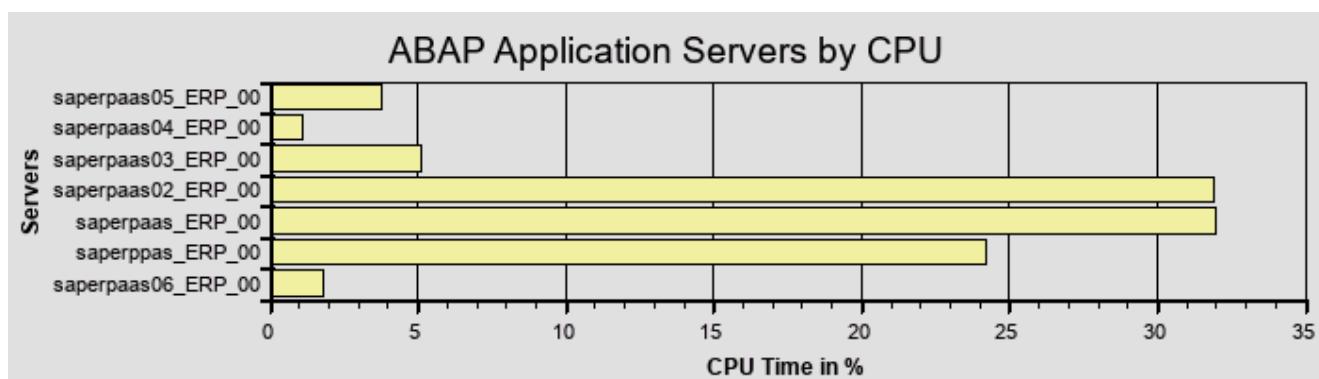
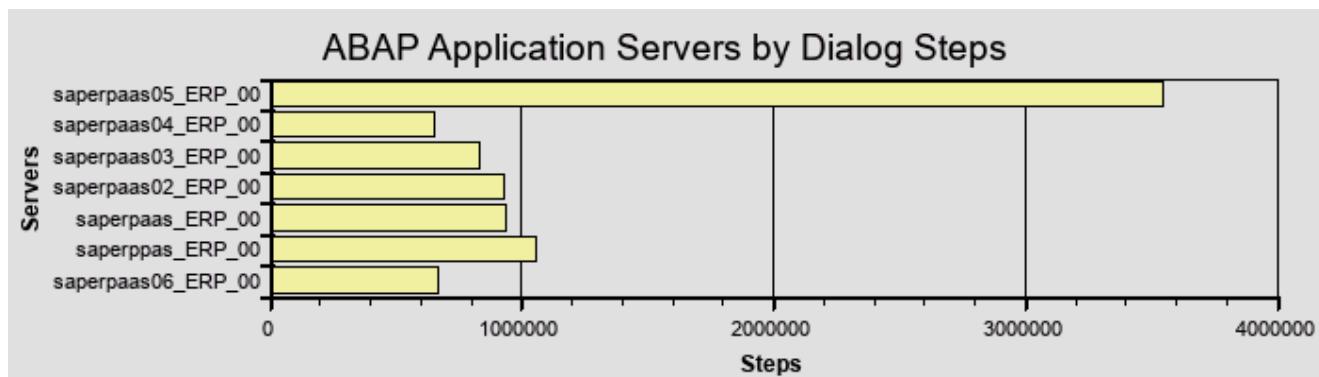
If your total hardware capacity is sufficient to handle your peak workload, an overload on one or more servers can increase response times for all users logged on to those servers. If the affected servers are running updates or a database instance, all users can be affected.

The following diagrams show the system workload distribution across all instances. We strongly recommend that you distribute the workload equally across all application servers.

The following aspects of the workload are evaluated below:

- The total number of transaction steps performed on the different servers
- The percentage of CPU time consumed by SAP applications running on the different servers

If the workload is distributed equally, the distribution of CPU time should be proportional to the number of CPUs on the different servers.



Note that your database capacity is limited by the database server hardware available. This is important, since your database is a central resource for all system activities. In contrast, application servers are not a central resource and affect only the users on that particular server. CPU shortages can be solved by improving the workload distribution or by adding a new application server. For information about automatic load balancing, refer to SAP Note [26317](#).

7.2.2 Workload by Application Module

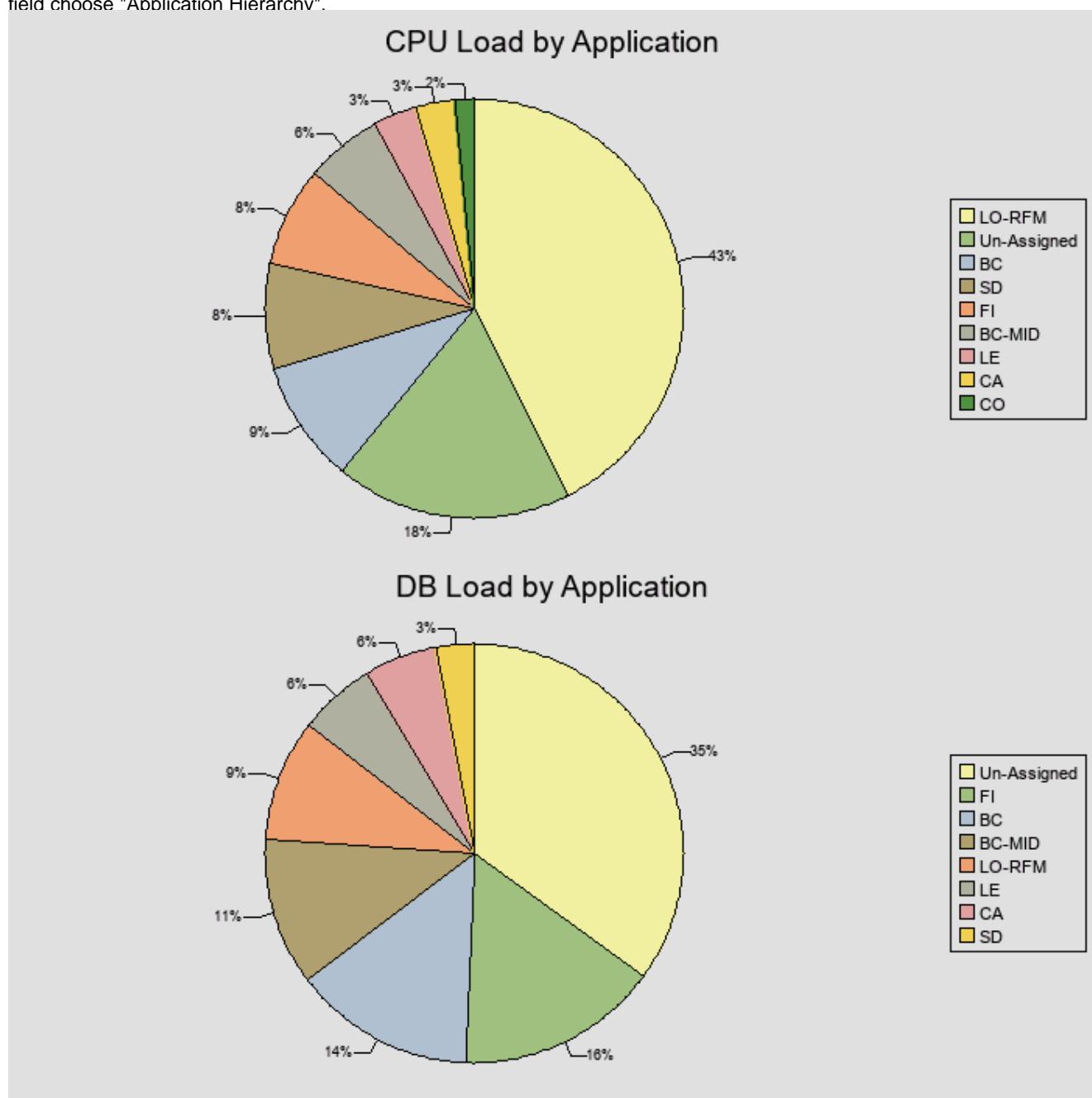
The following diagrams show how each application module contributes to the total system workload. Two workload aspects are shown:

- CPU time: total CPU load on all servers in the system
- Database time: total database load generated by the application

All programs that are not classified in the Application Hierarchy are summarized in the "Unassigned" category. Customer

programs, industry solutions, and third-party add-on developments may fall into this category.

The Application Hierarchy can be found in the Repository Browser (transaction SE80): in the "Object Category" selection field choose "Application Hierarchy".



7.2.3 DB Load Profile



The number of work processes creating database load in parallel is not significantly high.

The following diagram shows the DB load caused by dialog, RFC, HTTP(S), and background tasks, over different time frames.

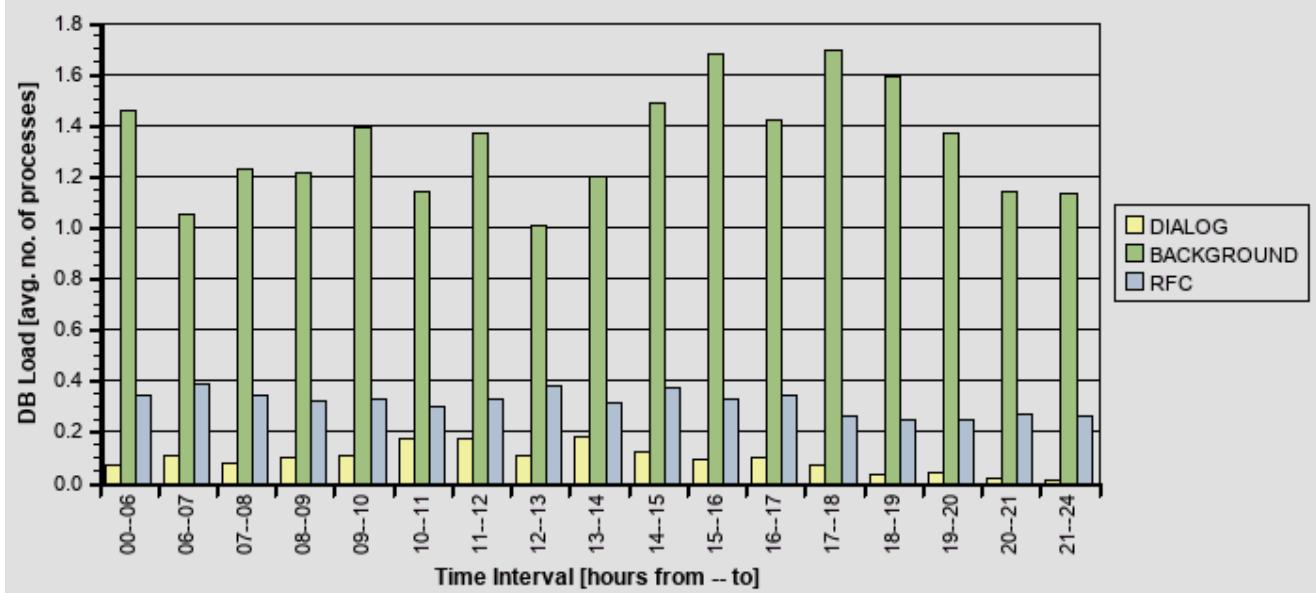
The data provided in the diagram represents the average number of database processes occupied by each task type in the database during the specified time frames.

These statistics are calculated as a weekly average, the average values over six working days with a unit of one hour. Periods between 00:00-06:00 and 21:00-24:00 contain an average value per hour, as these are not core business hours.

You can enable 24-hour monitoring by implementing SAP Note 910897. With 24-hour monitoring, the time profile returns the workload of the system or application server on an hourly basis rather than returning an average value per hour for the periods 00:00-06:00 and 21:00-24:00.

By comparing the load profiles for dialog and background activity, you can get an overview of the volume of background activity during online working hours.

Average No. Of Work Processes Waiting On DB Response



8 Performance Overview ERP



The performance of your system was analyzed with respect to the average response times and total workload. We did not detect any major problems that could affect the performance of your system.

Note: To access the response time statistics in SAP EarlyWatch Alert Workspace, click [system response time](#)

The following table shows the average response times for various task types:

Averages of Response Time Components in ms

Task type	Dialog Steps	Response Time	CPU Time	Wait Time	Load Time	DB Time	GUI Time
DIALOG	295.475	623,2	266,1	0,1	4,0	167,8	185,0
RFC	6.402.859	438,1	37,4	0,2	0,4	30,3	0,0
UPDATE	195.757	112,9	48,2	0,2	4,1	64,6	0,0
UPDATE2	189.981	25,8	16,0	0,1	1,3	8,6	0,0
BATCH	496.487	4.467,1	2.662,8	0,0	48,1	1.631,4	0,0
SPOOL	89.167	118,9	4,2	0,3	0,1	9,0	0,0
HTTP	194.088	4,6	3,6	0,1	0,4	0,1	0,0
HTTPS	80.639	4,2	3,0	0,1	0,3	0,0	0,0
SMTP	116	1.762,1	340,9	0,1	26,1	327,2	0,0

8.1 Performance Evaluation

The measured times are compared against reference times to provide a rating.

- If the number of dialog steps in an hour is less than 1000, this hour is not considered.
- If the total number of transaction steps is less than 20000, the rating for the task is not performed (indicated by a gray icon in the table).
- RED if at least three time ranges are rated RED.
- YELLOW if two time ranges are rated RED or at least three time ranges are rated YELLOW.

The table below shows that no problem is expected on the application or database servers.

Task	Steps	Application Server Performance	Database Server Performance
Dia	295.465	✓	✓
Upd	195.757	✓	✓
HTTP	194.088	✓	✓
HTTPS	80.639	✓	✓

The ratings in the table above are determined by comparisons against the reference table below.

If the dialog response times are very poor, it will cause a RED rating for the entire check.

Task	Reference for Avg. Response Time (ms) Yellow Rating	Reference for Avg. Response Time (ms) Red Rating	Reference for Avg. DB time (ms) Yellow Rating	Reference for Avg. DB time (ms) Red Rating
Dia	1.200	3.600	600	1.800
Upd	2.400	3.600	1.200	1.800
HTTP	1.200	3.600	600	1.800
HTTPS	1.200	3.600	600	1.800

8.2 Transaction Profile Check

The following tables show the response times and the number of dialog steps for the transactions that cause the heaviest

workload in your system.

8.2.1 Transactions by Total Workload

To access the transaction response time in SAP EarlyWatch Alert Workspace, click [here](#).

The following tables list the activities with the highest contribution to the total workload.

To view the workload of all transactions/programs, you can use the Workload Monitor in your SAP system. You can refer to this [Guided Answer](#) to diagnose a general performance problem in Workload Analysis.

Workload by Transaction (Dialog/HTTP(S)/WS-HTTP)

Transaction	Type	Dialog Steps	Total Resp. Time in %	Avg. Resp. Time in ms	Avg. CPU Time in ms	Avg. DB Time in ms	Avg. GUI Time in ms
YHUPAST	DIA	53.531	1,8	799,7	234,9	149,0	392,3
SE16N	DIA	4.014	1,2	7.124,8	6.429,1	373,2	267,2
SQ01	DIA	13.934	0,8	1.453,4	380,1	846,3	347,1
LTRMS	DIA	18.168	0,5	725,7	52,0	60,0	617,7
SESSION_MANAGER	DIA	8.186	0,4	1.047,0	749,1	78,6	208,6
LP00	DIA	34.218	0,2	140,0	39,2	88,1	0,0
MB51	DIA	383	0,2	12.111,7	11.280,2	357,6	350,9
YLX27	DIA	760	0,2	5.201,2	1.447,9	3.595,4	263,0
FBL3N	DIA	2.508	0,1	1.443,9	445,6	904,1	189,9
YLISTFIX	DIA	115	0,1	29.858,8	26.506,8	3.609,7	69,7

2.1% of the total response time in the above table is caused by customer transactions.

Workload by Transaction (Batch)

Transaction	Dialog Steps	Total Resp. Time in %	Total Resp. Time ins	Total CPU Time ins	Total DB Time in s
RWDDBUPD_HPR	290	27,3	664.778,0	641.196,0	100,4
ZINTERFACE_AIU	907	14,0	341.511,0	124.561,0	225.546,4
SAPF124	1.181	11,3	274.298,0	122.048,0	157.225,6
RBDMANI2	25.711	6,2	150.358,0	49.466,0	80.460,4
YSTOCK_OVERVIEW	42	5,7	139.218,0	121.645,0	14.055,3
ODQ_TASK	1.657	4,6	110.968,0	75.645,0	35.542,1
RWSORLIARTI	71	4,5	110.335,0	41.023,0	78.427,5
YHFR_FILL_ORD	1.008	2,9	71.319,0	14.751,0	59.688,7
ERTAKE_TABLES					
VTRBWVVTBNEW	7	1,8	44.355,0	19.764,0	30.407,8
MASSBACK	242	1,6	39.876,0	24.540,0	8.447,2

22.6% of the total response time in the above table is caused by customer transactions.

Workload by Web Services

Service	Calls	Total Resp. Time in %	Avg. Resp. Time in ms	Avg. CPU Time in ms	Avg. DB Time in ms	Type
Total	537	100,0	300,2	93,0	181,0	
ZPIII_SI_A_PARCEL_TRACKING_DET	420	87,8	337,1	103,5	202,4	asynchronous
ZPIII_SI_REPLENI_SHMENT_UPDATE	15	6,4	685,1	189,3	470,5	asynchronous
ZPIII_SI_A_EM_AIL_TABLE_IN	102	5,8	91,5	35,6	50,5	asynchronous

8.2.2 Transactions by DB Load

The following transaction profiles list the transactions that have the greatest share in the database load, sorted by

percentage of total database access times.

Database Load by Transactions (Dialog/HTTP(S))

Transaction	Type	Dialog Steps	Total DB Time in %	Avg. DB Time in ms
SQ01	DIA	13.934	1,4	846,3
YHUPAST	DIA	53.531	0,9	149,0
LP00	DIA	34.218	0,3	88,1
YLX27	DIA	760	0,3	3.595,4
FBL3N	DIA	2.508	0,3	904,1
SE16N	DIA	4.014	0,2	373,2
YX27	DIA	249	0,1	5.225,4
LTRMS	DIA	18.168	0,1	60,0
FBL1N	DIA	2.240	0,1	396,5
VA02	DIA	5.258	0,1	164,4

1.3% of the total database time in the above table is caused by customer transactions.

Database Load by Transactions (Batch)

Transaction	Dialog Steps	Total DB Time in %	Total DB Time ins
ZINTERFACE_AIU	907	25,8	225.546,0
SAPF124	1.181	18,0	157.226,0
RBDMANI2	25.711	9,2	80.460,0
RWSORLIARTI	71	9,0	78.428,0
YHFR_FILL_ORDERTAKE_TABLES	1.008	6,8	59.689,0
ODQ_TASK	1.657	4,1	35.542,0
SBIE0001	35	3,5	30.780,0
VTRBWVVTBNEW	7	3,5	30.408,0
YSTOCK_OVERVIEW	42	1,6	14.055,0
YDEL_SLOC_MASS_UPDATE	336	1,1	9.581,0

35.3% of the total database time in the above table is caused by customer transactions.

If average database times are outside acceptable boundaries and you are unhappy with the performance of a transaction, contact your in-house developers about possible optimization potential and create a case if required using the '[Get Support application](#)' in SAP for Me ([KBA 1296527](#)). Within case creation, select Product: Customer Project Based Solution, and enter component SV-PERF.

9 RFC Load by Initiating Action

The load in task type RFC is shown. In the workload monitor, this information is shown as 'Load from External Systems'. The calling system can be an application server of the system itself or any external system using the RFC interface. The 'Initial Action' is the calling program initiating the RFC. The total response time for each initial action is shown as an absolute value and as a percentage compared to the total RFC load considered in this table. The average times (per dialog step) are shown in milliseconds [ms].

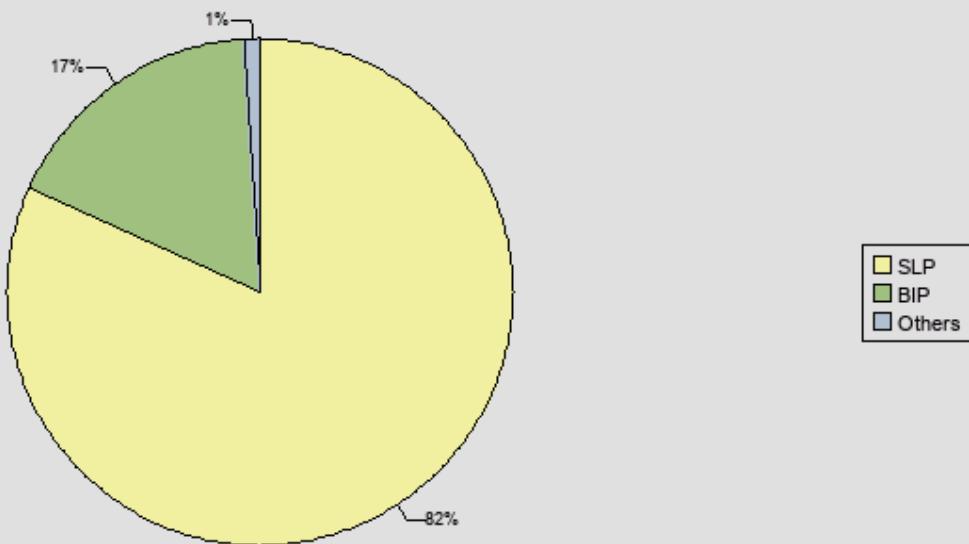
Calls from external systems are shown if they account for at least 8h or 5% of the total RFC load. Local calls are shown if they account for at least 24h or 20% of the total RFC load.

Please refer to this [Guided Answer](#) on how to analyze RFC performance issues.

Load Overview

Initial System	Load [s]	Load %
Local system ERP	648.715	28,08
Sum of external systems	1.661.476	71,92
SLT Load (Part of Sum of external systems)	1.349.870	58,43
RFC load (sum of above)	2.310.191	100,00
RFC load in Performance Overview	2.805.241	121,43
Load of all task types in Performance Overview	5.315.114	230,07

Load Distribution From External Systems



Top 20 RFC Calls From External Systems - Average Times [ms]

Initial System	Initial Action	Total Resp. Time ins	% of RFC Load	Avg. Response Time	Avg. CPU Time	Avg. DB Time	Avg. Roll Wait Time
SLP	/1LT/IUC_LOAD_MT_00A_001	630.097	27,27	1.034,7	13,2	19,8	0,2
SLP	/1LT/IUC_LOAD_MT_009_001	100.605	4,35	318,2	16,6	27,8	0,1
SLP	/1LT/IUC_LOAD_MT_009_002	76.624	3,32	317,2	16,2	27,7	0,1
SLP	/1LT/IUC_LOAD_MT_009_003	55.716	2,41	315,8	16,1	27,0	0,1

Initial System	Initial Action	Total Resp. Time ins	% of RFC Load	Avg. Response Time	Avg. CPU Time	Avg. DB Time	Avg. Roll Wait Time
SLP	/1LT/IUC_LOAD_MT_09_004	55.305	2,39	317,4	15,6	26,5	0,1
SLP	/1LT/IUC_LOAD_MT_09_005	45.212	1,96	312,5	15,0	25,1	0,1
SLP	/1LT/IUC_LOAD_MT_09_006	38.824	1,68	312,1	14,8	25,2	0,1
SLP	/1LT/IUC_LOAD_MT_09_008	36.615	1,58	309,4	14,3	24,6	0,1
SLP	/1LT/IUC_LOAD_MT_09_007	36.264	1,57	310,0	15,1	25,4	0,1
BIP	BIDTPR_202 6020107273 4000023_1	36.046	1,56	9.302,2	193,9	38,7	0,0
BIP	BIDTPR_202 6020110144 000007_1	35.536	1,54	10.910,6	166,7	37,6	0,0
SLP	/1LT/IUC_LOAD_MT_09_010	34.870	1,51	305,6	14,2	23,8	0,1
BIP	BIDTPR_202 6020108425 5000004_1	32.110	1,39	4.643,5	38,7	162,9	0,0
SLP	/1LT/IUC_LOAD_MT_09_009	31.842	1,38	313,4	14,6	25,9	0,1
SLP	/1LT/IUC_LOAD_MT_09_015	30.847	1,34	305,5	14,3	23,7	0,1
SLP	/1LT/IUC_LOAD_MT_09_012	30.816	1,33	307,5	14,3	24,5	0,1
SLP	/1LT/IUC_LOAD_MT_09_011	30.012	1,30	307,3	14,5	24,6	0,1
BIP	BIDTPR_202 6020110253 300006_1	29.717	1,29	9.448,9	120,6	45,5	0,0
SLP	/1LT/IUC_LOAD_MT_09_013	29.405	1,27	307,1	14,6	24,6	0,1
SLP	/1LT/IUC_LOAD_MT_09_014	27.523	1,19	307,8	14,6	24,6	0,1

Top 20 RFC Calls From Local System - Average Times [ms]

Initial System	Initial Action	Total Resp. Time ins	% of RFC Load	Avg. Response Time	Avg. CPU Time	Avg. DB Time	Avg. Roll Wait Time
ERP	/SDF/MON_SCHEDULER	241.201	10,44	4.307.161,1	4.051,4	6.261,7	135,2

Initial System	Initial Action	Total Resp. Time ins	% of RFC Load	Avg. Response Time	Avg. CPU Time	Avg. DB Time	Avg. Roll Wait Time
ERP	SAP_COLL_ECTOR_PE_RFMON_SW_NCCOLL	141.374	6,12	70,1	20,1	17,1	0,1
ERP	LM01	98.354	4,26	1.237,3	20,3	28,9	0,1
ERP	BSI_POS_P_ROCESS_IB_IDOCS	31.410	1,36	6.816,5	3.103,1	3.574,5	0,5
ERP	/BDL/TAS_K_PROCESSOR	26.415	1,14	28.312,2	647,8	7.060,9	0,1
ERP	YMASSPAC_KDELIVERY	20.708	0,90	160,2	19,9	28,7	0,1
ERP	BSI_REPL_EN_PROCE_SS_STO_I_DOCS	13.244	0,57	2.231,1	1.179,1	1.039,1	1,0
ERP	BSI_FIN_MM_PER_CLOSE	10.171	0,44	10.774,5	45,9	4.612,7	383,4
ERP	OUTBOUND_UPDATES_FROM_WCS	10.136	0,44	683,1	294,2	397,2	0,1
ERP	SAP_CCMS_MONI_BATC_H_DP	9.418	0,41	2.079,8	399,7	1.749,7	0,1
ERP	LT15	4.564	0,20	827,1	16,9	21,6	0,1
ERP	REPLEN_S_TOCK_TO_WCS	4.374	0,19	361,2	13,4	19,6	0,1
ERP	WCS_DIREC_T_DDL_DELIVERY_CREATION	3.587	0,16	102,4	10,5	12,1	0,1
ERP	RWSORLIARTI	2.961	0,13	29.606,0	24.652,6	5.186,2	0,1
ERP	BSI_FIN_PRICING_IDOC_S	2.755	0,12	263,4	63,3	108,6	0,3
ERP	BSI_HF_DELLTA_REFRESH_EMEA	2.151	0,09	2.211,1	530,3	1.427,4	0,1
ERP	<BGRFC_WATCHDOG>	2.057	0,09	42,5	7,6	2,2	0,1
ERP	EMAIL_NOTIFICATION_JOB	1.909	0,08	257,1	15,5	21,8	0,2
ERP	SMON_WP_UTIL_JD	1.665	0,07	137,7	3,2	1,0	0,1
ERP	ABAP CALL MONITOR: COLLECT	1.633	0,07	694,3	159,1	313,1	0,1

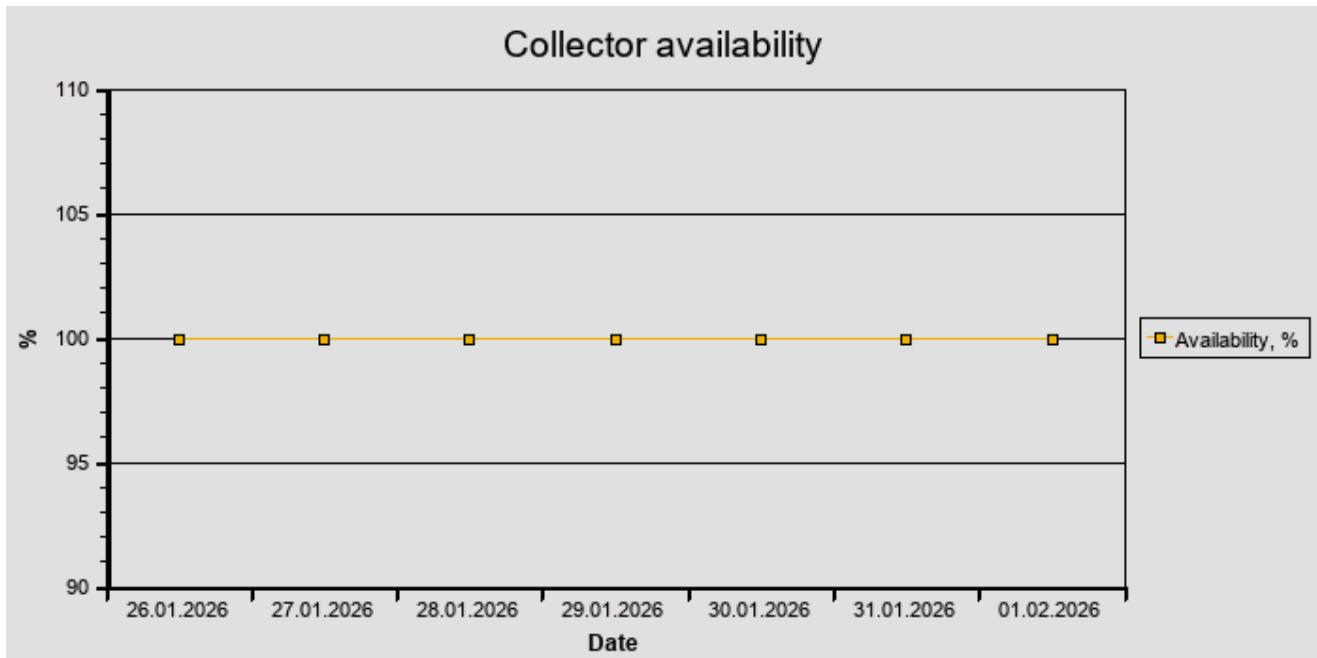
10 SAP System Operating ERP



The daily operation of your system was analyzed. We detected some problems that may impair system operation and stability.

Rating	Check
✓	Availability based on Collector Protocols
⚠	Program Errors (ABAP Dumps)
✓	Update Errors
⚠	Table Reorganization
✓	Critical Number Ranges

10.1 Availability based on Collector Protocols



A value of 100% means that the collector was available all day. "Available" in the context of this report means that at least one SAP instance was running. If the SAP collector was not running correctly, the values in the table and graphics may be incorrect.

To check these logs, call transaction ST03N (expert mode) and choose "Collector and Performance DB -> Performance Monitor Collector -> Log".

This check is based on the logs for job COLLECTOR_FOR_PERFORMANCEMONITOR that runs every hour.

The job does NOT check availability; it carries out only general system tasks such as collecting and aggregating SAP performance data for all servers/instances. The log does not contain any direct information about availability; it contains only information about the status of the hourly statistical data collection.

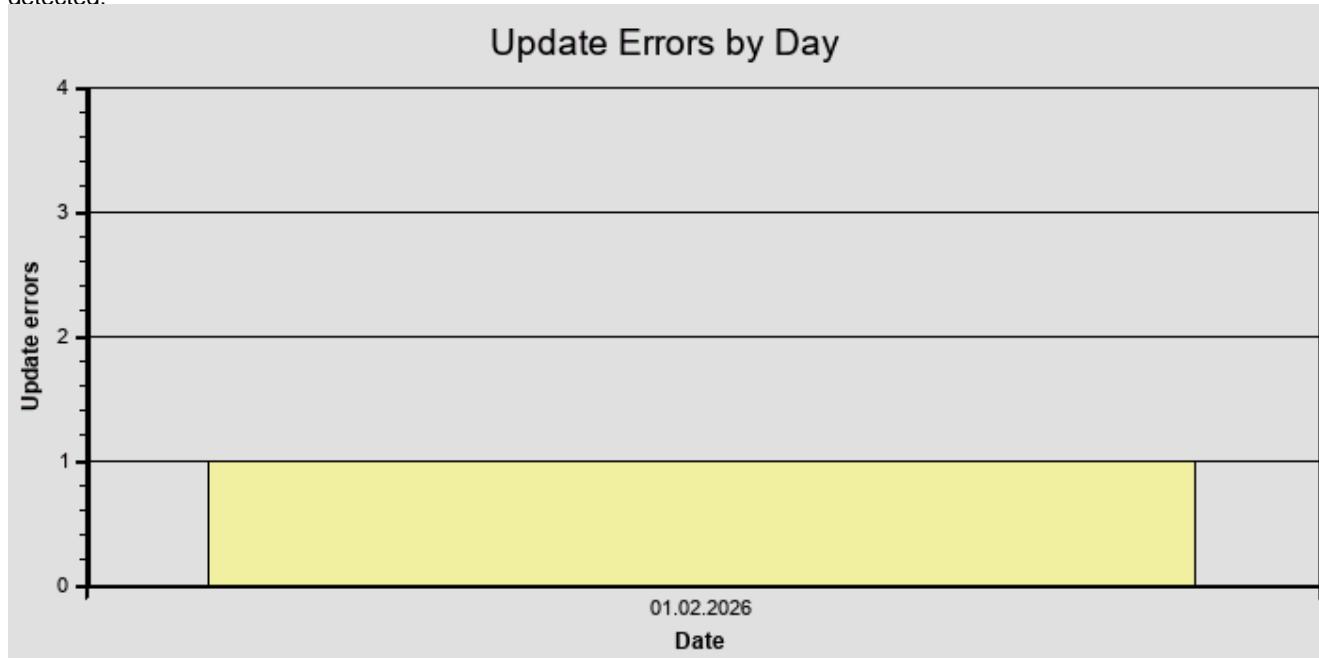
As of SAP Basis 6.40, system availability information is available in the CCMS (Computing Center Management System) of an SAP System, in Service Level Reporting of SAP Solution Manager.

This function is provided by the relevant Solution Manager Support Packages as an advanced development. For more information, refer to SAP Note 944496, which also lists the prerequisites that must be fulfilled before implementation can take place."

10.2 Update Errors



In a system running under normal conditions, only a small number of update errors should occur. To set the rating for this check, the number of active users is also taken into consideration. The following table contains the number of update errors detected.



We did not detect any problems.

10.3 Table Reorganization

When analyzing your database, we detected large or rapidly growing tables or indexes.

Recommendation: Implement the SAP Notes listed below to reduce the size of some of these tables or indexes.

Background: For more information about SAP Data Volume Management, see

[SAP DVM Community](#).

Table / Index Name	Size of Table / Index [MByte]	Recommended SAP Note
CKMI1	75.632,0	181030
TST03	67.954,0	48400, 130978, 16083

10.4 Program Errors (ABAP Dumps)

34 ABAP dumps have been recorded in your system in the period 26.01.2026 to 01.02.2026. ABAP dumps are generally deleted after 7 days by default. To view the ABAP dumps in your system, call transaction ST22 and choose Selection. Then select a timeframe.

Date	Number of Dumps
26.01.2026	3
27.01.2026	3
28.01.2026	10
29.01.2026	5
30.01.2026	11
31.01.2026	0
01.02.2026	2

Name of Runtime Error	Dumps	Server (e.g.)	Date (e.g.)	Time (e.g.)
DYNPRO_MSG_IN_HELP	1	saperpaas02_ERP_00	28.01.2026	09:48:31
DYNPRO_NOT_FOUND	2	saperpaas_ERP_00	28.01.2026	14:14:02
SAPSQL_PARSE_ERROR	2	saperpas_ERP_00	28.01.2026	15:13:24

Name of Runtime Error	Dumps	Server (e.g.)	Date (e.g.)	Time (e.g.)
MESSAGE_TYPE_X	1	saperpaas_ERP_00	28.01.2026	15:45:32
SYSTEM_NO_ROLL	7	saperpaas02_ERP_00	28.01.2026	17:14:24
STRING_SIZE_TOO_LARGE	1	saperppas_ERP_00	29.01.2026	10:33:53
TSV_TABH_POOL_NO_ROLL_MEMORY	1	saperpaas_ERP_00	29.01.2026	11:48:22
RAISE_EXCEPTION	1	saperpaas02_ERP_00	30.01.2026	10:09:41
STRING_LENGTH_TOO_LARGE	1	saperpaas06_ERP_00	30.01.2026	10:50:53
TABLE_INVALID_INDEX	7	saperpaas06_ERP_00	30.01.2026	14:46:30
TSV_TNEW_PAGE_ALLOC_FAILED	9	saperpaas_ERP_00	01.02.2026	03:46:09
SQL_CAUGHT_RABAX	1	saperpaas_ERP_00	01.02.2026	03:46:11

It is important that you monitor ABAP dumps using transaction ST22 on a regular basis. If ABAP dumps occur, you should determine the cause as soon as possible.

Based on our analysis, we found several ABAP dumps that need your attention. Evaluate and resolve the above dumps. If you cannot find a solution, create a case using the [Get Support application](#) in SAP for Me ([KBA 1296527](#)).

10.5 Critical Number Ranges

We have checked the usage of valid ABAP number ranges and found no issues.

11 Security



Critical security issues were found in your system. See the information in the following sections.

Rating	Check	System ID
✓	System Recommendations (HANA)	HRP
✗	Maintenance Status of current SAP HANA Database Revision	HRP
✓	SAP HANA System Privilege DATA ADMIN	HRP
✓	SAP HANA Password Policy	HRP
✓	SAP HANA Audit Trail	HRP
✓	SAP HANA SQL Trace Level	HRP
✓	SAP HANA Network Settings for Internal Services	HRP
✓	SAP HANA Network Settings for System Replication Communication (listeninterface)	HRP
✗	Activation Status and Validity of User SYSTEM	HRP
✓	System Recommendations (ABAP)	ERP
✗	Age of Support Packages	ERP
⚠	Default Passwords of Standard Users	ERP
✓	Control of the Automatic Login User SAP*	ERP
✓	Protection of Passwords in Database Connections	ERP
✓	ABAP Password Policy	ERP
✗	RFC Gateway Security	ERP
✓	Message Server Security	ERP
✗	Critical authorizations, which allow to do anything	ERP
✗	Critical authorizations, which should not be used in production	ERP
⚠	Critical authorizations, which should only see very limited use in production	ERP

11.1 SAP HANA Database HRP

11.1.1 Maintenance Status of current SAP HANA Database Revision

The following table shows your current SAP HANA database revision.

Rating	Product Version	HANA Revision	Release Date	Age of Revision in Months	Deployment Date	Age of Deployment Date in Months
✗	2.00 SP 05	2.00.059.11	05.12.2023	26	27.01.2024	25

The Support Package level of your SAP HANA database has run out of security maintenance. Due to the age of your SAP HANA revision, you are likely already missing published and unpublished security fixes. Furthermore, if new vulnerabilities are detected that require a code correction from SAP, SAP no longer analyzes whether your current revision is affected. To ensure the security of your system, you will then need to upgrade to a new Support Package.

Recommendation: Implement a clear SAP HANA maintenance strategy ensuring that the HANA software is kept up to date.

As a general recommendation, an upgrade to the latest HANA revision of an SAP HANA major release should be performed at least once per year.

For more information about the SAP HANA revision and maintenance strategy, see SAP Notes

[2021789 - SAP HANA 1.0 Revision and Maintenance Strategy](#) [2378962 - SAP HANA 2.0 Revision and Maintenance Strategy](#) [1948334 - SAP HANA Database Update Paths for Maintenance Revisions](#) for possible update paths.

Note: As of SAP HANA 2.0 SPS 1, Multi Tenancy is mandatory. Systems running as SINGLEDB will be converted.

Consequently, several manual security measures will be required in your system to protect the newly created SYSTEMDB.

For additional general information, refer to SAP Note
[2115815 - FAQ: SAP HANA Database Patches and Upgrades](#)

11.1.2 Activation Status and Validity of User SYSTEM

The activation status and validity dates (VALID FROM and VALID TO) of user SYSTEM have been checked in system table USERS.

Rating	Check
☒	User SYSTEM is currently active and valid.

Active standard users are an easy and widely used target for hacking attacks since they are available in every system. Furthermore, the user SYSTEM is like a super user with very powerful user authorizations that cannot be revoked.

Recommendation: Review the current usage of user SYSTEM and set up and test a user and role concept, so that the use of user SYSTEM becomes obsolete.

Deactivate the user account with the SQL statement:
ALTER USER SYSTEM DEACTIVATE USER NOW.

To prevent misuse of user SYSTEM, activate related audit policies in your SAP HANA system as described in the SAP HANA Administration Guide.

11.2 ABAP Stack of ERP

11.2.1 Age of Support Packages

The following table shows the current status, the final assembly date at SAP, and the implementation date of selected key software components that are installed in the system.

Software Component	Release	Support Package	Final assembly date	Age of final assembly date in months	Support Package import date	Age of SP import date in months	Rating
S4CORE	104	1	19.12.2019	75	04.06.2020	69	☒
SAP_ABA	75E	1	04.12.2019	75	04.06.2020	69	☒
SAP_BASIS	754	1	04.12.2019	75	04.06.2020	69	☒
SAP_GWFND	754	2	10.03.2020	72	04.06.2020	69	☒

SAP provides SAP Security Notes with high or very high priority for Support Packages shipped within the last 24 months. We identified key software components on your system that are outside of this timeframe.

In the case of SAP Solution Manager, the software component BBPCRM is not separately checked because the update is covered via software component ST.

For more information as well as exceptions, see <https://support.sap.com/securitynotes> --> "SAP Security Patch Day".

Recommendation: Run support package updates at least once a year. In addition, evaluate SAP Security Notes once a month at the time of the monthly SAP Security Patch Day. SAP strongly recommends always performing support package updates for the complete support package stack and not just for the software components listed above. See <https://support.sap.com/en/my-support/software-downloads/support-package-stacks.html> for further information.

11.2.2 Default Passwords of Standard Users

Standard users have default passwords.

Recommendation: Run report **RSUSR003** to check for standard users having default passwords in some clients. Ensure that user **SAPCPIC** has a non-default password in all clients. User **EARLYWATCH** was used in client 066 only. This client should no longer exist, and therefore, this user should not exist either in any client.

SAP Note [1749142](#) describes how to remove an obsolete client 066. Make sure that user **TMSADM** exists only in client 000 and that the standard password has been changed. SAP Note [1414256](#) describes a support tool for changing the password of user TMSADM in all systems of the transport domain. For more information, see "[Protecting Special Users](#)" either on SAP Help Portal or in the SAP NetWeaver AS ABAP Security Guide.

11.2.3 ABAP Password Policy

If password login is allowed for specific instances only, the password policy is checked only for these instances.

11.2.4 RFC Gateway Security

11.2.4.1 RFC Gateway Access Control Lists

Parameters: gw/sec_info gw/reg_info

Rating	Instance	Error Condition
✓	All instances	gw/reg_info and gw/sec_info are defined

reg_info

Rating	Instance	Error Condition	File does not exist (default)
✓	saperpaas06_ERP_00		
⚠	saperppas_ERP_00	P TP=* HOST=* ACCESS=* CANCEL=*	
✓	saperpaas_ERP_00		
✓	saperpaas02_ERP_00		
✓	saperpaas03_ERP_00		
✓	saperpaas04_ERP_00		
✓	saperpaas05_ERP_00		

sec_info

Rating	Instance	Error Condition	File does not exist (default)
✗	All instances	P USER=* TP=* HOST=* USER-HOST=*	

Parameter: gw/sim_mode

Rating	Instance	Current Value	Recommended Value
✓	All instances	0	0

At least one of the following critical conditions is true:

- Profile parameters gw/sec_info is not set
- File secinfo does not exist
- File secinfo contains at least one trivial entry
- Profile parameter gw/sim_mode is set to 1

Additionally, gw/reg_info may be missing or also contain a trivial entry.

Recommendation: The profile parameters gw/sec_info and gw/reg_info provide the file names of the corresponding access control lists. These access control lists are critical to controlling RFC access to your system, including connections to RFC servers. You should create and maintain both access control lists, which you can do using transaction SMGW.

The files secinfo and reginfo, which are referenced by these profile parameters, should exist and should not contain trivial entries.

The profile parameter gw/acl_mode should be set to 1 to enable secure default rules if any of these files do not exist. The profile parameter gw/sim_mode should be set to 0 to disable the simulation mode which would accept any connections.

SAP recommends defining and properly maintaining these access control lists to prevent rogue servers from accessing the system. For more information, see the following SAP Notes:

SAP Note [1305851](#) - Overview note: "reg_info" and "sec_info"

SAP Note [1408081](#) - Basic settings for reg_info and sec_info

For more information, see "Configuring Connections between SAP Gateway and External Programs Securely" on SAP Help Portal and the [SAP Gateway wiki](#) on the SAP Community Network.
 See also the white paper on SAP Security Recommendations: Securing Remote Function Calls (RFC) available at https://support.sap.com/content/dam/support/en_us/library/ssp/security-whitepapers/securing_remote-function-calls.pdf.

11.2.5 Users with Critical Authorizations

For more information about the following check results, see SAP Note [863362](#).

Recommendation: Depending on your environment, review your authorization concept and use the Profile Generator (transaction PFCG) to correct roles and authorizations. You can use the User Information System (transaction SUIM) to check the results. For each check, you can review the roles or profiles that include the authorization objects listed in the corresponding section.

11.2.5.1 Critical authorizations, which allow to do anything

11.2.5.1.1 Super User Accounts

Users with authorization profile SAP_ALL have full access to the system. There should be a minimum of such users. The number of users with this authorization profile is stated for each client.

Client	No. of Users Having This Authorization	No. of Valid Users	Rating
000	8	28	
001	2	3	
700	75	999	

Authorization profile: SAP_ALL

11.2.5.1.2 Users Authorized to Debug / Replace

This authorization provides access to data and functions, since any authorization check that is built in ABAP can be bypassed. In addition, you can change data during processing, which may lead to inconsistent results. The specified number of users for each client have the checked authorization.

Client	No. of Users Having This Authorization	No. of Valid Users	Rating
000	5	28	
700	12	999	

Authorization objects: Object 1: S_DEVELOP with ACTVT=02 (change) and OBJTYPE=DEBUG

Note: If you do not want to disable development in your system, you have to exclude the authorization for OBJTYPE=DEBUG with ACTVT=02 from roles and only allow any other object type for S_DEVELOP. This means that development and debugging with visualization is still possible.

You can achieve this by adding two authorizations to the object S_DEVELOP: one with all object types except for DEBUG and all activities, and another for the object type DEBUG only and all activities except for 02.

11.2.5.2 Critical authorizations, which should not be used in production

11.2.5.2.1 Users Authorized to Change or Display all Tables

Unauthorized access to sensitive data is possible if too many users have this authorization. The specified number of users for each client have the checked authorization.

Client	No. of Users Having This Authorization	No. of Valid Users	Rating
000	6	28	
700	113	999	

Authorization objects: Object 1: S_TCODE with TCD=SE16, TCD=SE16N, TCD=SE17, TCD=SM30, or TCD=SM31
 Object 2: S_TABU_DIS with ACTVT = 03 or 02 and DICBERCLS = *

11.2.5.3 Critical authorizations, which should only see very limited use in production

11.2.5.3.1 Users Authorized to Start all Reports

This authorization allows critical functions and reports that do not contain their own authorization checks to be executed. The specified number of users for each client have the checked authorization.

Client	No. of Users Having This Authorization	No. of Valid Users	Rating
000	5	28	✓
700	139	999	!

AUTHORIZATION OBJECTS: Object 1: S_TCODE with TCD=SA38

Object 2: S_PROGRAM with P_ACTION=SUBMIT P_GROUP=*

or

Object 1: S_TCODE with TCD=SE38

Object 2: S DEVELOP with OBJTYPE=PROG OBJNAME=* ACTVT=16

12 Software Change and Transport Management of ERP



No critical software change management issues were found in your system.

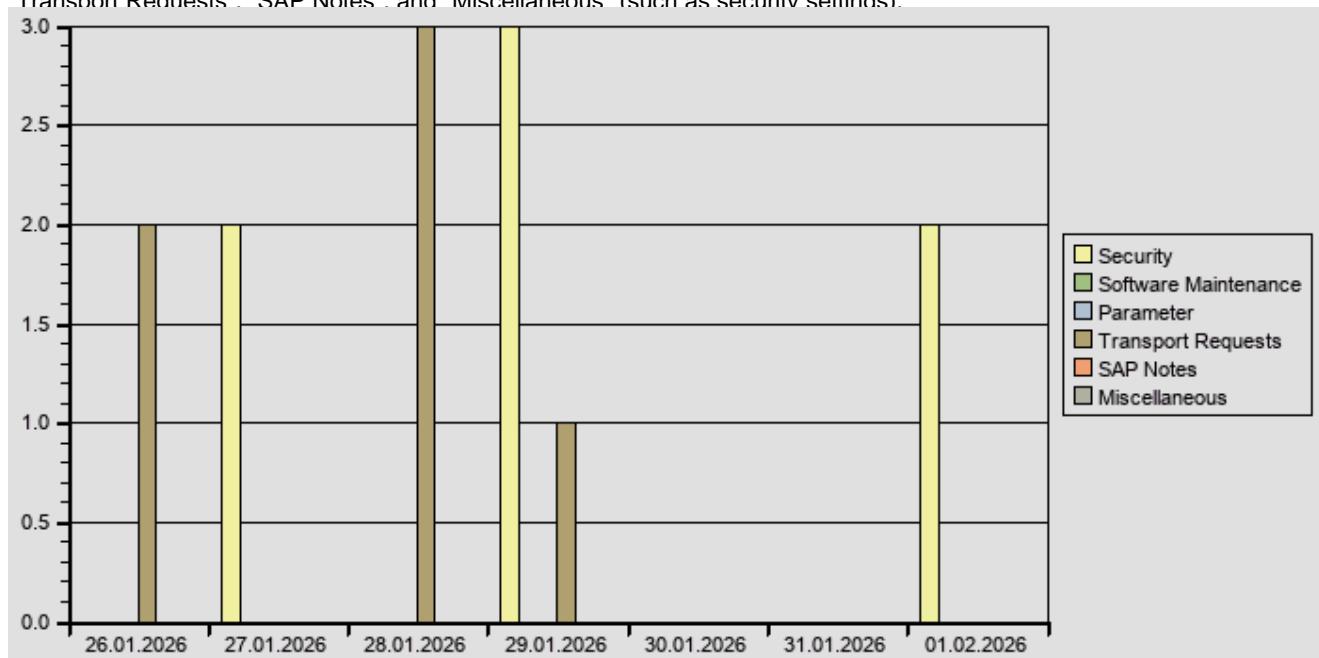
12.1 SAP Netweaver Application Server ABAP of ERP

Rating	Check Performed
✓	Number of Changes
✓	Emergency Changes
✓	Failed Changes

12.1.1 Number of Changes

Performing changes is an important cost driver for the IT department. It is only acceptable to make a large number of software and configuration changes in exceptional situations, such as during go-live for an implementation project.

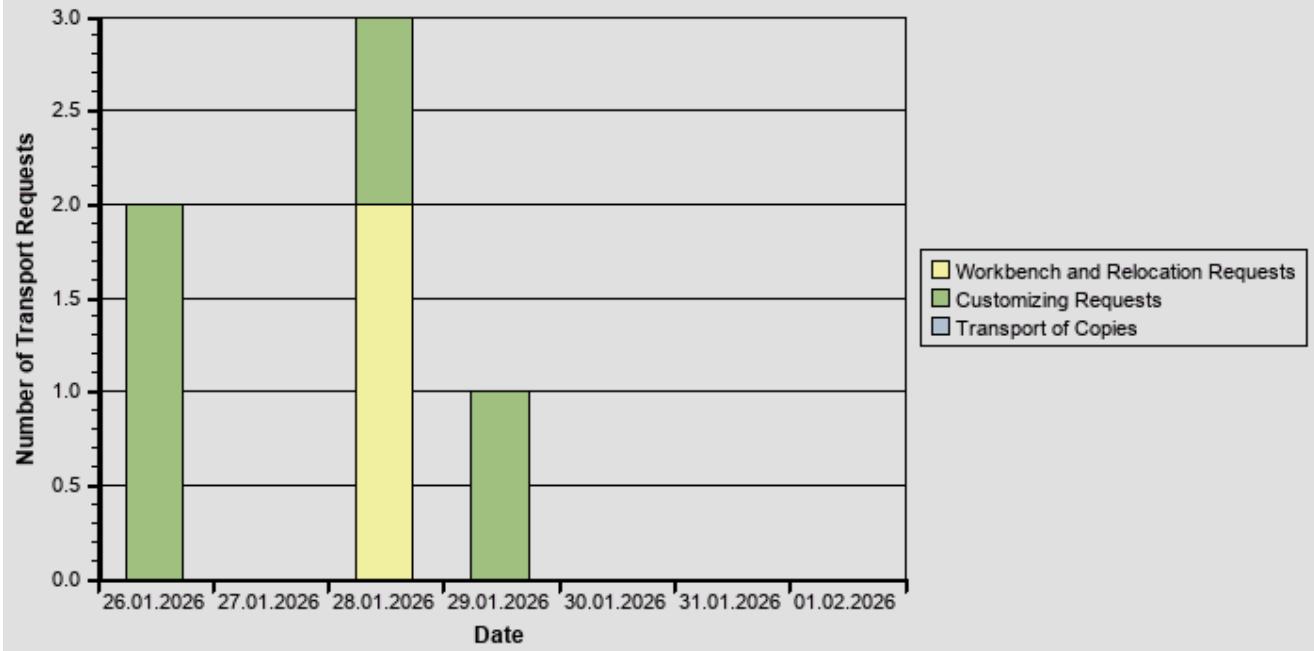
The following diagram shows the number of changes per day that were performed in the SAP system in the last week. The data is extracted from the Change Diagnostics application in SAP Solution Manager. The changes are grouped into "Software Maintenance" (such as support or enhancement packages), "Parameter" (instance, database, operating system), "Transport Requests", "SAP Notes", and "Miscellaneous" (such as security settings).



Date	Security	Software Maintenance	Parameter	Transport Requests	SAP Notes	Miscellaneous
26.01.2026	0	0	0	2	0	0
27.01.2026	2	0	0	0	0	0
28.01.2026	0	0	0	3	0	0
29.01.2026	3	0	0	1	0	0
01.02.2026	2	0	0	0	0	0

12.1.2 Number of Transport Requests

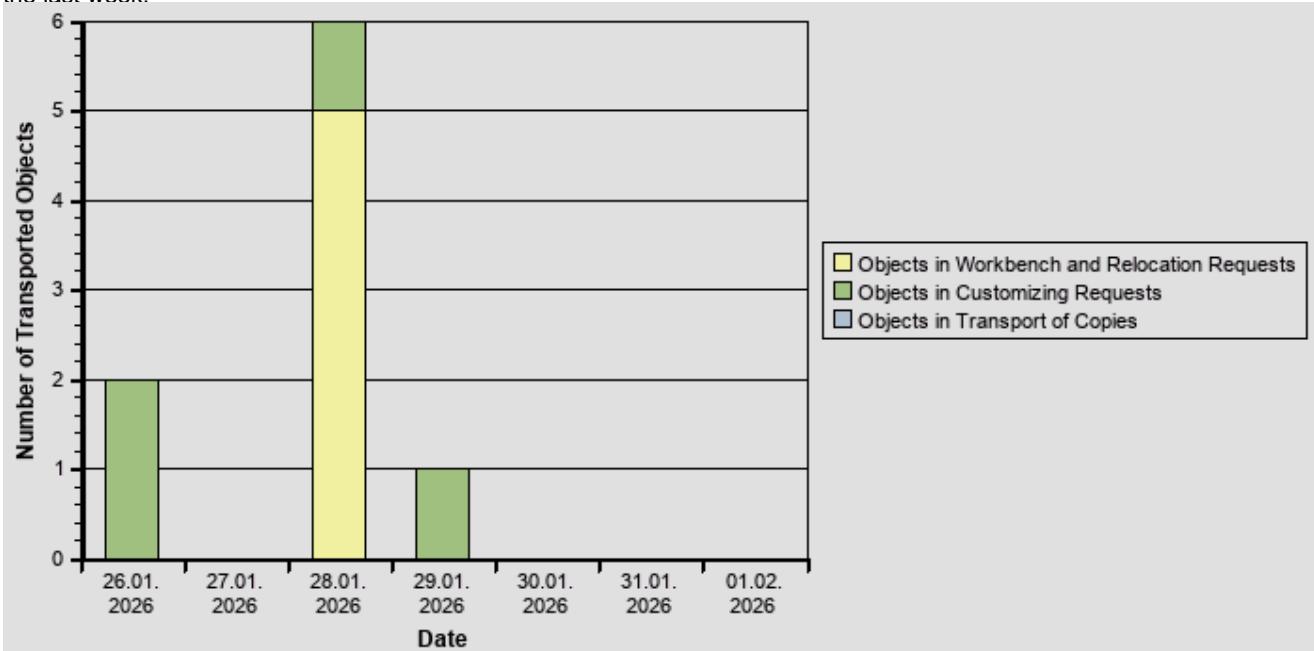
The following diagram contains information about the number of transport requests per day that were imported into the SAP system in the last week.



Date	Workbench and Relocation Requests	Customizing Requests	Transport of Copies
26.01.2026	0	2	0
28.01.2026	2	1	0
29.01.2026	0	1	0

12.1.3 Number of Transported Objects

The following diagram contains information about the number of objects per day that was imported into the SAP system in the last week.



Date	Objects in Workbench and Relocation Requests	Objects in Customizing Requests	Objects in Transport of Copies
26.01.2026	0	2	0
28.01.2026	5	1	0
29.01.2026	0	1	0

12.1.4 Emergency Changes

We analyzed the number of emergency changes in system ERP in the last week.

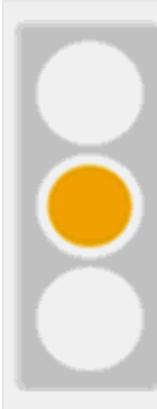
Rating	Item	Value	Explanation
✓	Transport requests created in production	0	Number of transport requests; created or released in production.
✓	Transport requests with short transition time	2	The duration between the export from the development system and the import into the production system was shorter than one day.
◆	Total number of transport requests	6	Total number of transport requests in production.

12.1.5 Failed Changes

In this check, we analyzed the number of failed changes in system ERP during the last week.

Rating	Item	Value	Explanation
✓	Transport requests with import errors	0	Number of transport requests with import errors that were not resolved within one hour.
✓	Overtakers and bypassed transport requests	0	If an old object version overwrites a newer one we count this as a transport sequence error. We count both the overtaker transport and the bypassed transport. Each transport is only counted once.
◆	Total number of transport requests	6	Total number of transport requests that were imported or released in production within the last week.

13 Financial Data Quality



After execution of the “quick” consistency checks and execution of the main reconciliation report, NO issues were identified that require your attention.

Please note that, due to a technical limitation in automatic data collection, we can only identify high-level indicators, which are a general sign of further inconsistencies in financial data.

The current Financial Data Quality chapter contains essential information about the quality and consistency of your financial data.

This chapter is structured with three subchapters: “Financial Data Integrity”, “Financial Data Management”, “Reconciliation for S/4HANA”. The first two chapters are based on “quick” checks of different financial modules. The latter chapter displays the status and results of the main reconciliation checks.

It is important to understand that, due to the technical limitation of the automated data collection, we can cover only a limited result list in your system using the “quick” consistency checks. The reconciliation checks are the main sources of data for our financial data quality analysis and should be executed. These checks ensure full transparency at the consistency level of your financial data.

13.1 Financial Data Integrity

Our “quick” checks identified no inconsistencies in the area of Financial Data Integrity that require your attention.

13.2 Financial Data Management

Our “quick” checks identified no inconsistencies in the area of Financial Data Management that require your attention.

13.3 Reconciliation for S/4HANA

This section displays data from the reconciliation checks in the area of Finance.

14 Data Volume Management (DVM)

Data relevant for Data Volume Management was collected on system ERP and stored in the SDCCN download. If you gave your consent, this data has been sent to SAP for further analysis. After the analysis has finished, you can find the analysis result in [SAP for Me](#) via the link shown in the respective column in the table below.

Note: For more information about DVM cloud-based service delivery, see [Knowledge Base Article 2716655](#).

Link to SAP Support Launchpad
https://launchpad.support.sap.com/#/dataoverview

15 Compatibility Package Usage: Information for SAP Solution Manager

The Compatibility Package Check is not available in the Solution Manager.

This is because it is based on data that is only available in SAP's service delivery infrastructure, namely a large set of rules for the assessment of transactions, reports, and other objects, and statistics of usage.

To receive the full Compatibility Package Check, you must have the EarlyWatch processed at SAP. You will then receive the report via [SAP for me](#).

See SAP note [207223 - SAP EarlyWatch Alert Processed at SAP](#) on how to send EarlyWatch Alert data to SAP.

See SAP note [1257308 - FAQ: Using EarlyWatch Alert](#) for general information about the SAP EarlyWatch Alert service.

Note 1: It is not sufficient to just "send the session" to SAP. It lacks necessary information and you will not receive valid results.

Note 2: After having sent EarlyWatch Alert data to SAP for the first time, allow at least two more weeks until you can expect reliable information from the check. If there are objects under the Compatibility Package that are rarely used but nevertheless important for your business processes it may take even longer. The reason is that the statistics necessary for assessment need time to build up.

Refer to [SAP Note 2269324](#) for more information on compatibility packages and their expiry dates.

Further, it is recommended that you perform a simplification item check as explained in the SAP blog post [How to Identify the Usage of Compatibility Scope](#).

16 SAP HANA Database HRP



We have checked your SAP HANA environment and found some issues that might have a negative impact on your overall system stability and performance. Review the report carefully and implement our recommendations.

Rating	Check
!	SAP HANA Stability and Alerts
!	SAP HANA Database Configuration
!	SAP HANA Resource Consumption
✓	SAP HANA Workload and Performance
!	Size and Growth
!	Administration

16.1 Overview

The tables below provide an overview of your current SAP HANA database configuration.

DB Version / Start Time

Current SAP HANA DB Version	Build Branch	Start Time
2.00.059.11	fa/hana2sp05	20.01.2026 13:43:58

Technical Instances

Host	Database Name	System ID	Instance	Active	Daemon	Start Time	Time Zone	Nameserver Role	Indexserver Role
saphrphdb02	HRP	HRP	00	yes	yes	2026-01-20 13:43:43.154	UTC	MASTER	MASTER

Hardware Settings - General Data

Host	Physical Hostname	Manufacturer	Model
saphrphdb02	azsahrpdb02	Microsoft Corporation	Virtual Machine

Hardware Settings - CPU and Memory Data

Host	CPU Type	CPU Frequency	CPU Cores	Threads	Sockets	NUMA Nodes	Physical Memory [GB]	Allocation Limit [GB]	Swap Space [GB]
saphrphdb02	Intel(R) Xeon(R) Platinum 8280L CPU @ 2.70GHz	2.693	64	128	4	4	3.831,0	3.710,4	2,0

Operating System Details

Host	Operating System PPMS Name	Operating System Version	Operating System Kernel	NOFILES Limit	OPEN_FILE Limit
saphrphdb02	LINUX_X86_64	SUSE Linux Enterprise Server 15 SP5	5.14.21-150500.55.116-default	1.048.576	9.223.372.036.854 .775.800

HANA Feature Usage

Usage	Installed / used	Additional data	SAP Note
Multitenant Database Containers (MDC)	Yes	System ID: HRP	2101244
Dynamic Tiering	No		2140959
Enterprise Performance Management Add-On (EPM MDS)	No		2456225
Embedded liveCache	No		2593571
Streaming Server	No		
Advanced Function Libraries	No		
XS Advanced	No		
Embedded Statisticsserver active	Yes		2147247
System Replication	Yes		1999880
Smart Data Access (SDA)	No		2180119
Smart Data Integration (SDI)	No		2400022
Smart Data Streaming (SDS)	No		2367236
Persistent Memory	No		2700084
Fast Restart Option	No		2700084
Data Aging	Yes		2416490
Extension Node	No		2741690
Workload Classes	No		2222250
Native Storage Extension (NSE)	No		2775588
Multi Dimensional Expressions (MDX)	No		
Multi Dimensional Services (MDS)	No		2670064
Activated Audit Policies	Yes	44	2159014
Sequences	Yes	177 (SLT: 167)	2600095
Triggers	Yes	510 (22 internal)	2800020
Fulltext Indexes	Yes	189	2800008
Fuzzy Search Indexes	Yes	155	2800008
Document Store Collections	No		2477204
Text Analysis Tables	No		2800008
Text Mining Tables	No		2800008
Series Tables	No		
Table Replicas	No		2340450
Volume Encryption	Yes	PERSISTENCE, LOG, BACKUP	2159014
Incremental Data Backup	No		1642148
Differential Data Backup	No		1642148
Data Snapshot Backup	No		1642148

HANA System Settings

Name	Value	SAP Note
Users with individual Statement Memory Limit	44	1999997
Statement Hints	0	2400006
Database Log Mode	normal (DEFAULT)	1642148
Automatic Log Backup	yes (DATABASE)	1642148
Query Result Cache	no (DEFAULT)	2014148
Global Auditing State	true (DATABASE)	1991634
Parallelism of Table Preload	10 (DATABASE)	2127458
Table Preload during Startup	true (DEFAULT)	2127458

System Replication Overview

Host	Site Name	Secondary Host	Secondary Site Name	Replication Mode	Full Sync	Operation Mode
saphrphdb02	AZSAHRPDB02	saphrphdb01	AZSAHRPDB01	SYNC	DISABLED	logreplay

HANA Update Information

Date	Version
16.10.2020	2.00.046.00.1581325702
12.06.2021	2.00.055.00.1615413201
19.03.2022	2.00.059.01.1642499117
17.06.2023	2.00.059.08.1678802465
27.01.2024	2.00.059.11.1700553860

16.2 SAP HANA Stability and Alerts

16.2.1 SAP HANA Alerts

 SAP HANA alerts have been issued for the monitored timeframe.

SAP HANA collects system information periodically and issues alerts of different priority levels according to predefined thresholds. These alerts can be used to monitor the performance and stability of the SAP HANA database. Possible alert priorities are:

- 1 – Information
- 2 – Low
- 3 – Medium
- 4 – High
- 5 – Statistics Server Alert

The following "Alerts" table shows SAP HANA alerts that reached at least medium priority during the monitored timeframe. It also shows how often an alert was created and the highest priority for this particular alert.

The "Recommendations" table lists recommendations for the alerts found and refers to SAP KBA Notes if available. Further details and recommendations for SAP HANA alerts are available in the relevant sections of the report.

Alerts

Alert ID	Alert	No. of Occurrences	Highest Rating
136	Checks if configuration parameters are set to unsupported values	8	3
46	Identifies new runtime dump files (*rtedump*) have been generated in the trace directory of the system. These contain information about, for example, build, loaded modules, running threads, CPU, and so on.	1	3

Recommendations

Alert ID	General Recommendation	KBA
46	Check the contents of the dump files. For details please refer to the chapter "SAP HANA Stability and Alerts".	1977099
136	Check if system is running in a supported state	

Recommendation: Monitor SAP HANA alerts in the system closely to get an overview of the SAP HANA system status. React to warnings and problems visible in the alerts in due time. If you require support, create a case using the Get Support application in SAP for Me ([KBA 1296527](#)). Within case creation, select Product: Customer Project-Based Solution, and enter the component HAN-DB*.

For details, refer to the [SAP HANA Administration Guide](#) and to the SAP Note [2445867 How-To: Interpreting and Resolving SAP HANA Alerts](#).

16.2.2 SAP HANA Dumps

 SAP HANA dumps were detected during the time period analyzed.

SAP HANA dumps indicate critical situations during SAP HANA system operation.

Date	Crash Dumps	OOM Dumps	Emergency Dumps	Cleanup OOM Dumps	Composite OOM Dumps	Page Dumps	Operating System OOM Dumps	Process Allocation Limit OOM Dumps

Date	Crash Dumps	OOM Dumps	Emergency Dumps	Cleanup OOM Dumps	Composite OOM Dumps	Page Dumps	Operating System OOM Dumps	Process Allocation Limit OOM Dumps
01.02.2026	0	0	0	0	1	0	0	0

We observed a number of dumps in your SAP HANA system. Depending on the type of dump, different actions have to be performed:

Out-of-memory dumps: There are different reasons for out-of-memory dumps.

- "OOM Dump": Insufficient memory for normal operation.
- "Composite OOM Dump": Expensive SQL statements in SAP HANA consume too much memory and exceed the statement limit.
- "Cleanup OOM dump": This is an automatic dump to document the memory state after cleanup of an OOM situation.
- "Operating System OOM Dump": This type is raised if a certain memory request cannot be fulfilled by the operating system. The root cause has to be evaluated by analyzing the related OOM diagnosis file. If necessary, create a case using the Get Support application in SAP for Me ([KBA 1296527](#)). Within case creation, select Product: Customer Project-Based Solution, and enter the component HAN-DB*.
- "Process Allocation Limit OOM Dump": This type is raised if a certain memory request cannot be fulfilled by the corresponding process (e.g. indexserver or nameserver). The root cause has to be evaluated by analyzing the related OOM diagnosis file and is mostly caused by a too low limit set with parameter <global.ini|nameserver.ini|indexserver.ini> -> [memorymanager] -> allocationlimit. If necessary, create a case using the Get Support application in SAP for Me ([KBA 1296527](#)). Within case creation, select Product: Customer Project-Based Solution, and enter the component HAN-DB*.

All other dumps: In the event of emergency dumps or crash dumps, the call stack has to be evaluated. If necessary, create a case using the Get Support application in SAP for Me ([KBA 1296527](#)). Within case creation, select Product: Customer Project-Based Solution, and enter the component HAN-DB*.

Type of Dump	SAP Note
Out-Of-Memory Dump	1999997
Composite Out-Of-Memory Dump	1999997
Crash Dump	2177064
Page Dump	1977242
Operating System Out-Of-Memory Dump	2800138

To access the long-term history of memory consumption in SAP EarlyWatch Alert Workspace, click [here](#).

16.2.3 SAP HANA Service Restarts

	No critical issues with SAP HANA service restarts were detected.
--	--

We did not find critical issues with SAP HANA service restarts.

16.2.4 SAP HANA DB Availability

The SAP HANA DB availability was based on the availability of the index server as logged in the daemon trace file.

No critical problems occurred regarding the availability of SAP HANA services.

16.3 SAP HANA Database Configuration

16.3.1 Parameter Recommendation

	Check parameter settings
--	--------------------------

Some parameters are not set as recommended, or there are parameters deviating from default values.

This table highlights the parameters that were checked with regard to their impact on system performance and stability.

Important SAP HANA Parameters

Location	Parameter	Layername	Current Value	Recommended Value	Rating	SAP Note
global.ini [communication]	sslsessioncacheemode			off		2960895

Location	Parameter	Layername	Current Value	Recommended Value	Rating	SAP Note
global.ini [execution]	load_factor_job_wait_pct			0	!	2222250
global.ini [execution]	load_factor_sys_wait_pct			0	!	2222250
global.ini [memorymanager]	gc_unused_memory_threshold_abs	DEFAULT	0	949760	!	2169283
global.ini [memorymanager]	gc_unused_memory_threshold_rel	DEFAULT	-1	25	!	2169283
global.ini [system_replication]	logshipping_snapshot_logsize_threshold	DEFAULT	3221225472	3221225472000	!	2600030
indexserver.ini [lobhandling]	garbage_collect_interval_s	DEFAULT	43200	0	!	1999998
indexserver.ini [mergedog]	max_cputime_for_merge			100	!	2057046
indexserver.ini [mergedog]	max_cputime_for_parallel_merge			80	!	2057046
indexserver.ini [mergedog]	smart_merge_decision_func	DEFAULT	(MMS<1000 or DMS>1000 or DRC>0.1*MRC or DMR>0.1*MRC)	(DMS>1000 or DRC>0.1*MRC or DMR>0.1*MRC)	!	2057046
indexserver.ini [session]	itab_initial_buffer_size			1126400	!	1999997
indexserver.ini [threads]	default_stack_size_kb			2048	!	1999997
indexserver.ini [threads]	worker_stack_size_kb			2048	!	1999997
indexserver.ini [transaction]	suspended_cursor_lifetime			<between 1440 and 14400>	!	2800055

Recommendation: Set the SAP HANA parameters to the recommended value in the table.

Be aware that for a proper tenant DB parameter setting, the parameters configured on the system DB side must also be double-checked. Otherwise, critical parameters can be set in the system DB that appear as default values on the tenant side. Default values are only reported by the parameter check if an explicit recommendation exists, therefore, critical settings can be missed by focusing only on the tenant DB parameter check.

The table "SAP HANA Parameters deviating from default" lists parameters deviating from default. These parameters do not belong to the set of recommended parameters, they represent parameters that are not set to DEFAULT value.

In the list below, there might be parameters that needed to be changed, but also parameters that were supposed to be set back to their default values (as for special settings only in certain SAP HANA revisions) but were forgotten. The purpose of this output is only to report those parameters to bring them to your attention so you can check them.

SAP HANA Parameters deviating from default

Location	Parameter	Layername	Current Value
global.ini [execution]	max_concurrency_dyn_min_pct	DATABASE	30
indexserver.ini [partitioning]	bulk_load_threads	DATABASE	8
indexserver.ini [partitioning]	split_threads	DATABASE	32
indexserver.ini [smart_data_access]	enable_binary_transfer	DATABASE	false
indexserver.ini [sql]	hex_enable_remote_table_access	SYSTEM	false
indexserver.ini [sqltrace]	application	DATABASE	abap:erp
indexserver.ini [sqltrace]	application_user	DATABASE	sap_jobs_usr

16.3.2 SAP HANA Workload Management

 SAP HANA workload parameters need to be adjusted.

Workload management in SAP HANA allows you to balance and manage all workload types for optimal throughput and

response times. The available workload management parameters limit resource consumption (e.g. CPU, threads, memory) for certain operations. The recommended values depend on available memory resources and on the number of CPU threads of the database server (also referred to as number of logical CPUs). For general information, refer to SAP Note [2222250](#) (FAQ: SAP HANA Workload Management).

If the current value deviates from the default, we check whether the current value is within the interval specified by the minimum and maximum formula.

We were not able to determine the complete SAP HANA landscape. The recommendations below are only valid if you have one tenant.

Location	Parameter	Layername	Current Value	Recommended Value	Rating
indexserver.ini [indexing]	parallel_merge_threads	DEFAULT	2	<between 5 and 10>	!
indexserver.ini [metadata]	max_num_recompile_threads	DEFAULT	<HANA kernel>	<between 8 and 64>	!

Some workload parameters are not set correctly.

Recommendation: We generally recommend setting the minimum value for initial setup. However, depending on the overall load situation, customer-specific settings may lead to better results and need to be evaluated.

16.3.3 Parameters violating Value or Layer Restrictions

●●● There are parameters which violate value or layer restrictions.

The following SAP HANA parameter settings violate existing restrictions.

Location	Parameter	Layername	Current Value	Data Type	Value Range	Layer Restrictions	Kind of Violation
global.ini [infile_checker]	replicate	DATABASE	true	BOOLEAN		SYSTEM	Layer Violation

For value restrictions, you can compare the "Current Value" with the expected values ("Data Type", "Value Range") and consider the following discrepancies:

- Data Type = 'n/a', Value Range = 'n/a': The parameter name is either invalid or it is currently not maintained in view CONFIGURATION_PARAMETER_PROPERTIES.

- Else: The parameter value ("Current Value") doesn't match the specification (Data Type, Value Range).

For layer restrictions, you can compare the actual layer (Layer Name) with the permitted layers (Layer Restrictions) and make sure that the parameter is defined on a permitted layer.

Recommendation: See SAP Note [2186744](#) and make sure that all SAP HANA parameters are set correctly in terms of parameter name, value, and layer.

16.3.4 Disk Configuration

●●● There are no disk configuration issues.

Disk ID	Device ID	File system	Host	Path	Usage
2	866567	xfs	saphrphdb02	/usr/sap/HRP/HDB00/backup/data/	DATA_BACKUP
3	709071	xfs	saphrphdb02	/hana/log/HRP/	LOG
4	866567	xfs	saphrphdb02	/usr/sap/HRP/HDB00/backup/log/	LOG_BACKUP+CATALOG_BACKUP
5	866567	xfs	saphrphdb02	/usr/sap/HRP/HDB00/saphrphdb02/	TRACE
1	28132	xfs	saphrphdb02	/hana/data/HRP/	DATA

There are no disk configuration issues. Data and log data is stored on separate physical devices.

16.4 Size and Growth

Monitoring the size and growth of the HANA database is crucial for system stability and performance. In terms of stability, the growth on disk is shown. In terms of performance, the size of row and column tables as well as the size of delta areas in column tables are analyzed.

16.4.1 Disk Usage



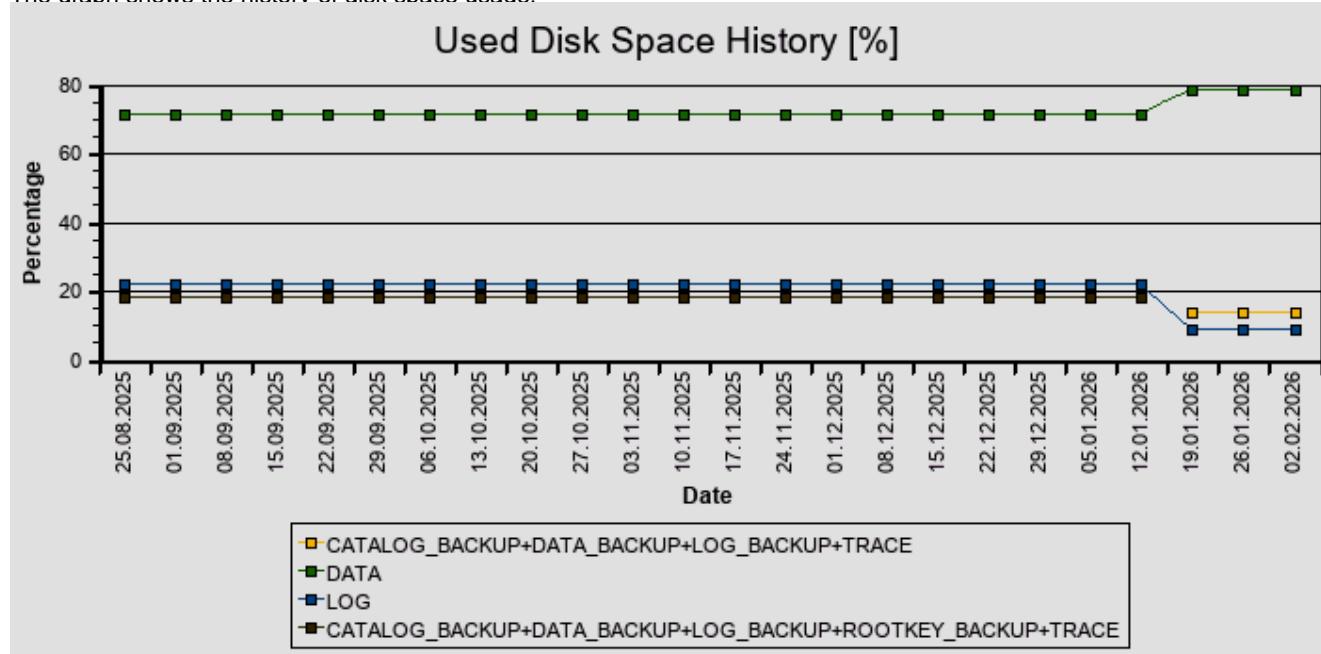
	Percentage of free disk space > 20%
--	-------------------------------------

The table below shows the disk occupancy with respect to the partitions and their usage types. If the percentage of free disk space falls below 10%, an intermediate action has to be performed. Otherwise, there is a risk of standstill in the SAP HANA database.

Disk Space

Host	Available Disk Space [GB]	Used Disk Space [GB]	Percentage of free Disk Space	Usage Types	File system	Rating
saphrphdb02	767,25	69,39	91,0	LOG	xfs	✓
saphrphdb02	1.023,50	140,90	86,2	CATALOG_BA CKUP+DATA_ BACKUP+LOG _BACKUP+TRACE	xfs	✓
saphrphdb02	6.141,25	4.841,11	21,2	DATA	xfs	✓

The graph shows the history of disk space usage.

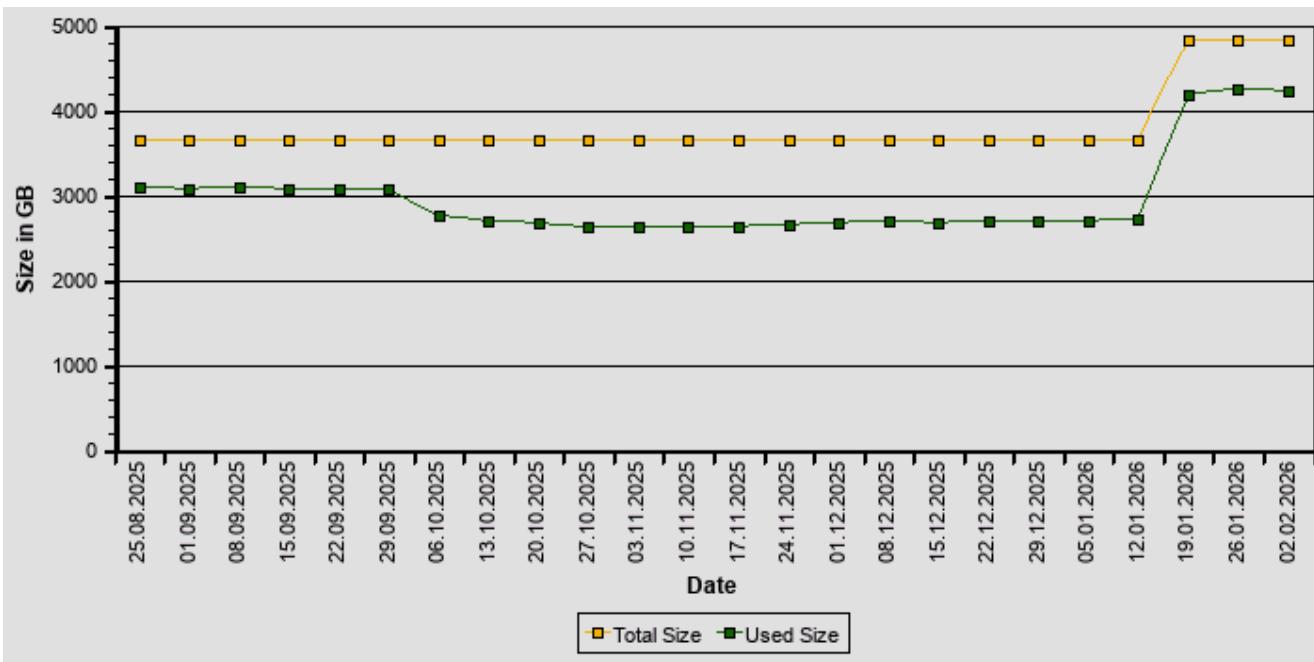


16.4.2 Database Growth

The graph shows the database size and growth based on the size of data volumes.

Total Size: Amount of data allocated by SAP HANA database on data volumes.

Used Size: Amount of used data by SAP HANA database on data volumes.



To access the database growth chart in SAP EarlyWatch Alert Workspace, click [here](#).

16.4.3 Tables and Indexes

The table below displays the number of column and row tables together with their indexes.

Tables and Indexes

Objects	Number
Column Tables	154.889
Indexes of Column Tables	161.098
Row Tables	12.437
Indexes of Row Tables	832

16.4.4 Size of Database Schemas

The following table lists the size of schemas in the SAP HANA database.

Size of SAP HANA Schemas

Host	Schema Name	Memory Size [MB]	Disk Size [MB]	LOB Size [MB]	Store Type
saphrphdb02	SAPABAP1	2.021.572	4.228.867	2.154.722	Column store
saphrphdb02	SYS_REPO	579	1.664	1.125	Column store
saphrphdb02	SYS_STATISTICS	940	1.471	620	Column store
saphrphdb02	SAPABAP1	1.460	80.631	79.171	Row store

16.4.5 SAP HANA Row Store

16.4.5.1 Row Store Size

●●●	The allocated row store size is below the technical limit.
--	--

The table below shows the size of the SAP HANA row store. The row store contains mainly SAP Basis and application statistics tables. The rating indicates whether the technical size limit will be reached in the near future.

The size of the row store generally has a direct impact on the start-up time of the SAP HANA database. This is relevant for system start-up and for recovery. We recommend that you keep the row store at an optimum size by performing housekeeping for large Basis tables (SAP Note 2388483) and, where feasible, moving large application tables from row

store to column store.

Row Store Size (MB)

Host	Port	Allocated Size (MB)	Rating
saphrphdb02	30003	3.136	✓

16.4.5.2 Largest Row Store Tables

The table lists the largest tables according to total disk size. The size of the memory and the number and type of LoBs are also shown. The LOBs are marked with either "H" (Hybrid) or "M" (Memory) and the number of the existing LoB columns.

Schema Name	Table Name	Total Disk Size (MB)	Size in Memory (MB)	Max Size in Memory (MB)	Nr. of Records	LOB Size (MB)	LOB Details
SAPABAP1	TST03	67.954	416	514	6.363.657	67.440	H1
SAPABAP1	FPLAYOUTT	5.125	2	2	26.950	5.123	H2
SAPABAP1	ODQDATA_F	2.902	1	1	7.344	2.902	H1
SAPABAP1	SXMSCLUR	803	31	33	102.511	769	H1
SAPABAP1	FPCONTEXT	756	1	1	5.282	755	H1
SYS	CS_COLUM NS_	607	570	607	2.107.830	0	0
SAPABAP1	ENHHEADER	602	3	3	21.809	599	H1
SAPABAP1	SWNCMONI	516	12	14	129.943	501	H1
SYS	RS_COLUM NS_	430	417	430	1.513.560	0	0
SAPABAP1	SXMSCLUP	393	8	10	84.293	383	H1

For large SAP Basis tables, remove obsolete data regularly according to SAP Note [2388483](#).

16.4.6 SAP HANA Column Store

16.4.6.1 Largest Column Tables (Size)

The table lists the largest tables according to total disk size. The size of the memory and the number and type of LoBs are also shown. The LOBs are marked with either "H" (Hybrid) or "M" (Memory) and the number of the existing LoB columns.

Schema Name	Table Name	Nr. of Partitions	Total Disk Size (MB)	Size in Memory (MB)	Max. Size in Memory (MB)	LOB Size (MB)	LOB Details
SAPABAP1	/DVD/ERP_C LU	1	1.009.798	0	905	1.008.896	H1
SAPABAP1	/DVD/DTS_B CK0002	1	552.029	552	552	551.468	H1
SAPABAP1	/DVD/DTS_B CK0006	1	403.788	357	357	403.418	H1
SAPABAP1	CDPOS	8	377.510	381.221	381.221	0	0
SAPABAP1	PRCD_ELEM ENTS	16	215.530	219.762	219.713	0	0
SAPABAP1	MATDOC	4	101.111	102.533	102.535	0	0
SAPABAP1	BSEG	2	89.031	88.304	88.304	0	0
SAPABAP1	CKMI1	4	75.632	76.503	76.506	0	0
SAPABAP1	ACDOCA	2	74.253	77.526	77.519	0	0
SAPABAP1	SRRELROLE S	1	64.383	65.613	65.585	0	0

For large SAP Basis tables, remove obsolete data regularly according to SAP Note [2388483](#).

16.4.6.2 Largest Non-partitioned Column Tables (Records)

	The number of records in column-based table partitions may become critical.
--	---

The table below shows the largest non-partitioned column tables in terms of the number of records.

Largest Non-partitioned Column Tables According To Records

Schema Name	Table Name	Records (Total)	Weekly Record Growth [%]	Load Status	Rating
SAPABAP1	RSAU_BUF_DATA	1.069.911.759	0,82	PARTIALLY	
SAPABAP1	EDID4	730.254.922	0,01	PARTIALLY	
SAPABAP1	SRRELROLES	652.229.286	0,03	PARTIALLY	
SAPABAP1	EDIDS	496.442.535	3,06	PARTIALLY	
SAPABAP1	WPLST	434.790.944	0,00	PARTIALLY	
SAPABAP1	VFKN	381.641.162	0,00	PARTIALLY	
SAPABAP1	VFSI	381.583.415	0,00	PARTIALLY	
SAPABAP1	VBRP	321.661.713	0,05	PARTIALLY	
SAPABAP1	STXH	302.643.804	0,06	PARTIALLY	
SAPABAP1	VEPO	295.513.497	0,02	PARTIALLY	

There are objects with a high number of records (more than 1 billion). This is not yet critical with regard to the technical limit of SAP HANA (2 billion records), but table partitioning should be considered if these tables are expected to grow rapidly in the future.

Recommendation: Consider partitioning for tables that are expected to grow rapidly in order to ensure parallelization and adequate performance. We recommend that you partition tables before inserting mass data or while they are still small.

For more information, see SAP Note [1650394](#) or refer to the [SAP HANA Administration Guide](#) to chapter "Table Partitioning" and to SAP Note [2044468](#) -> "Question 27: Are there specific partitioning recommendations for certain SAP applications and tables?".

16.4.6.3 Largest Column Table Partitions (Records)

	The number of records in column-based table partitions is not critical.
--	---

The table below lists the largest column table partitions in the productive schema in terms of number of entries.

Largest Partitioned Column Tables According To Records

Schema Name	Table Name	Partition ID	Records (Total)	Weekly Record Growth [%]	Rating
SAPABAP1	ACDOCA	1	766.061.973	0,06	
SAPABAP1	ACDOCA	2	765.933.585	0,06	
SAPABAP1	CDPOS	4	727.570.252	0,03	
SAPABAP1	CDPOS	7	727.377.527	0,03	
SAPABAP1	CDPOS	8	727.175.238	0,03	
SAPABAP1	CDPOS	5	727.127.502	0,03	
SAPABAP1	CDPOS	2	726.886.093	0,03	
SAPABAP1	CDPOS	3	726.750.144	0,03	
SAPABAP1	CDPOS	1	726.541.974	0,03	
SAPABAP1	CDPOS	6	726.360.075	0,02	

The table partitions can handle the number of the records.

16.5 SAP HANA Resource Consumption

The following table shows an overview of the resource consumption of the SAP HANA instances in the monitored timeframe.

HANA Instances Overview

HANA Instance	Role	CPU Usage	Memory Usage of HANA server	Memory Usage of SAP HANA Instance	Memory Allocation of Tables	Memory Consumption Indexserver
saphrphdb02_HRP_00	MASTER	✓	✓	✓	!	✓

Some of the SAP HANA hardware resources are not sufficient for the current workload. This may lead to performance and stability issues. Details of resource consumption issues are listed in the sections below.

16.5.1 Memory Utilization Overview for SAP HANA Instances

The following table shows the memory usage of the SAP HANA database. The table displays weekly average values for the SAP HANA memory areas:

'**Memory usage of the HANA database**' corresponds to the memory used by the entire SAP HANA database (comparable to 'DB used memory' in SAP HANA studio).

'**Global allocation limit**' is the limit for the overall memory usage of the SAP HANA instance defined by the global_allocation_limit parameter.

'**Row store size**' shows the average size of row store tables in SAP HANA memory.

'**Column store size**' shows the average size of column store tables in SAP HANA memory.

The main SAP HANA workload is handled by the SAP HANA index server. The weekly average of the hourly maximum values of the '**Memory usage of the index server**' and the '**Effective allocation limit**' of the index server are listed.

More detailed information about memory shortage on an SAP HANA instance is provided in the sections below.

Avg. memory usage by SAP HANA Instances

HANA instance	Memory usage of SAP HANA [GB]	Global allocation limit [GB]	Row store size [GB]	Column store size [GB]	Memory usage of indexserver [GB]	Effective allocation limit of indexserver [GB]
saphrphdb02_HRP_00	2.447	3.710	6	2.029	2.455	3.700

16.5.2 SAP HANA Instance saphrphdb02_HRP_00

16.5.2.1 CPU Usage of SAP HANA Server

	No CPU bottlenecks were detected.
---	-----------------------------------

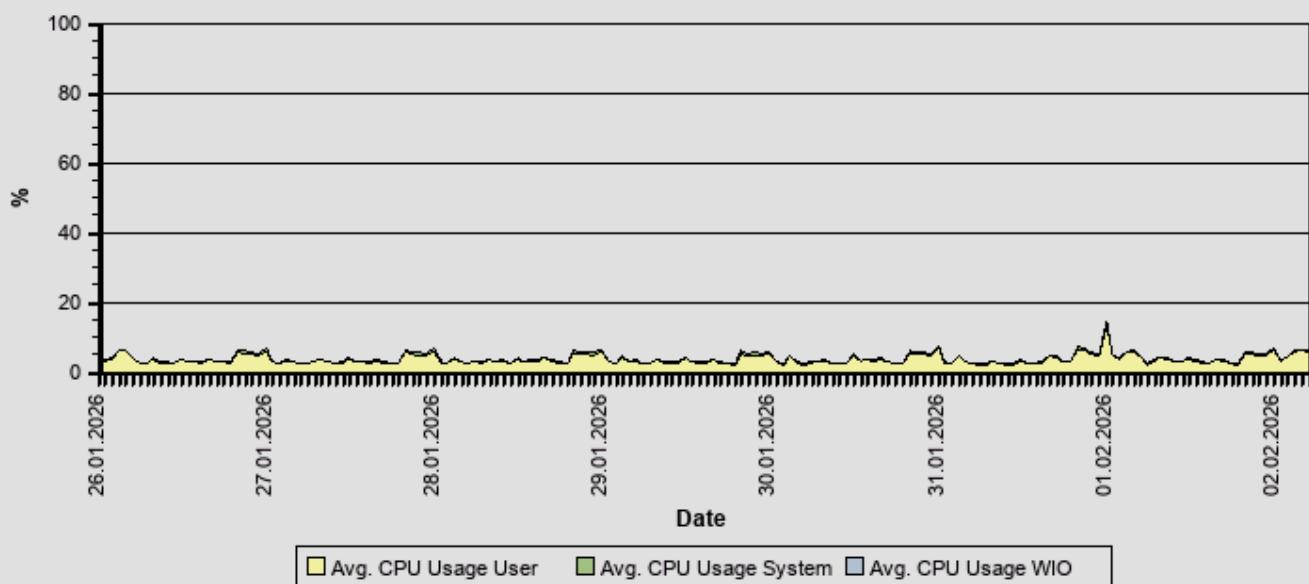
To access the CPU usage charts in SAP EarlyWatch Alert Workspace, click [here](#).

The graphics below show the average and maximum CPU consumption per hour.

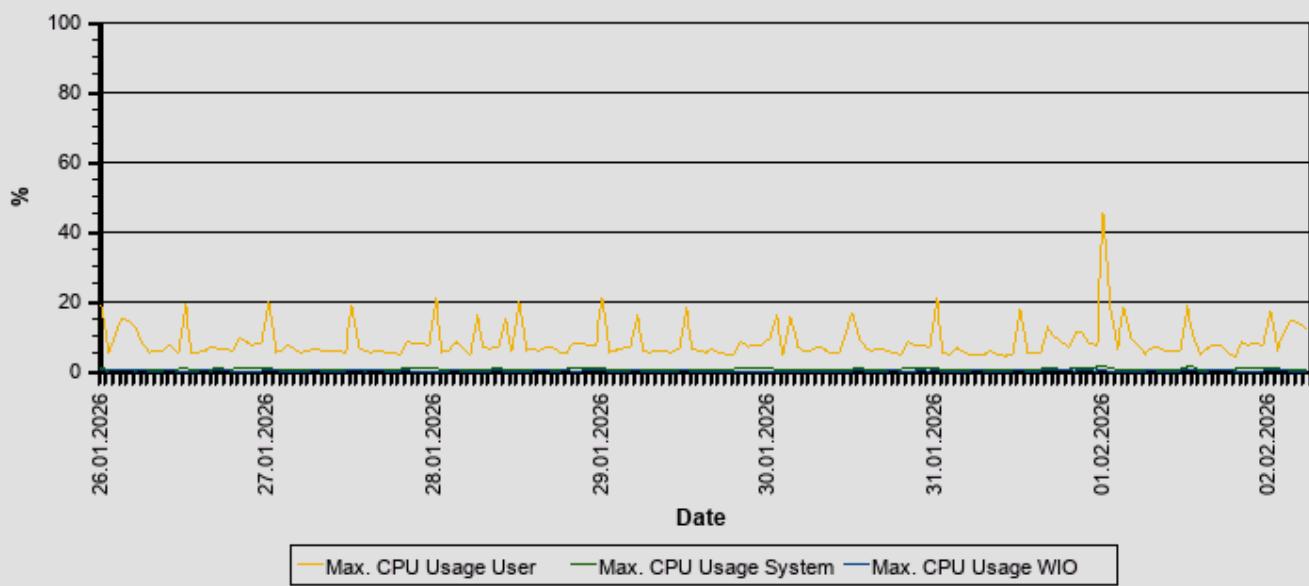
The data is obtained from the statistics tables of the SAP HANA database.

If the average CPU consumption exceeds 75%, a YELLOW rating is assigned. If it exceeds the threshold of 90%, a RED rating is assigned.

Average CPU Usage (Hourly Aggregates)



Maximum CPU Usage (Hourly Aggregates)



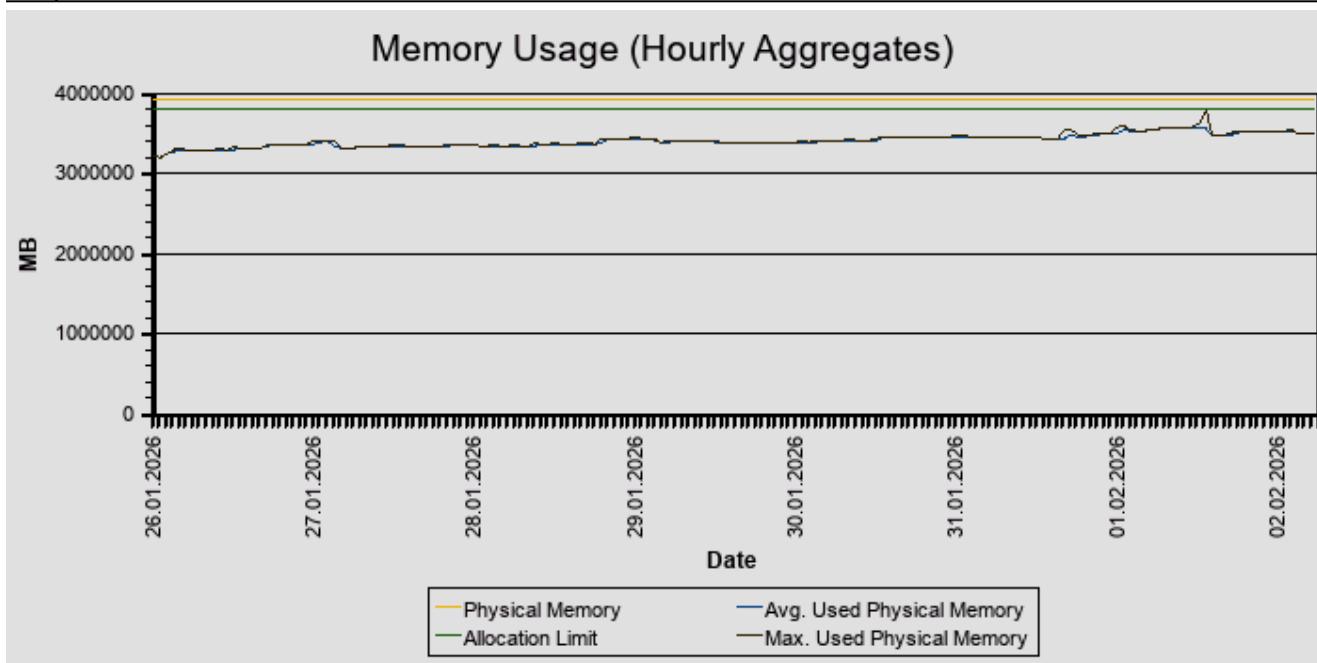
We did not find any critical issues in this area.

16.5.2.2 Memory Usage of SAP HANA Server

No memory bottlenecks were detected.

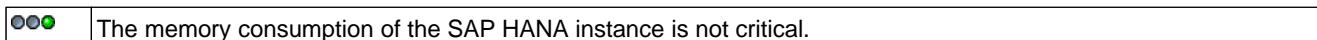
To access the memory usage chart in SAP EarlyWatch Alert Workspace, click [here](#).

The following graph shows the physical memory usage during the monitored timeframe. The average and maximum memory used by SAP HANA (and possibly other processes) is compared with the available physical memory of the SAP HANA server.



No critical issues were detected in this area.

16.5.2.3 Memory Usage of SAP HANA Instance

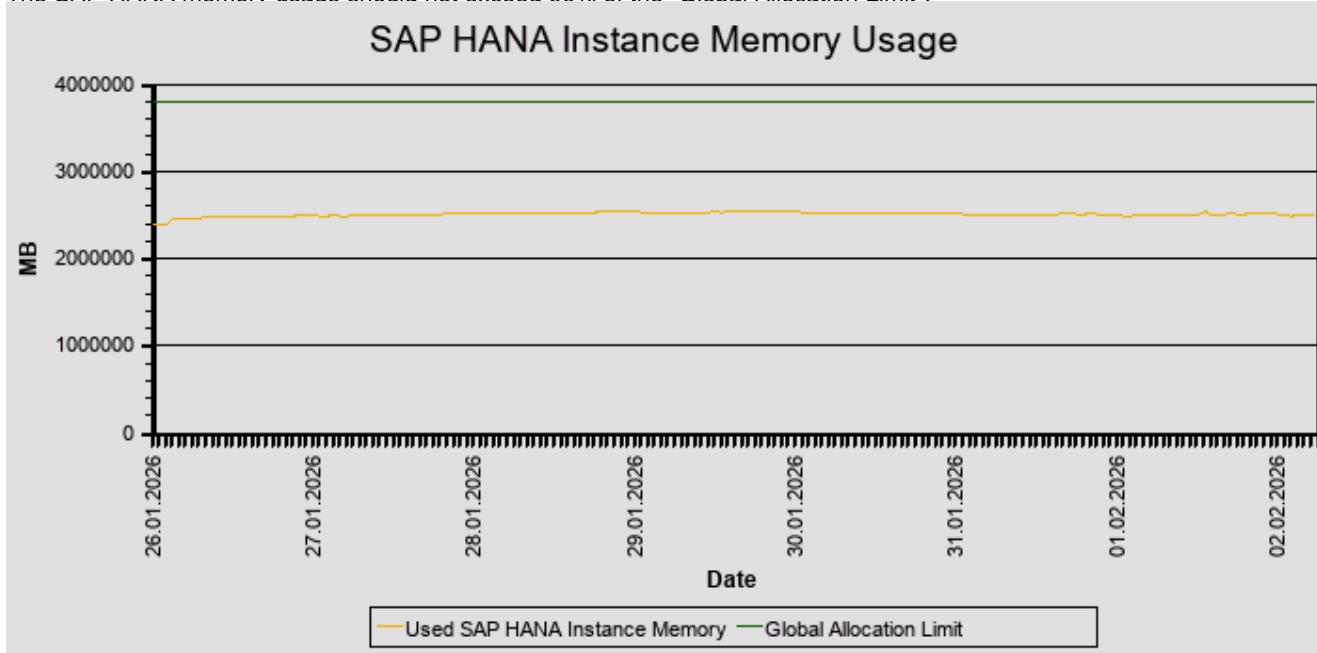


To access the memory usage chart in SAP EarlyWatch Alert Workspace, click [here](#).

The following graph shows the memory usage of the SAP HANA database instance during the monitored timeframe. The memory used by SAP HANA on the SAP HANA host is compared with the global allocation limit of the SAP HANA instance.

If the "Used SAP HANA Instance Memory" approaches the "Global Allocation Limit", data has to be unloaded from SAP HANA memory. This may affect the overall performance and stability of the SAP HANA database.

The SAP HANA memory usage should not exceed 90% of the "Global Allocation Limit".



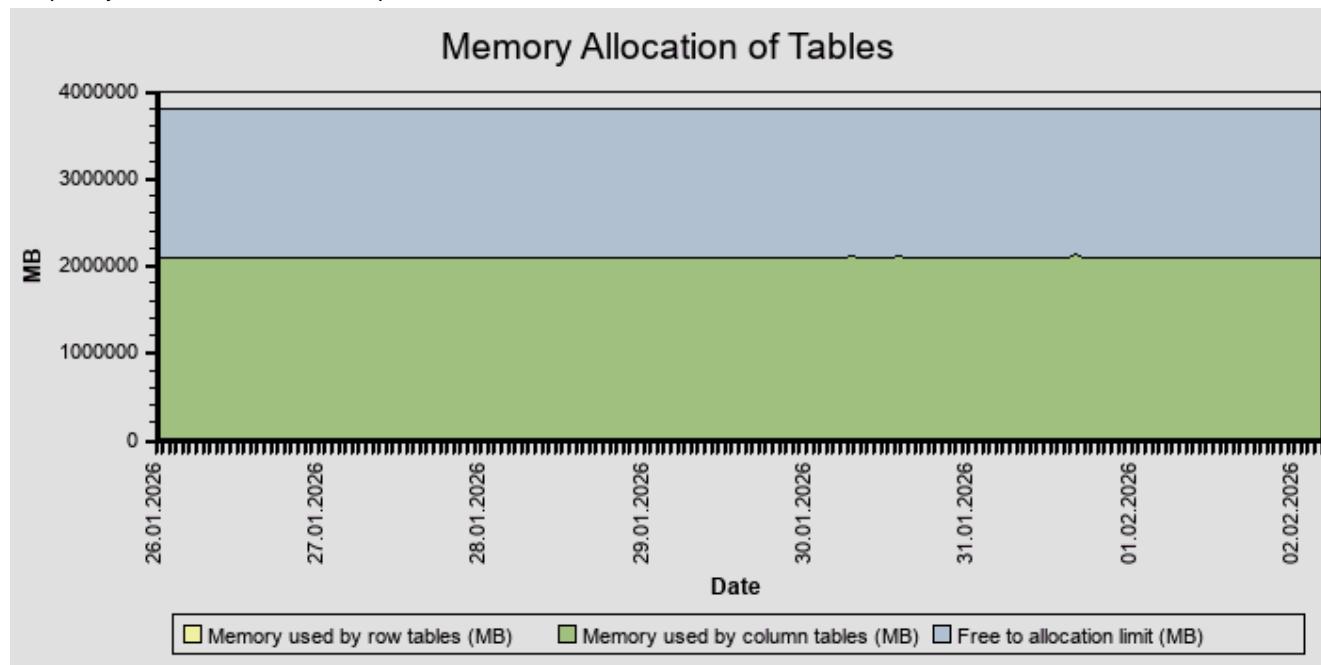
The memory consumption of the SAP HANA instance is not critical.

16.5.2.4 Memory Allocation of Tables



This graphic shows the average memory consumption for storing row and column tables, and the memory available for

temporary calculations and other operations.



From a SAP HANA sizing perspective, it is recommended that the memory usage for SAP HANA tables remains below 50% of the global allocation limit.

If the memory usage for SAP HANA tables reaches 70% of the global allocation limit, the remaining memory resources for temporary calculations may be too small.

The memory remaining for working operations may become critical.

Recommendation: Monitor the SAP HANA memory consumption closely. For more information about SAP HANA memory consumption and monitoring, see the SAP HANA Administration Guide, chapter "Monitoring SAP HANA systems" at http://help.sap.com/hana/SAP_HANA_Administration_Guide_en.pdf.

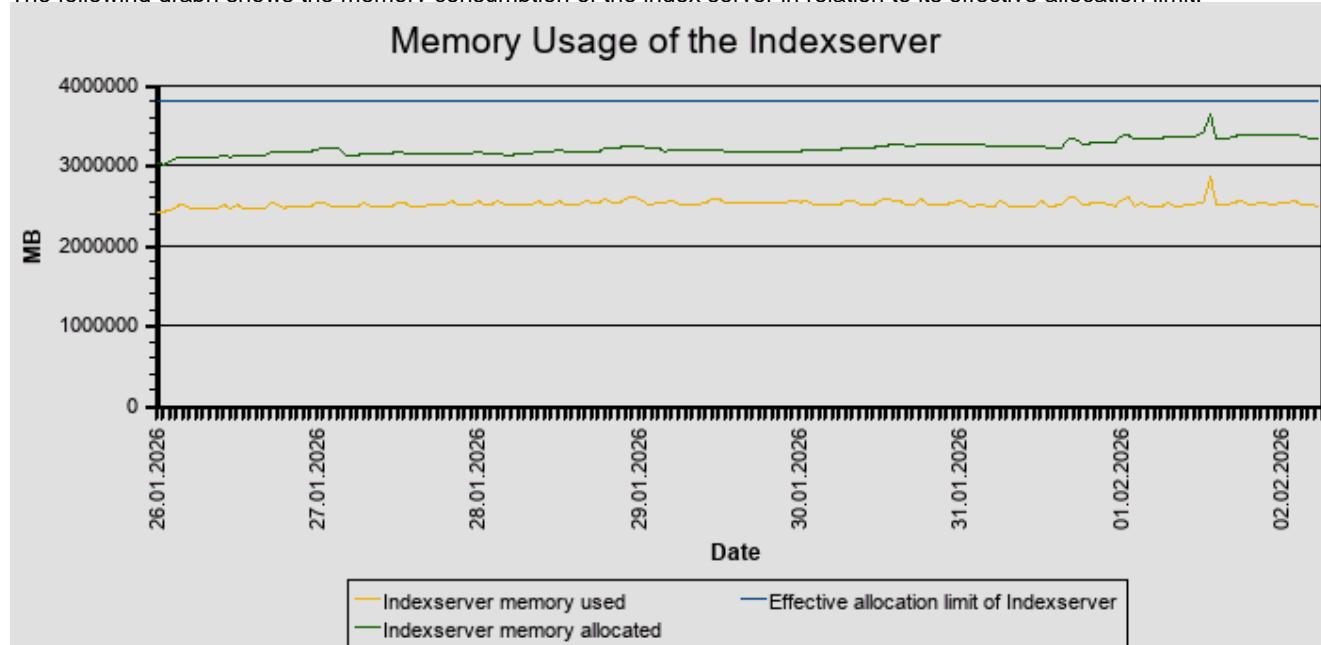
16.5.2.5 Memory Consumption of Indexserver

●●● The memory consumption of the index server was not critical.

To access the memory usage chart in SAP EarlyWatch Alert Workspace, click [here](#).

The index server is the most critical component with regard to SAP HANA memory consumption and must be monitored regularly. If the memory consumption of the index server approaches the effective allocation limit, table unloads or even out-of-memory dumps may occur.

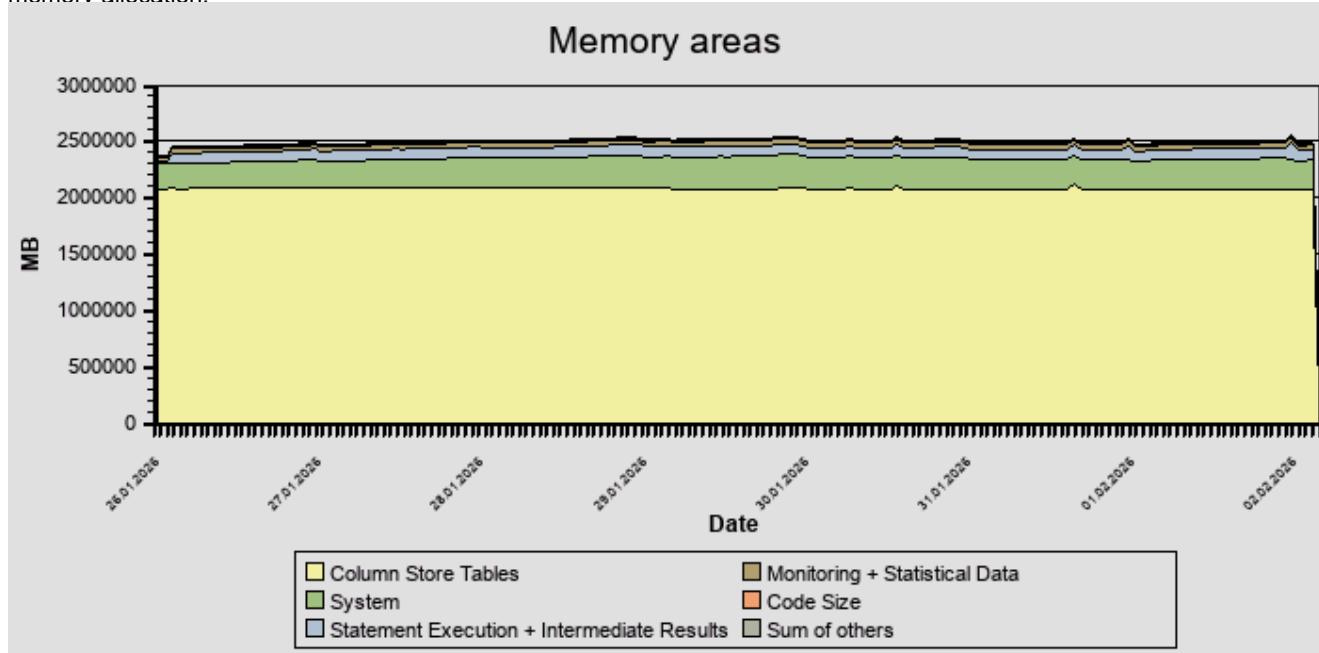
The following graph shows the memory consumption of the index server in relation to its effective allocation limit.



The memory consumption of the index server was not critical.

16.5.2.6 Main Memory Areas of SAP HANA

The following graph shows the top 5 consumers of SAP HANA memory. Additional allocators are summed up in the "Others" category. Refer to SAP Note [1999997](#) - FAQ: SAP HANA Memory for a more detailed explanation of SAP HANA memory allocation.



To access the memory usage chart in SAP EarlyWatch Alert Workspace, click [here](#).

16.6 SAP HANA Workload and Performance

16.6.1 SAP HANA Load History

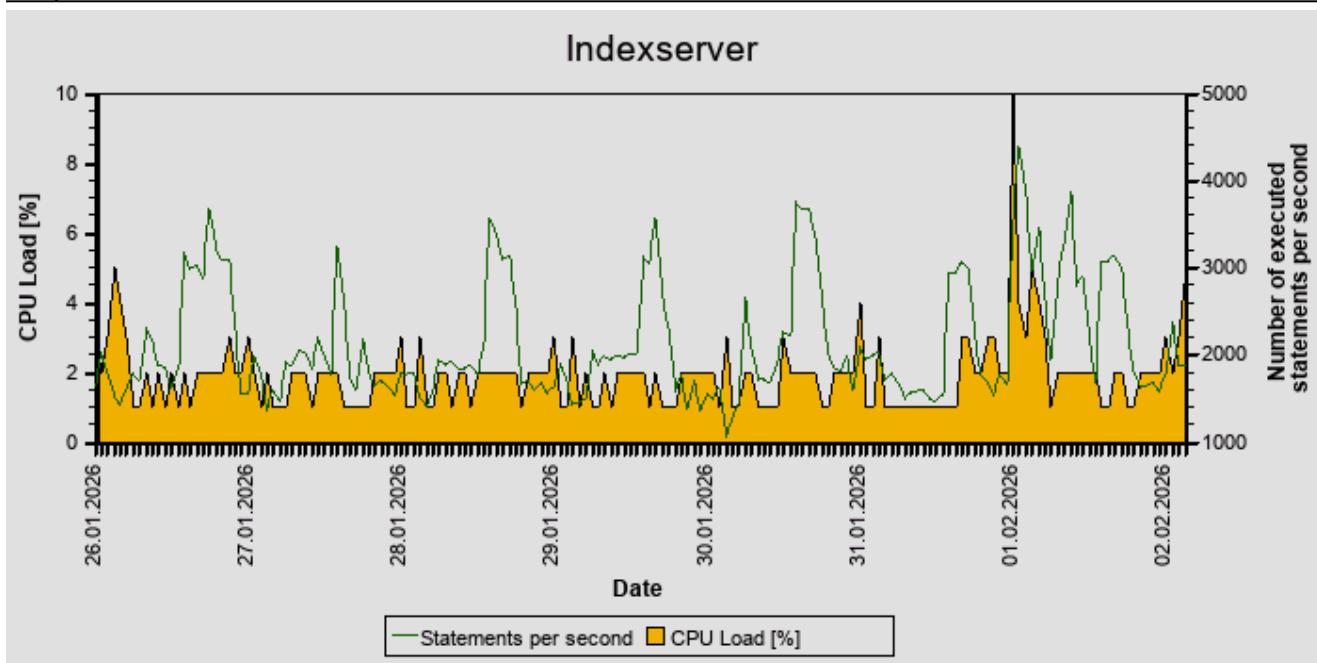
With the load history of the SAP HANA database important key figures can be obtained, which give further insights of the health state of the SAP HANA database.

16.6.1.1 SAP HANA Instance saphrphdb02_HRP_00

16.6.1.1.1 CPU and SQL Statement Load

The following chart shows the comparison of the CPU load and the number of SQL statements per second of the corresponding service.

The number of SQL statements per second and the CPU utilization should correlate. In a well-balanced system the CPU consumption should be dominated by the number of SQL statements per second. Deviations of this behavior point e.g. to expensive SQL statements and should be investigated. High resource intensive SQL statements can be found in the SAP EarlyWatch Alert Workspace. To do so, use this link to the [SAP EarlyWatch Alert Workspace](#) and press the button "Analyze CPU Utilization".



16.6.1.1.2 Threads and SQL Executors

The table below shows the most important KPIs regarding the thread- and SQL executor throughput.

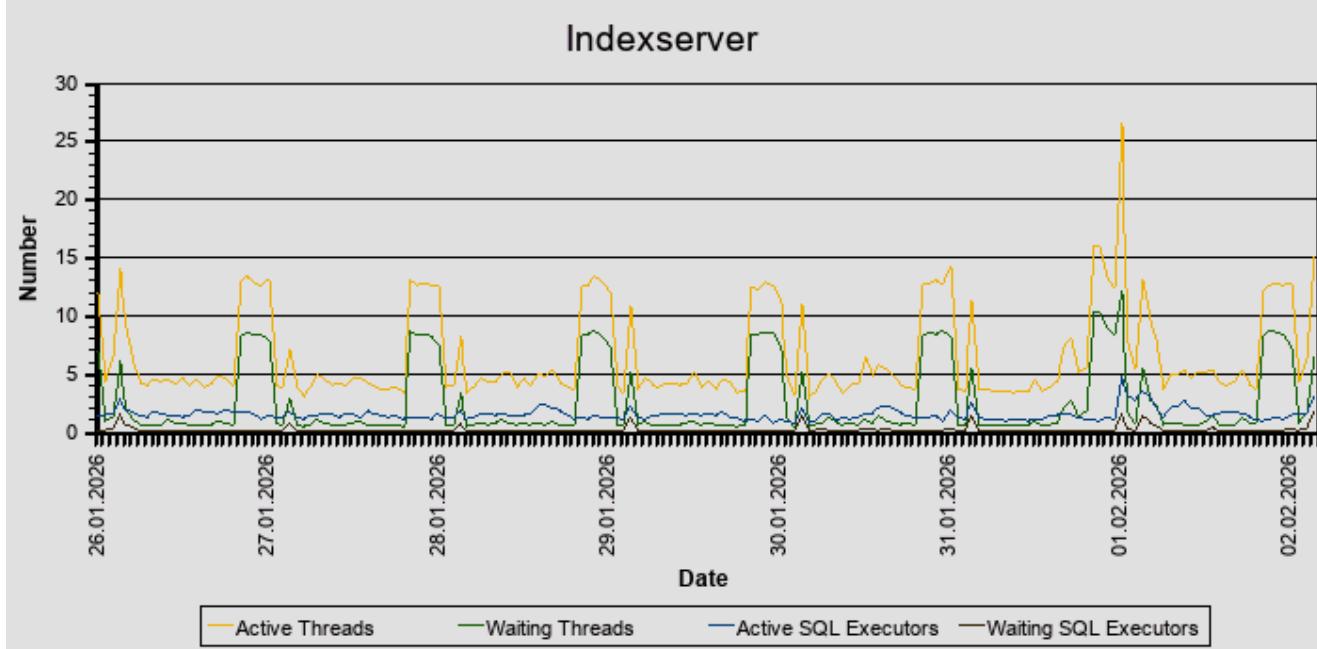
Summary of Important Thread KPIs

Service Name	Average Number of Active Threads	Maximum Number of Active Threads	Average Number of Waiting Threads	Maximum Number of Waiting Threads
Indexserver	6,60	26,57	2,57	12,11

Summary of Important SQL Executor KPIs

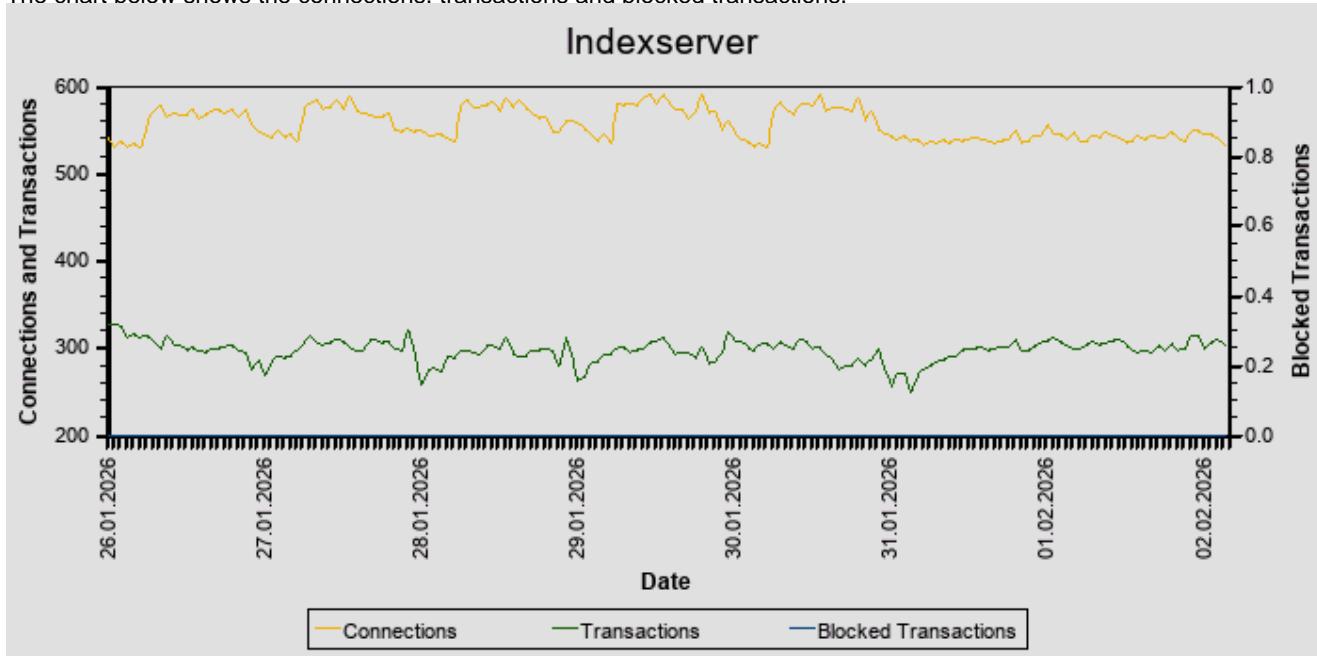
Service Name	Average Number of Active SQL Executors	Maximum Number of Active SQL Executors	Average Number of Waiting SQL Executors	Maximum Number of Waiting SQL Executors
Indexserver	1,48	4,75	0,17	1,73

The chart below shows active and waiting threads and active and waiting SQL executors. A high amount of those waiting key figures in comparison to the corresponding active key figures might point to a problem during this time interval.



16.6.1.1.3 Connections and Transactions

The chart below shows the connections, transactions and blocked transactions.



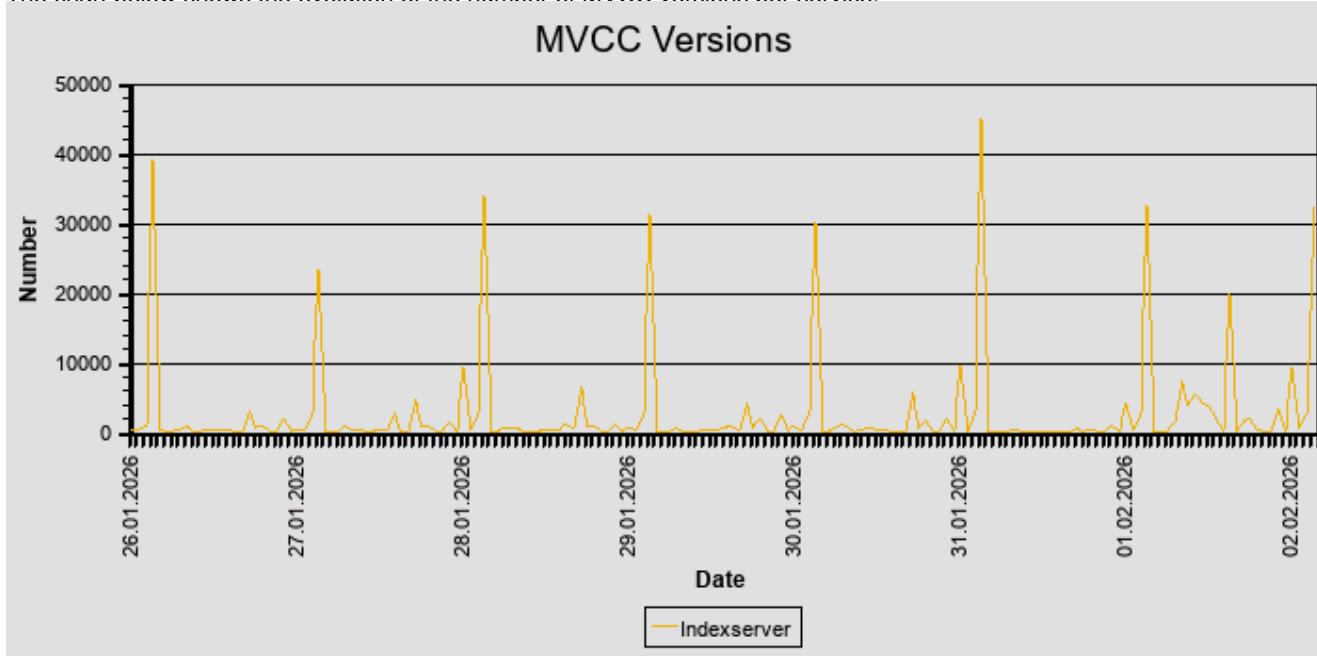
16.6.1.1.4 Number of MVCC Versions

The Row Store Multiversion Concurrency Control (MVCC) indicates if long running not committed transactions were running leading to a high number of versions and may result in performance problems.

The table below shows the average and maximum number of the MVCC versions during the previous week.

Service Name	Average Number of MVCC Versions	Maximum Number of MVCC Versions
Indexserver	2.642,3	45.052

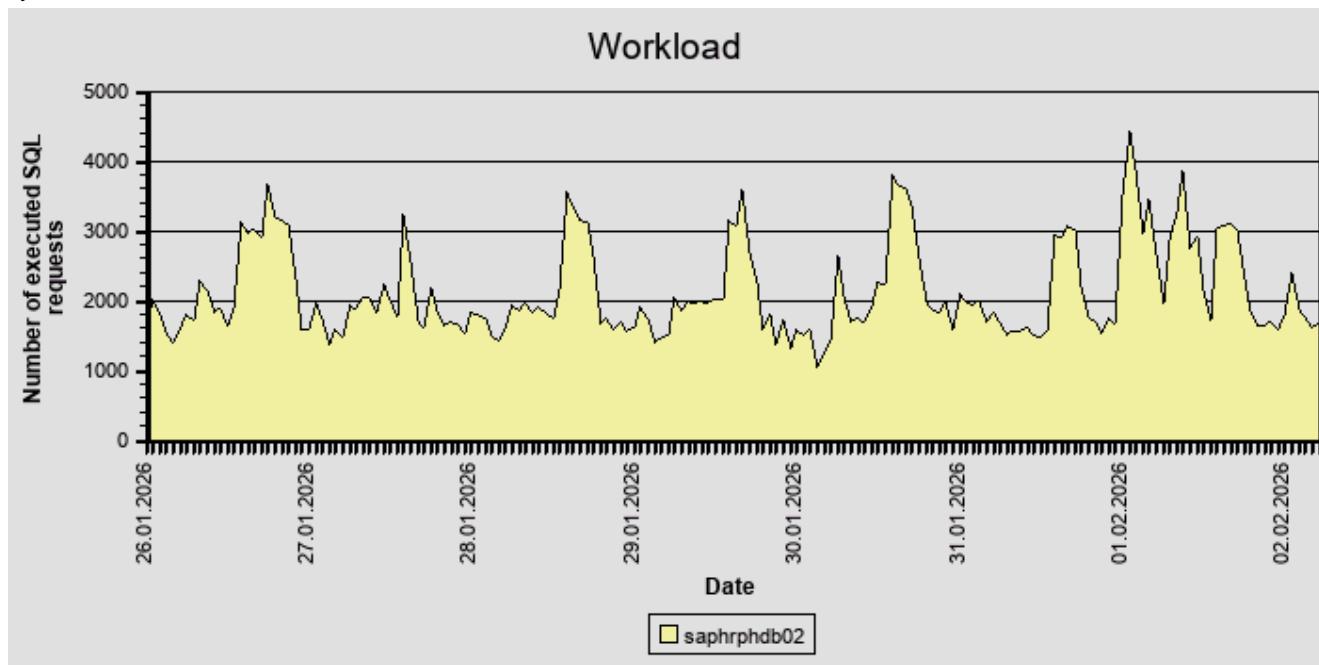
The chart below shows the evolution of the number of MVCC versions per service.



16.6.2 SAP HANA Workload

The table shows the number of SQL requests executed per second and per node (maximum 23 nodes) in your SAP HANA

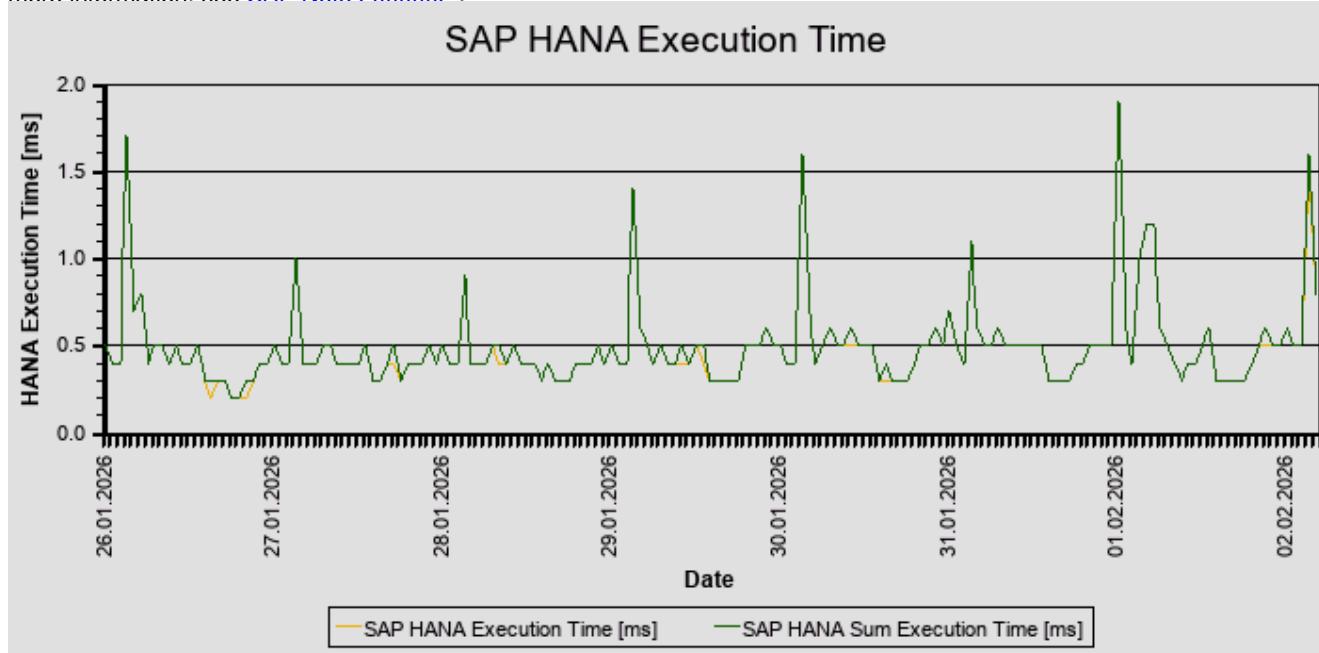
system in the monitored timeframe.



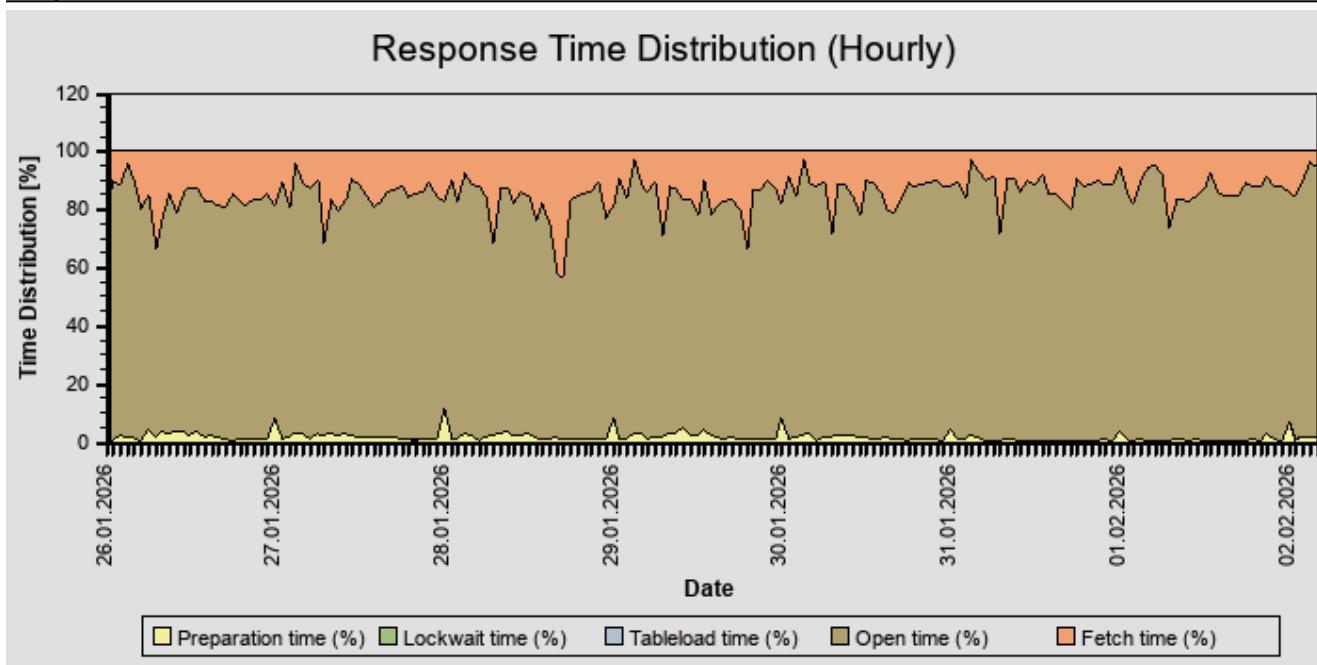
16.6.3 SAP HANA Response Times

The following graph shows the execution times of the SAP HANA system in the monitored timeframe aggregated from all SAP HANA nodes. The displayed "Execution Time" is the hourly average execution time obtained by the historized SQL Plan Cache.

Since the "Execution Time" in the SQL Plan Cache does not contain all response time parts, we also show in the graph below the "Sum Execution Time", which is the sum of the "Execution Time" plus preparation time and table load time. For more information see [SAP Note 2000002](#).



The following graph shows the response time distribution of the SAP HANA system. The data is collected from the history data of the SQL Plan Cache.



Explanation of the SAP HANA response time shares:

- Preparation time – time share for plan preparation
- Open time – time share for cursor open and select
- Fetch time – time share for cursor fetch
- Lock wait time - lock wait time share for the plan
- Table load time – time share for loading tables during plan preparation (available as of SAP HANA rev. 50)

16.6.4 Delta Merges

16.6.4.1 Column Tables with Largest Delta Stores

●●● No problems with the delta size of column store tables were detected.

The separation into main and delta storage allows high compression and high write performance at the same time. Write operations are performed on the delta store and changes are transferred from the delta store to the main store asynchronously during delta merge.

The column store automatically performs a delta merge according to several technical limits that are defined by parameters.

If applications require more direct control over the merge process, the smart merge function can be used for certain tables (for example, BW prevents delta merges during data loading for performance reasons).

Largest Column Tables in terms of Delta size

Schema Name	Table Name	Partition ID	Memorysize in Main Store [MB]	Memorysize in Delta Store [MB]	Records in Delta Store	Sum of Records	Days since last Merge	Auto Merge On
SAPABAP1	EDID4	0	31.215,0	950,1	3.655.606	730.252.928	7	TRUE
SAPABAP1	BALDAT	0	47.623,0	600,3	1.105.399	137.858.205	0	TRUE
SAPABAP1	EDIDS	0	17.673,8	541,1	2.552.831	496.285.155	1	TRUE
SAPABAP1	RSAU_BUFDATA	0	46.508,2	457,9	6.525.934	1.069.910.640	40	TRUE
SAPABAP1	BALHDR	0	2.233,7	251,4	1.677.101	41.818.683	1	TRUE
SAPABAP1	SRRELROLES	0	65.446,5	166,0	473.743	652.229.256	6	TRUE
SAPABAP1	IDOCREL	0	13.665,0	85,4	240.566	182.969.835	4	TRUE
SAPABAP1	/AIF/T_MMG_IDX	0	400,1	77,5	915.144	14.463.110	1	TRUE
SAPABAP1	/AIF/MMSG_VARS	0	893,2	75,2	933.865	18.606.512	1	TRUE

Schema Name	Table Name	Partition ID	Memorysize in Main Store [MB]	Memorysize in Delta Store [MB]	Records in Delta Store	Sum of Records	Days since last Merge	Auto Merge On
SAPABAP1	SUSSG_DA TA	0	632,7	66,5	632.053	24.043.017	1	TRUE

16.6.4.2 Delta Merge Statistics

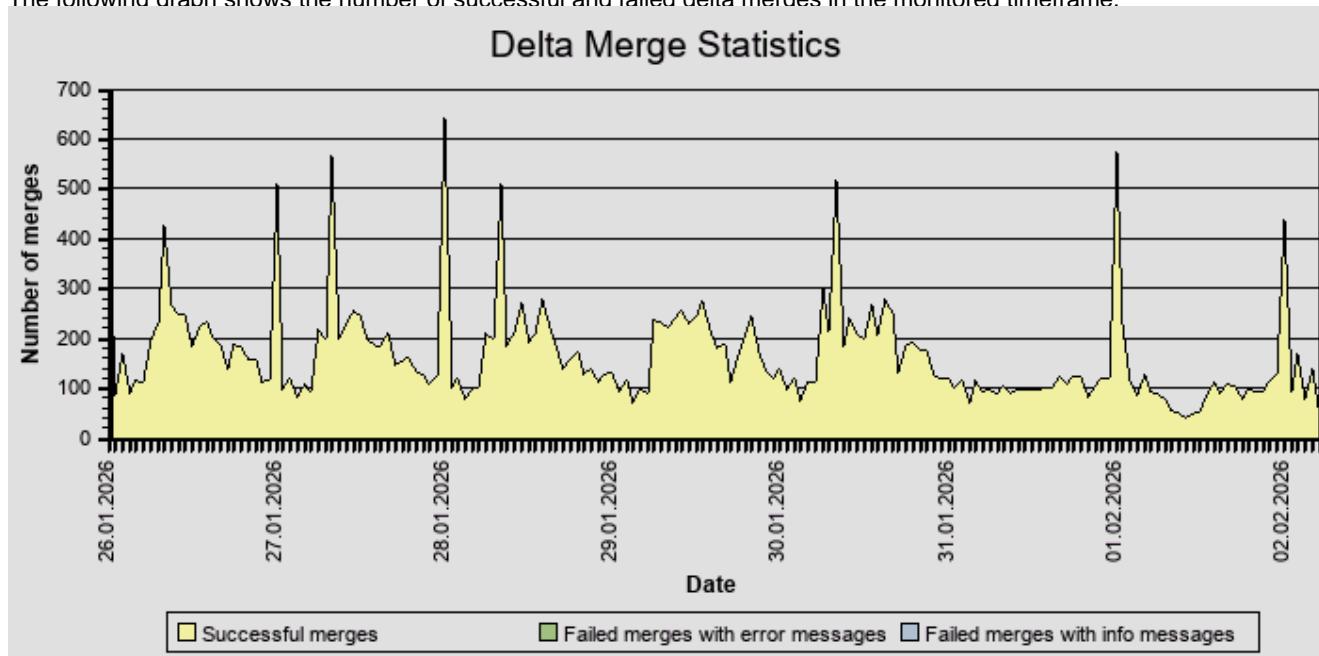
The SAP HANA database column store uses efficient compression algorithms to keep relevant application data in memory. Write operations on the compressed data are costly since they require the storage structure to be reorganized and the compression to be recalculated. Therefore, write operations in the column store do not directly modify the compressed data structure in the "main storage".

Instead, all changes are first written into a separate data structure called "delta storage" and synchronized with the main storage at a later point in time. This synchronization operation is called a delta merge.

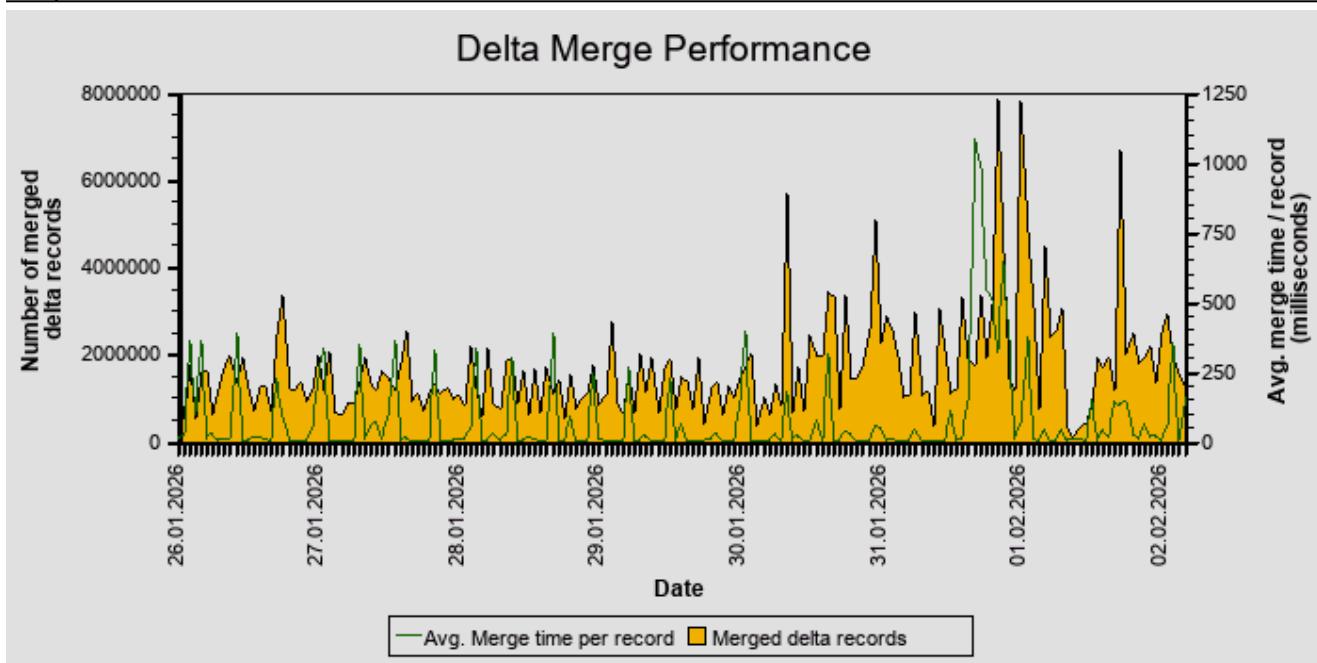
Performance issues may occur in SAP HANA if there is a large amount of data in the delta storage, because read times from delta storage are considerably slower than reads from main storage.

In addition, the merge operation on a large data volume may cause bottleneck situations, since the data to be merged is held in memory twice during the merge operation.

The following graph shows the number of successful and failed delta merges in the monitored timeframe.



The following graph shows the delta merge volume from all merge types and the average delta merge time per record in the monitored timeframe:



Note: High merge duration can be a result of a high number of records to be merged or of a high-load situation in the system.

16.7 Administration

16.7.1 Diagnosis Files



The trace directory contains a high number of diagnosis files or the files occupy a lot of disk space.

During operation, the SAP HANA database service writes messages and information to log files in its trace directory. The system administrator should check these files regularly and react to error messages accordingly. A large number of files may be generated, which can take up a lot of disk space and impair performance. The following table shows the number of files contained in the trace directory.

Diagnosis Files

Server	Measured Time Period	Type	Number of Files	Total Size in MB
saphrphdb02	Weekly	Log	2	204,89
saphrphdb02	Weekly	Trace	25	211,17
saphrphdb02	Weekly	Dump	1	0,17
saphrphdb02	Unlimited	TOTAL	6.332	36.677,28

We recommend that you check the content of the trace folder in the SAP HANA database installation directory on a regular basis and delete any files that are no longer required.

16.7.2 Backup and Recovery



No issues for operating or administration in terms of backup/recovery have been detected.

16.7.2.1 Log Backup

Date	Weekday	Successful Log Backups	Unsuccessful Log Backups
26.01.2026	Monday	193	0
27.01.2026	Tuesday	193	0
28.01.2026	Wednesday	193	0
29.01.2026	Thursday	193	0
30.01.2026	Friday	193	0

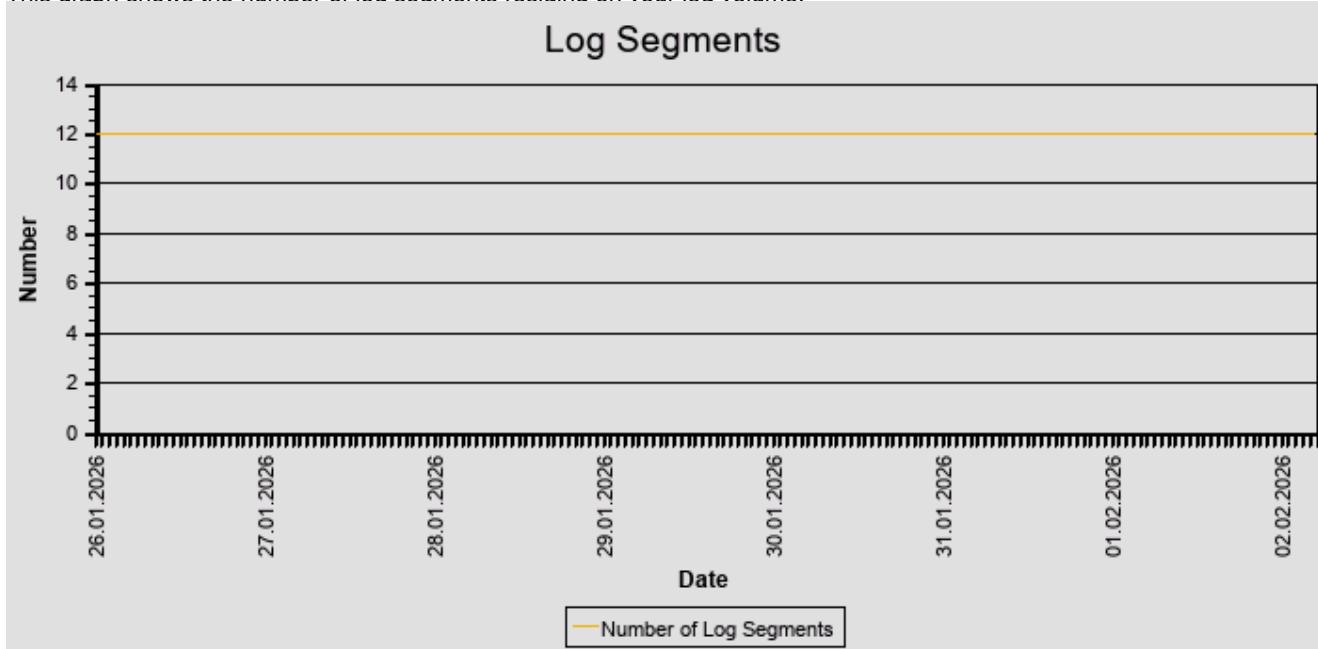
Date	Weekday	Successful Log Backups	Unsuccessful Log Backups
31.01.2026	Saturday	193	0
01.02.2026	Sunday	193	0

16.7.2.2 Data Backup

Date	Weekday	Successful Data Backups	Unsuccessful Data Backups
26.01.2026	Monday	1	0
27.01.2026	Tuesday	1	0
28.01.2026	Wednesday	1	0
29.01.2026	Thursday	1	0
30.01.2026	Friday	1	0
31.01.2026	Saturday	1	0
01.02.2026	Sunday	1	0

16.7.2.3 Number of Log Segments

This graph shows the number of log segments residing on your log volume.



We found no issues related to log segments.

16.7.3 Global Consistency Check Run

Only a lightweight consistency check is scheduled.

The tables below show your setup of the consistency check runs. We differentiate between consistency check runs executed on all levels (CHECK_TABLE_CONSISTENCY('CHECK',NULL,NULL)) and consistency check runs executed on table level (CHECK_TABLE_CONSISTENCY('CHECK',<SCHEMA_NAME>,<TABLE_NAME>)) or executed by the statistics server.

Consistency Check Runs on all Levels with Action 'CHECK'

Number of successful Executions	Last Start Date
0	

Consistency Check Runs on Table Level with Action 'CHECK'

Number of checked Tables	Number of not verified Tables	Last Start Date

Number of checked Tables	Number of not verified Tables	Last Start Date
0	46048	

Table Consistency Check by Statisticsserver

Action	Time since last Run
check_delta_log, check_variable_part_sanity, check_data_container, check_variable_part_double_reference_global, check_partitioning, check_replication, check_table_container_no_load	1 Day, 3 Hours

A lightweight consistency check was scheduled by the statistics server or with the global consistency check on table level but only 50 - 80% of the tables were checked.

Recommendation: Set up the consistency check according to SAP's recommendation. Further information can be found in SAP Note [2116157](#) and in the SAP HANA Admin Guide -> Managing Tables -> Table and Catalog Consistency Check. Please note that the consistency check should be performed at times when there is a low load on your system.

16.7.4 License Information

	Your license is valid and permanent or it will remain for at least 30 days until it expires.
--	--

The following table shows information about the validity of your license. The license should be permanent and valid.

License Information

System ID	Installation Number	Expiration Date	Permanent	Valid	Product Name	Product Limit
HRP	0021075820		TRUE	TRUE	SAP-HANA	3800

16.7.5 Statisticsserver and Monitoring

	Issues with the statistics server were detected.
--	--

The table below shows KPIs relevant for monitoring stability with the embedded statistics server.

KPI	Current value	Rating
Status of the embedded Statisticsserver	Okay	✓
Alerts in the Statisticsserver are not scheduled in the expected timeframe.	0	✓
Number of tables not located on the master server	0	✓
Number of disabled alert collectors	0	✓
Number of disabled statistic collectors	0	✓
Collector_Global_Table_Persistence_S statistics idle	Idle	✓
Number of collectors with retention times < 42 days	0	✓
High number of unprocessed e-Mails	54	✓
Status of Collector HOST_CS_UNLOADS	Inactive	✓
Number of relevant inactive actions	0	✓
Number of actions with unknown state	0	✓
Number of Statisticsserver worker threads	5	✓
Historic thread samples save interval (s)	600	✓
History of M_RECORD_LOCKS collected	no	✓
Historic thread call stacks interval (s)	300	⚠
Retention time for the table disk size history	42	⚠

Recommendation: See the details and recommendations regarding the statistics server issues in the table below.

KPI	Description	SAP Note
Historic thread call stacks interval (s)	Due to non-representative data it is recommended to collect the data every 299 s.	2147247
Retention time for the table disk size history	It is recommended to set the retention time for the table disk size history to at least 365 days.	2147247

16.8 Important SAP Notes for SAP HANA

	Important information is available in the SAP Notes below.
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The following tables list important SAP Notes for SAP HANA.

SAP Notes for SAP HANA

SAP Note	Description
1514967	SAP HANA: Central Note
2380229	SAP HANA Platform 2.0 - Central Note
2091951	Best Practice: SAP HANA Database Backup & Restore
2021789	SAP HANA Revision and Maintenance Strategy
2000003	FAQ: SAP HANA
2600030	Parameter Recommendations in SAP HANA Environments
1911180	HANA EarlyWatch Alerts (EWA) Issues
1592925	SAP HANA Database service connections
1642148	FAQ: SAP HANA Database Backup & Recovery
1664432	DBA Cockpit: SAP HANA database as remote database
1681092	Multiple SAP HANA databases on one appliance
1661202	Support for multiple applications on SAP HANA
1650394	SAP HANA DB: Partitioning and Distribution of Large Tables
1953429	SAP HANA and SAP NetWeaver AS ABAP on one Server
1761546	SAP ERP powered by SAP HANA - Optimizations
1872170	Suite on HANA and S/4 HANA sizing report
1794297	Secondary Indexes for the business suite on HANA

SAP Notes for operating system

SAP Note	Description
2684254	SAP HANA DB: Recommended OS settings for SLES 15 / SLES for SAP Applications 15

17 SAP HANA SQL Statements in HRP

This section provides an overview of the "most expensive SQL statements". When possible, a recommendation is provided. A more detailed analysis of the SQL statements (including the possibility to choose different time windows) is supported by the "Self-Service SQL Statement Tuning" (see [SAP Note 1601951](#)). For general information on dealing with expensive SQL statements in SAP HANA, see [SAP Note 2000002](#).

17.1 Data Quality

A download-based SQL statement analysis can be performed.

The following table provides information about the data in the SDCC download. For details, see [SAP Note 2344673](#) and its successor note [SAP Note 3347789](#).

Observation	Comment	Rating
Version of ST-PI function module: 40	This is the most recent version	●●●

17.2 Top Statements (Elapsed Time)

This section shows the top non-internal statements according to "Total Elapsed Time". The "Total Elapsed Time" is the sum of the "Total Execution Time" and the "Total Preparation Time" from the SQL PLAN CACHE. It has a direct impact on the response time of the application calling the statement.

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Plan Cache
Data Source	HOST_SQL_PLAN_CACHE
Begin of Time Interval	25.01.2026 -- 23:49:43
End of Time Interval	02.02.2026 -- 00:49:43

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Total Elapsed Time [s]	Number of Executions	Time / Execution [us]	Records / Execution	Time / Record [us]
4a4c270ef48e053bc203bf55f9b0e657	27.631,5	279.153	98.983,5	160,6	616,3
6e93a8ec63adb231a08bcebe2d81c7ce	20.409,3	4.674.766	4.365,8	3,7	1.180,7
1530b5c89230213270bb05b30ea71e10	11.885,2	1.745.246	6.810,1	1,0	6.810,1
d93e233828737b8b2a9c3afe03f9f27d	10.673,5	686	15.559.037,4	14.394,5	1.080,9
3d6dda63c0348ec5ddc7786eec3d62ea	8.929,8	4.531.262	1.970,7	0,1	18.106,4

17.2.1 SQL Statement 4a4c270ef48e053bc203bf55f9b0e657

UPSERT "YHF_ORDER_TAKE" ("ERDAT", "AUDAT", "VBTYP", "TRVOG", "AUART", "NETWR", "WAERK", "VKORG", "VTWEG", "SPART", "VKGRP", "VKBUR", "VDATU", "BSARK", "KUNNR", "AEDAT", "XBLNR", "ZUONR", "VGTYP", "AUFNR", "QNUM", "PORTALGUID", "GBSTK", "BSTKD", "STORE", "CUST_NAME", "STORE_NAME", "H_COMMENT", "MATNR", "ARKTX", "PSTYV", "POSAR", "PRODH", "ZWERT", "ZMENG", "ZIEME", "MEINS",

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,70
Contribution to Total Execution Time [%]	5,60
Maximal CPU Consumption per Hour [%] (30.01.2026 between 05:00 and 06:00)	0,42

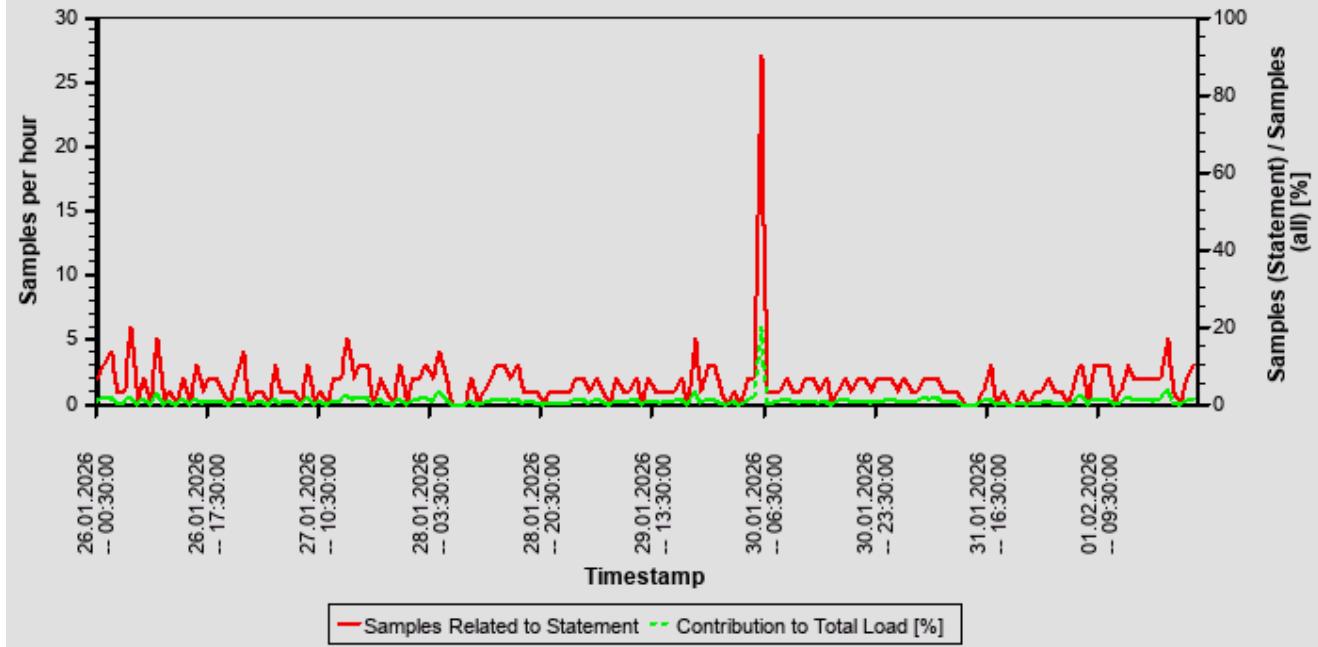
17.2.1.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	27.631	98.983	1.875	2.259.588
PREPARATION	0	0		
LOCK DURATION	0	0		

17.2.1.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.2.1.3 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
YHF_ORDER_TAKE	SAPABAP1	COLUMN	Table not partitioned	958.859	saphrphdb02

17.2.1.4 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the

list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding
ERP	BSI_HF_ORDER_REFRESH	YHFR_FILL_ORDERTAKE_TABLES	142	30.05.2022	

17.2.2 SQL Statement 6e93a8ec63adb231a08bcebe2d81c7ce

```

SELECT
/* FDA READ */ "MATNR" , "WERKS" , "LGORT" , "CHARG" , "ATPDATE" , SUM( "REQQTY" ) "REQQTY" ,
"STOCK_TYPE" , "LIFNR"
FROM
/* Entity name: ATPC_CDS_STOCK WITH PRIVILEGED ACCESS */ "ATPC_STOCK" "ATPC_CDS_STOCK"
WHERE
"CLIENT" = ? AND "MATNR" = ? AND "WERKS" = ? AND "SOBKZ" = ?
GROUP BY
"MATNR" , "WERKS" , "LGORT" , "CHARG" , "ATPDATE" , "STOCK_TYPE" , "SOBKZ" , "LIFNR"
ORDER BY
"ATPC_CDS_STOCK" . "MATNR" , "ATPC_CDS_STOCK" . "LGORT" , "ATPC_CDS_STOCK" . "LIFNR"
Statement Impact

```

Indicator	Value
Contribution to Total CPU Load [%]	1,13
Contribution to Total Execution Time [%]	4,13
Maximal CPU Consumption per Hour [%] (26.01.2026 between 07:00 and 08:00)	0,09

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement
SAP HANA SQL Statements in HRP -> Top MATDOC Statements (Elapsed Time)
SAP HANA SQL Statements in HRP -> Statements on Top Scanned Table

17.2.2.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	Scanned Record Count	Index Lookup Count
MATDOC_E_XTRACT	CLIENT	=					
MATDOC_E_XTRACT	MATNR	=					
MATDOC_E_XTRACT	SOBKZ	=			3	612.645.295	0
MATDOC_E_XTRACT	WERKS	=			1.986	3.331.304.86 8.547.582	0

17.2.2.2 Time Consumption

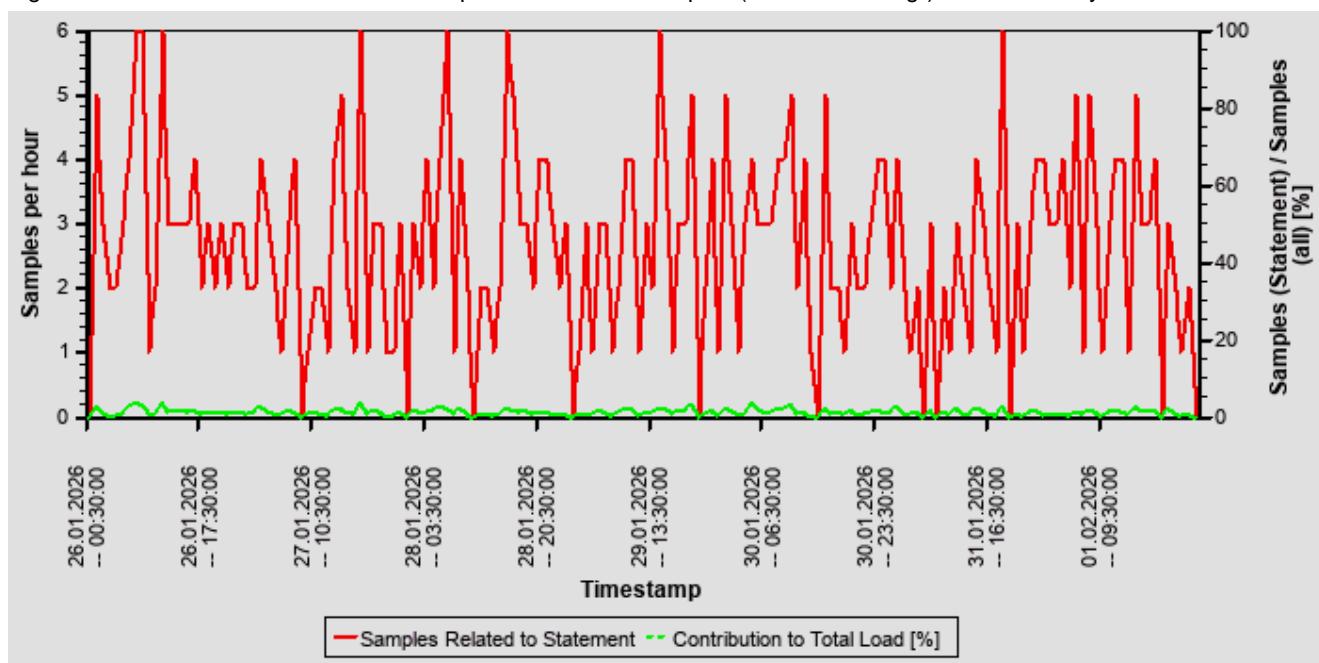
The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	20.409	4.366	2.127	86.211
PREPARATION	0	0		
LOCK DURATION	0	0		

17.2.2.3 Statement History (Thread Sample 'Running')



The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.2.2.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02

17.2.2.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	RVV50R10C	CL_ATP_PA C_DB_SELE CT=====CM00G	7	27.11.2018	✓	CA-ATP-PAC	ATP: Product Availability Check

17.2.3 SQL Statement 1530b5c89230213270bb05b30ea71e10

```

SELECT DISTINCT
bname
FROM
usr21 inner join adr6 on usr21.ADDRNUMBER = adr6.ADDRNUMBER and usr21.PERSNUMBER = adr6.PERSNUMBER
WHERE
upper ( adr6.SMTP_ADDR ) = ? and usr21.mandt = ?
Statement Impact

```

Indicator	Value
Contribution to Total CPU Load [%]	0,59
Contribution to Total Execution Time [%]	2,41
Maximal CPU Consumption per Hour [%] (01.02.2026 between 12:00 and 13:00)	0,17

17.2.3.1 Analysis of Where Clause

Table	Field	Operator	Compression	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
?)	=			
USR21	MANDT	=	DEFAULT	8.675.113.608	3.749.350

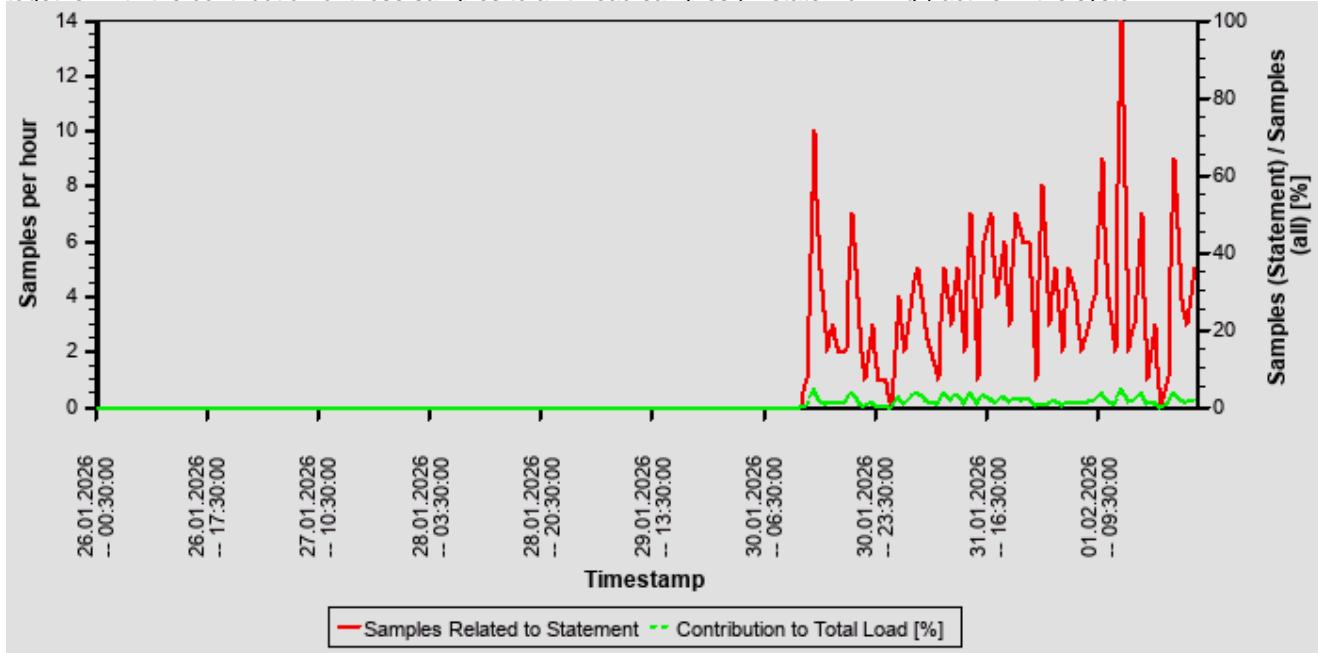
17.2.3.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	11.885	6.810	4.469	223.376
PREPARATION	0	0		
LOCK DURATION	0	0		

17.2.3.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.2.3.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ADR6	SAPABAP1	COLUMN	Table not partitioned	1.033.228	saphrphdb02
USR21	SAPABAP1	COLUMN	Table not partitioned	3.746	saphrphdb02

17.2.3.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	LYR3_INTERFACESU18	21	25.08.2012		CA	Cross-Application Components

17.2.4 SQL Statement d93e233828737b8b2a9c3afe03f9f27d

```

SELECT
/* FDA WRITE */ DISTINCT "ANEP" . *
FROM
/* Redirected table: ANEP */ "FAAV_ANEP" "ANEP" , ? AS "t_00" ("C_0" NVARCHAR(12), "C_1" NVARCHAR(4))
WHERE
"ANEP" . "MANDT" = ? AND "ANEP" . "BUKRS" = ? AND "ANEP" . "ANLN1" = "t_00" . "C_0" AND "ANEP" . "ANLN2" =
?t_00" . "C_1" AND "ANEP" . "GJAHR" BETWEEN ? AND ?

```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,17
Contribution to Total Execution Time [%]	2,16
Maximal CPU Consumption per Hour [%] (30.01.2026 between 03:00 and 04:00)	1,06

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top ACDOCA Statements (Elapsed Time)

17.2.4.1 Analysis of Where Clause

Table	Field	Operator
?	ANLN1	=
?	ANLN2	=
?	BUKRS	=
?	GJAHR	BETWEEN
?	MANDT	=

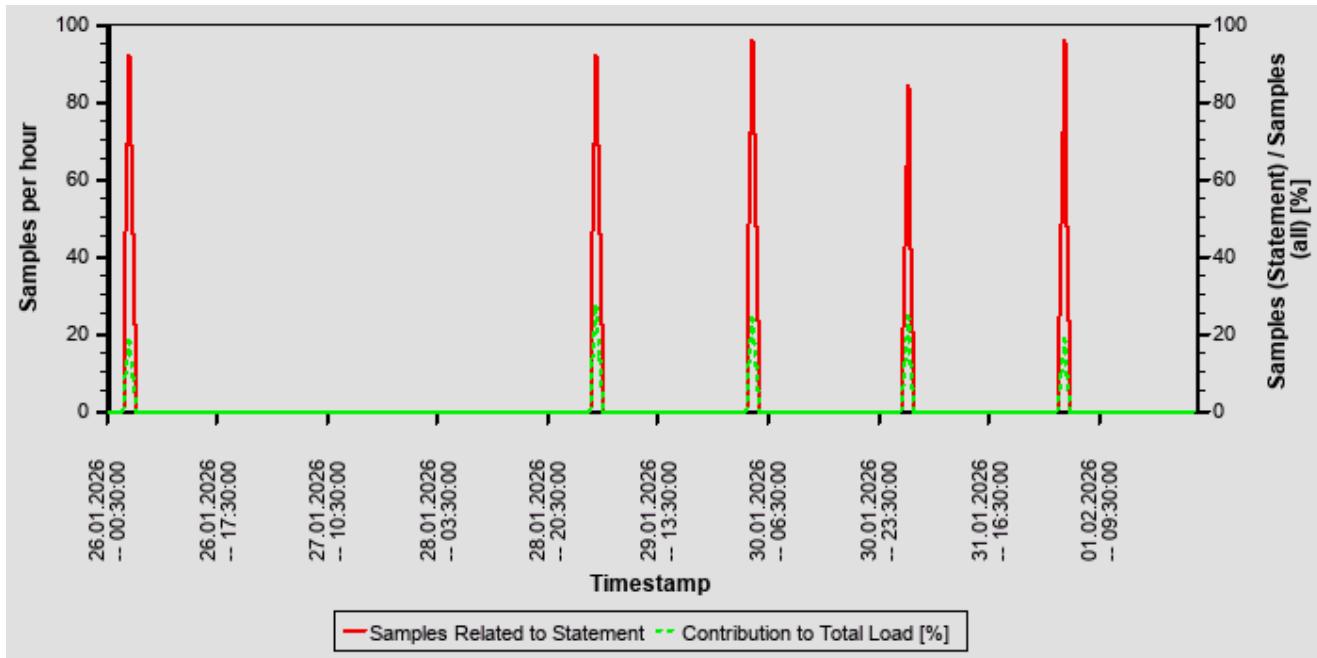
17.2.4.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	10.647	15.520.633	57.247	31.672.649
PREPARATION	26	38.404		
LOCK DURATION	0	0		

17.2.4.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.2.4.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FAAC_CMP_DA0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_T093_EMU	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_VALVIEW0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_AP0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02

17.2.4.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_4UYKVK9AHBY 5DGJGTAO62FV9K	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_4YPG7QWK49Z 9IOZGXYL4SD820	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_86PNME3QCEF45F2BT 8SMXF66G	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_BG53ICBQUEIVDM9R7 EGPO9JBC	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_DWRIOVJB2SR8REOGP ABUQHR7S	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions

17.2.5 SQL Statement 3d6dda63c0348ec5ddc7786eec3d62ea

```

SELECT
/* FDA READ */ *
FROM
"ATP_EKET"

```

WHERE

"MANDT" = ? AND "MATNR" = ? AND "WERKS" = ? AND "BSTYP" IN (?, ?) AND ("LOEKZ" = N"-GDPR-'S'-GDPR--GDPR--GDPR-'5'-GDPR-

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,99
Contribution to Total Execution Time [%]	1,81
Maximal CPU Consumption per Hour [%] (31.01.2026 between 17:00 and 18:00)	0,15

17.2.5.1 Analysis of Where Clause

Table	Field	Operator
?	BSTYP	IN
?	LOEKZ	=
?	MANDT	=
?	MATNR	=
?	WERKS	=

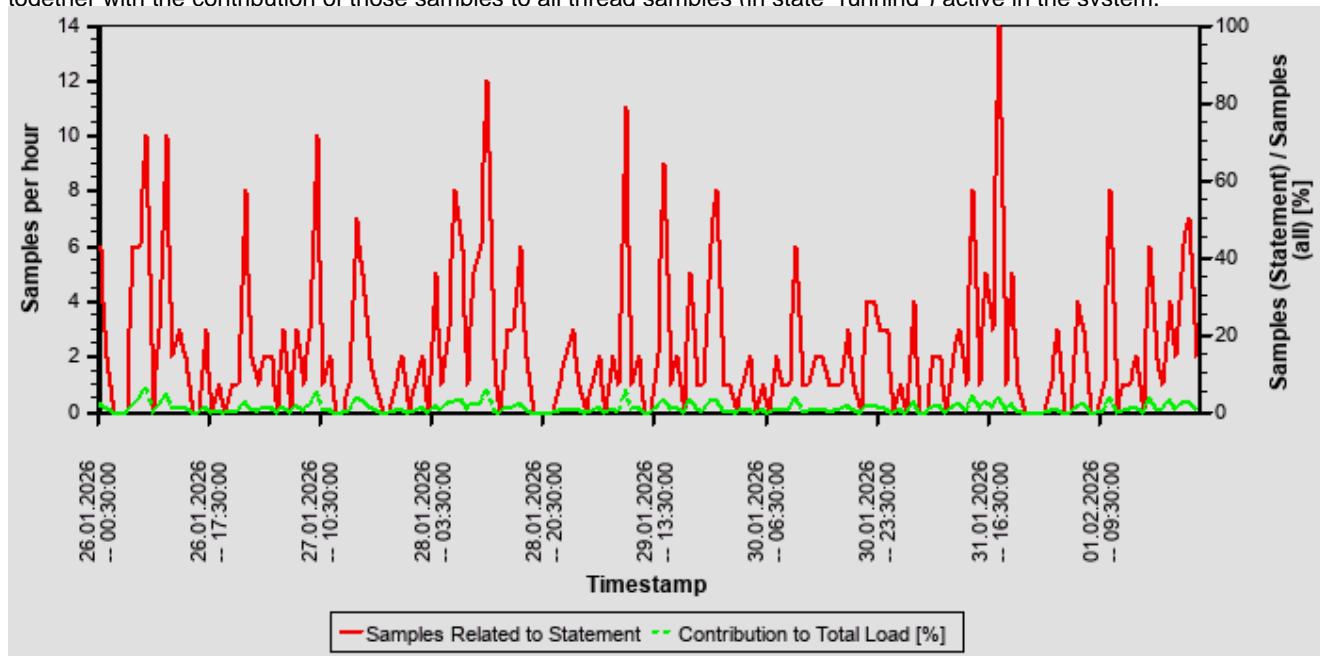
17.2.5.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	8.930	1.971	342	1.101.431
PREPARATION	0	0		
LOCK DURATION	0	0		

17.2.5.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.

**17.2.5.4 Tables**

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
EKPO	SAPABAP1	COLUMN	Table not partitioned	196.523.475	saphrphdb02
EKET	SAPABAP1	COLUMN	Table not partitioned	196.384.115	saphrphdb02

17.2.5.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	LATP2FE3	51	30.01.2017	✓	CA-ATP	Available to Promise (ATP)

17.3 Top ACDOCA Statements (Elapsed Time)

This section shows the top non-internal statements according to "Total Elapsed Time". The "Total Elapsed Time" is the sum of the "Total Execution Time" and the "Total Preparation Time" from the SQL PLAN CACHE. It has a direct impact on the response time of the application calling the statement.

Only statements accessing table ACDOCA are shown.

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Plan Cache
Data Source	HOST_SQL_PLAN_CACHE
Begin of Time Interval	25.01.2026 -- 23:49:43
End of Time Interval	02.02.2026 -- 00:49:43

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Total Elapsed Time [s]	Number of Executions	Time / Execution [us]	Records / Execution	Time / Record [us]
d93e233828737b8b2a9c3afe03f9f27d	10.673,5	686	15.559.037,4	14.394,5	1.080,9
44bc5e591890a04cfcd66ad4beefd6cb	8.575,0	294	29.166.640,2	766,9	38.031,6
e71e62c2d0f66e36666b538dc034f6c4	7.351,7	343	21.433.462,8	10.017,1	2.139,7
b851345029179a8c14da84d81ad7141b	4.380,2	740.090	5.918,4	1,0	5.989,8
c8163019d182ed5b82702bee1b5a3b38	4.260,0	14.600	291.777,9	0,0	0,0

17.3.1 SQL Statement d93e233828737b8b2a9c3afe03f9f27d

SELECT

```
/* FDA WRITE */ DISTINCT "ANEPE" . *
FROM
/* Redirected table: ANEP */ "FAAV_ANEP" "ANEPE" , ? AS "t_00" ("C_0" NVARCHAR(12), "C_1" NVARCHAR(4))
WHERE
```



"ANEP" . "MANDT" = ? AND "ANEP" . "BUKRS" = ? AND "ANEP" . "ANLN1" = "t_00" . "C_0" AND "ANEP" . "ANLN2" = "t_00" . "C_1" AND "ANEP" . "GJAHR" BETWEEN ? AND ?

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,17
Contribution to Total Execution Time [%]	2,16
Maximal CPU Consumption per Hour [%] (30.01.2026 between 03:00 and 04:00)	1,06

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statements (Elapsed Time)

17.3.1.1 Analysis of Where Clause

Table	Field	Operator
?	ANLN1	=
?	ANLN2	=
?	BUKRS	=
?	GJAHR	BETWEEN
?	MANDT	=

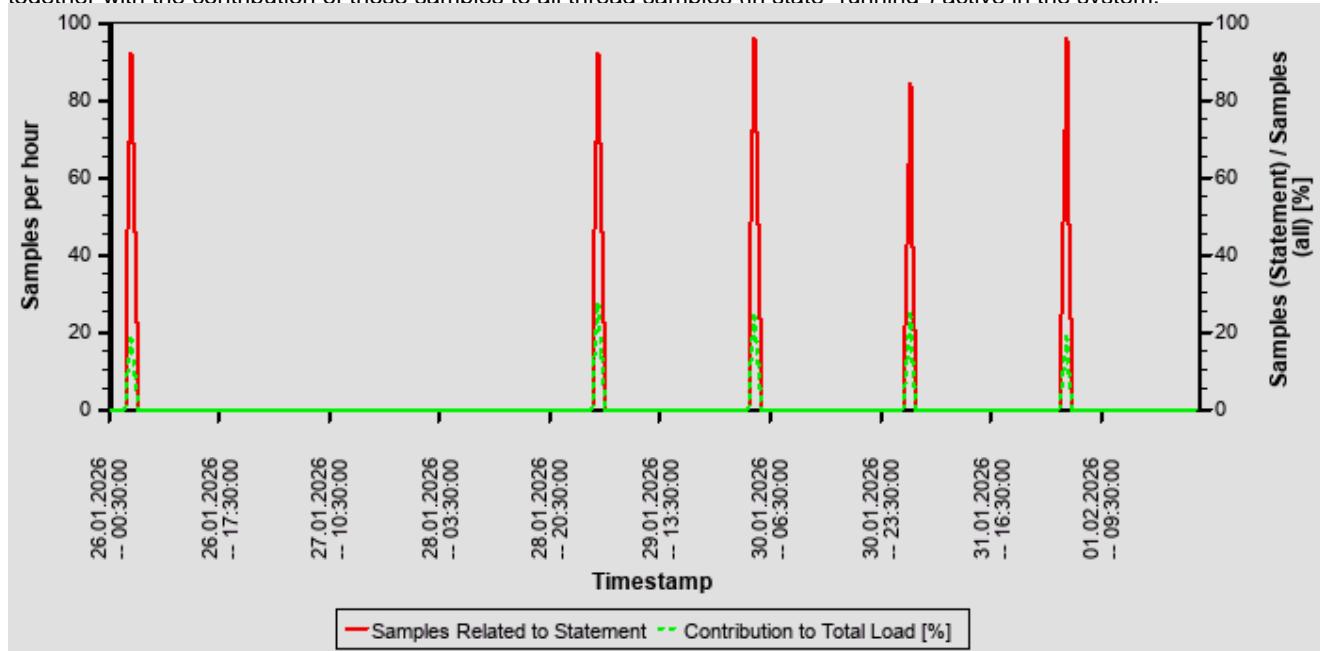
17.3.1.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	10.647	15.520.633	57.247	31.672.649
PREPARATION	26	38.404		
LOCK DURATION	0	0		

17.3.1.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.3.1.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FAAC_CMP.DAO	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_T093.EMU	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_VALVIEW0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_AP0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02

17.3.1.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_4UYKVK9AHBY 5DGJGTAO62FV9K	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_4YPG7QWK49Z 9IOZGXYL4SD820	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_86PNME3QCEF45F2BT 8SMXF66G	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_BG53ICBQUEIVDM9R7 EGPO9JBC	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_DWRIOVJB2SR8REOGP ABUQHR7S	LABRAF20	892	01.03.2019	✓	FI-AA-AA	Basic Functions

17.3.2 SQL Statement 44bc5e591890a04cfcd66ad4beefd6c b

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,18
Contribution to Total Execution Time [%]	1,73
Maximal CPU Consumption per Hour [%] (01.02.2026 between 03:00 and 04:00)	1,04
Maximal Memory Consumption [%] (30.01.2026 -- 03:37:27)	0,18

Note: The statement as identified by its statement hash can also be found in other sections of this report.

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statements (Total Memory)

17.3.2.1 Analysis of Where Clause

Table	Field	Operator
?	ANLN1	IN
?	BUKRS	=
?	GJAHR	BETWEEN
?	MANPT	=

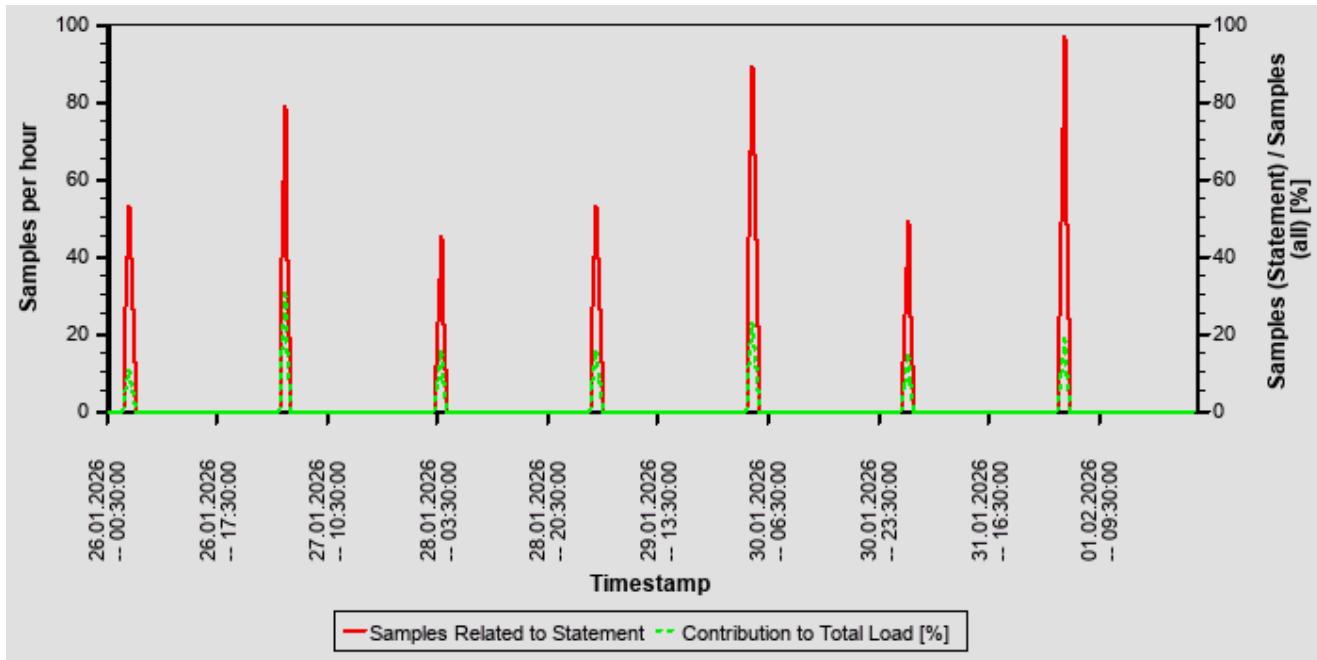
17.3.2.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	8.560	29.115.133	3.127.062	43.018.110
PREPARATION	15	51.507		
LOCK DURATION	0	0		

17.3.2.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.3.2.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FAAC_CMP_DA0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_VALVIEW0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_VALVIEW1A	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_AP0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02

17.3.2.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_1N134HIADSQ DREXQQ44IV2Z9K	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_6B868RJSWGT UTNCL9USYKF5L4	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_7HA0CA522L418A714NKA CBV2G	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_7MVFCXSV2Z8 TX5K7U0CUKTAFC	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_8CA3ZTW1T3AOWB 8QHDMWA1DS8	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_8SKP4V6LDJN 0G5YLUCM6SJ288	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_9M1ZF7YSBXE BTUI9KD89ZYXOO	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_F0QQJPJXEGR JEAQ3GS3CIJY88	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions

17.3.3 SQL Statement e71e62c2d0f66e36666b538dc034f6c4

```

SELECT
/* FDA WRITE */ DISTINCT "ANEA" . *
FROM
/* Redirected table: ANEA */ "FAAV_ANEA" "ANEA" , ? AS "t_00" ("C_0" NVARCHAR(12), "C_1" NVARCHAR(4))
WHERE
"ANEA" . "MANDT" = ? AND "ANEA" . "BUKRS" = ? AND "ANEA" . "ANLN1" = "t_00" . "C_0" AND "ANEA" . "ANLN2" =
?t_00" . "C_1" AND "ANEA" . "GJAHR" BETWEEN ? AND ?
Statement Impact

```

Indicator	Value
Contribution to Total CPU Load [%]	0,82
Contribution to Total Execution Time [%]	1,48
Maximal CPU Consumption per Hour [%] (31.01.2026 between 03:00 and 04:00)	0,69

17.3.3.1 Analysis of Where Clause

Table	Field	Operator
?	ANLN1	=
?	ANLN2	=
?	BUKRS	=
?	GJAHR	BETWEEN
?	MANDT	=

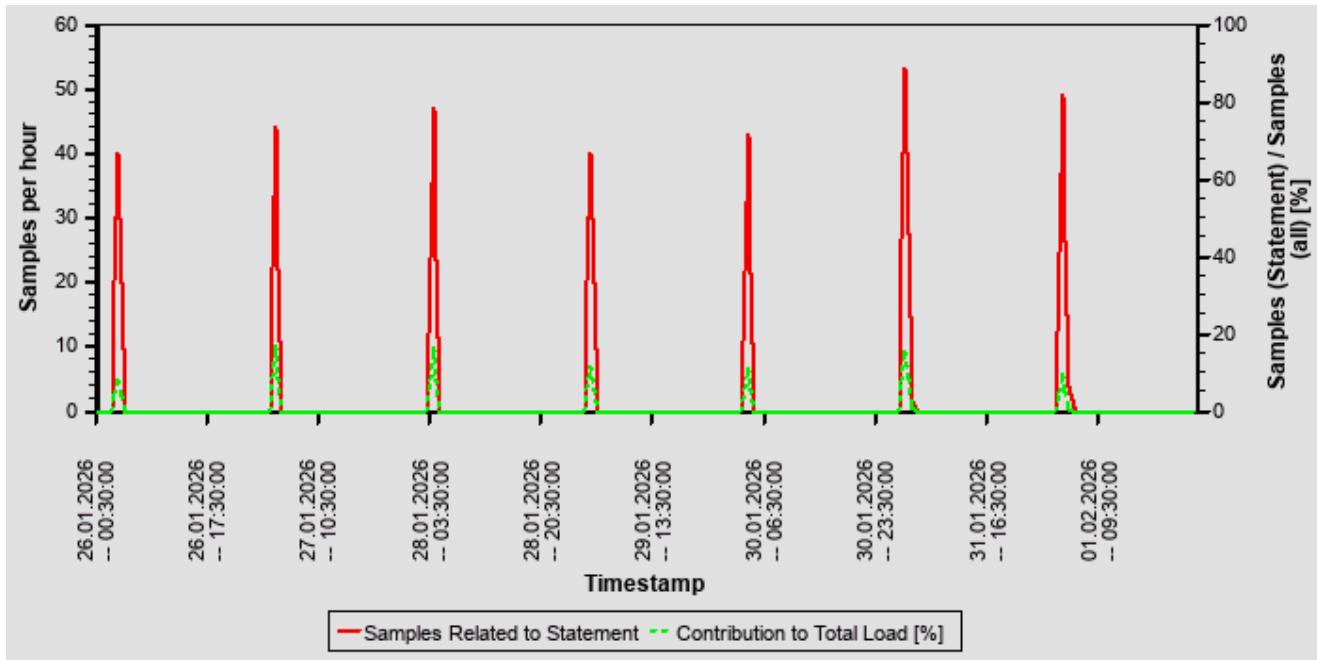
17.3.3.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	7.334	21.380.525	19.886.556	28.836.149
PREPARATION	18	52.937		
LOCK DURATION	0	0		

17.3.3.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.3.3.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FAAC_CMP_DA0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_T093_EMU	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_VALVIEW0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_AP0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02

17.3.3.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_3W9OFX2ZP5O UNFT5CFYC31C09	LABRAF20	1.074	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_8OPX2FO75PE IPS8V7GR55MZGP	LABRAF20	1.074	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_9V592TW7C7K 22QFQBF33D0IDL	LABRAF20	1.074	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_DPEKNC65WIZ U0JROJ39S3WOAW	LABRAF20	1.074	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_EFSNT6923TQ CZIQSARFJPGLJD	LABRAF20	1.074	01.03.2019	✓	FI-AA-AA	Basic Functions

17.3.4 SQL Statement b851345029179a8c14da84d81ad7141 b

```

SELECT
"VERPR"
FROM
/* Redirected table: MBEW */ "MBVMBEW" "MBEW"

```

WHERE

"MANDT" = ? AND "MATNR" = ? AND "BWKEY" = ?

ORDER BY

"MBEW" . "MANDT" , "MBEW" . "MATNR" , "MBEW" . "BWKEY" , "MBEW" . "BWTAR" LIMIT 1

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,28
Contribution to Total Execution Time [%]	0,89
Maximal CPU Consumption per Hour [%] (31.01.2026 between 00:00 and 01:00)	0,33

17.3.4.1 Analysis of Where Clause

Table	Field	Operator
?	BWKEY	=
?	MANDT	=
?	MATNR	=

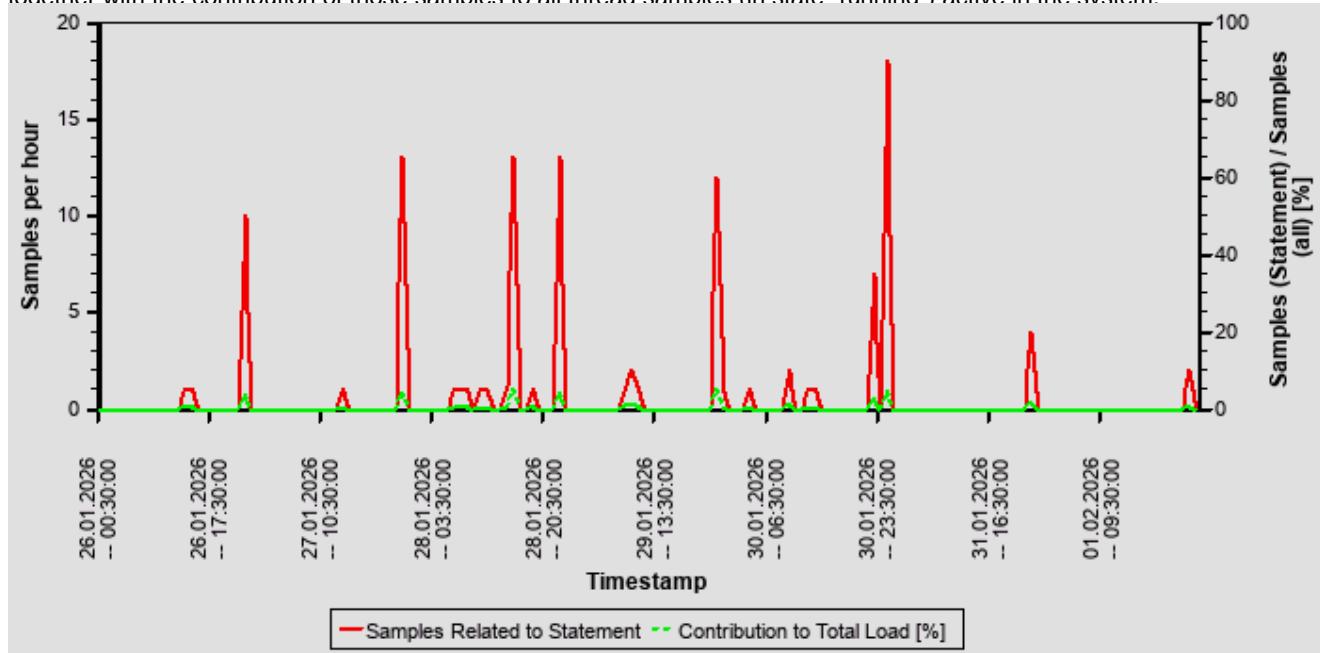
17.3.4.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.380	5.918	207	32.868
PREPARATION	0	0		
LOCK DURATION	0	0		

17.3.4.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.

**17.3.4.4 Tables**

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
CKMLCR	SAPABAP1	COLUMN	HASH	1.915.217.611	saphrphdb02
MBEW	SAPABAP1	COLUMN	Table not partitioned	147.487.712	saphrphdb02
ACDOCA_M_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	92.901.738	saphrphdb02
FMLT_CURTP_ML	SAPABAP1	COLUMN	Table not partitioned	226	saphrphdb02

17.3.4.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BSI_ORDER_RESCHEDULE_DC01	RV64A934	27	07.05.2021		SD-BF-PR	Pricing and Conditions
ERP	RVV50R10C	RV64A934	27	07.05.2021		SD-BF-PR	Pricing and Conditions
ERP	VF04	RV64A934	27	07.05.2021		SD-BF-PR	Pricing and Conditions
ERP	VKM1	RV64A934	27	07.05.2021		SD-BF-PR	Pricing and Conditions
ERP	YSO_REJECT_LINES	RV64A934	27	07.05.2021		SD-BF-PR	Pricing and Conditions

17.3.5 SQL Statement c8163019d182ed5b82702bee1b5a3b38

CALL "CL_FML_BH_AMDP=>UPDATE_EXTRACT_ERROR_IND#stb2#20181127000626" (?, ?, ?)
Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,02
Contribution to Total Execution Time [%]	0,86
Maximal CPU Consumption per Hour [%] (01.02.2026 between 00:00 and 01:00)	0,08
Maximal Memory Consumption [%] (01.02.2026 -- 00:25:52)	0,10

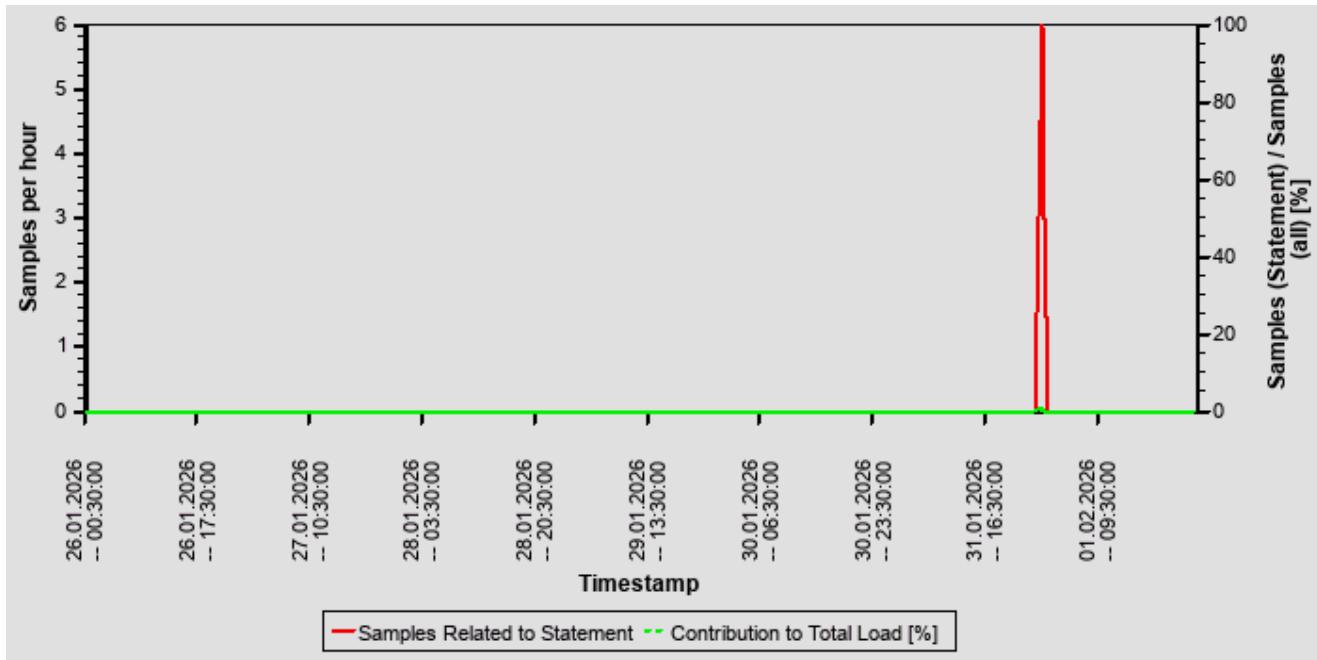
17.3.5.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.260	291.775	24.531	6.789.031
PREPARATION	0	3		
LOCK DURATION	0	0		

17.3.5.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.3.5.3 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,55	strong correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,09	no significant correlation

17.3.5.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
CKMLHD	SAPABAP1	COLUMN	Table not partitioned	146.215.604	saphrphdb02
ACDOCA_M_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	92.901.738	saphrphdb02
FAGL_CARRY_FORW	SAPABAP1	COLUMN	Table not partitioned	114	saphrphdb02

17.3.5.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	CL_FML_BH_AMDP===== =====CM004	1	27.11.2018	✓	CO-PC-ACT	Actual Costing/Material Ledger

17.4 Top MATDOC Statements (Elapsed Time)

This section shows the top non-internal statements according to "Total Elapsed Time". The "Total Elapsed Time" is the sum of the "Total Execution Time" and the "Total Preparation Time" from the SQL PLAN CACHE. It has a direct impact on the response time of the application calling the statement.

Only statements accessing table MATDOC are shown.

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Plan Cache
Data Source	HOST_SQL_PLAN_CACHE
Begin of Time Interval	25.01.2026 -- 23:49:43
End of Time Interval	02.02.2026 -- 00:49:43

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Total Elapsed Time [s]	Number of Executions	Time / Execution [us]	Records / Execution	Time / Record [us]
6e93a8ec63adb231a08bcebe2d81c7ce	20.409,3	4.674.766	4.365,8	3,7	1.180,7
81241d0f0070ca6cb0a7ae37d4adbd42	7.919,9	763.345	10.375,3	0,9	11.194,9
3d69a71b1a1de5897506f779c224cea8	4.355,9	5.079.690	857,5	0,2	4.053,1
6f6557b376dd9c83df8cc8753200735c	4.160,2	1.703	2.442.888,7	1.673,1	1.460,1
a764fa071a76eb89eb32f572c0e9d516	4.094,1	29.608	138.276,9	0,0	0,0

17.4.1 SQL Statement 6e93a8ec63adb231a08bcebe2d81c7ce

```

SELECT
/* FDA READ */ "MATNR" , "WERKS" , "LGORT" , "CHARG" , "ATPDATE" , SUM( "REQQTY" ) "REQQTY" ,
"STOCK_TYPE" , "LIFNR"
FROM
/* Entity name: ATPC_CDS_STOCK WITH PRIVILEGED ACCESS */ "ATPC_STOCK" "ATPC_CDS_STOCK"
WHERE
"CLIENT" = ? AND "MATNR" = ? AND "WERKS" = ? AND "SOBKZ" = ?
GROUP BY
"MATNR" , "WERKS" , "LGORT" , "CHARG" , "ATPDATE" , "STOCK_TYPE" , "SOBKZ" , "LIFNR"
ORDER BY
"ATPC_CDS_STOCK" . "MATNR" , "ATPC_CDS_STOCK" . "LGORT" , "ATPC_CDS_STOCK" . "LIFNR"
Statement Impact

```

Indicator	Value
Contribution to Total CPU Load [%]	1,13
Contribution to Total Execution Time [%]	4,13
Maximal CPU Consumption per Hour [%] (26.01.2026 between 07:00 and 08:00)	0,09

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement
SAP HANA SQL Statements in HRP -> Top Statements (Elapsed Time)
SAP HANA SQL Statements in HRP -> Statements on Top Scanned Table

17.4.1.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
MATDOC_E_XTRACT	CLIENT	=					
MATDOC_E_XTRACT	MATNR	=					
MATDOC_E_XTRACT	SOBKZ	=			3	612.645.295	0
MATDOC_E_XTRACT	WERKS	=			1.986	3.331.304.86 8.547.582	0

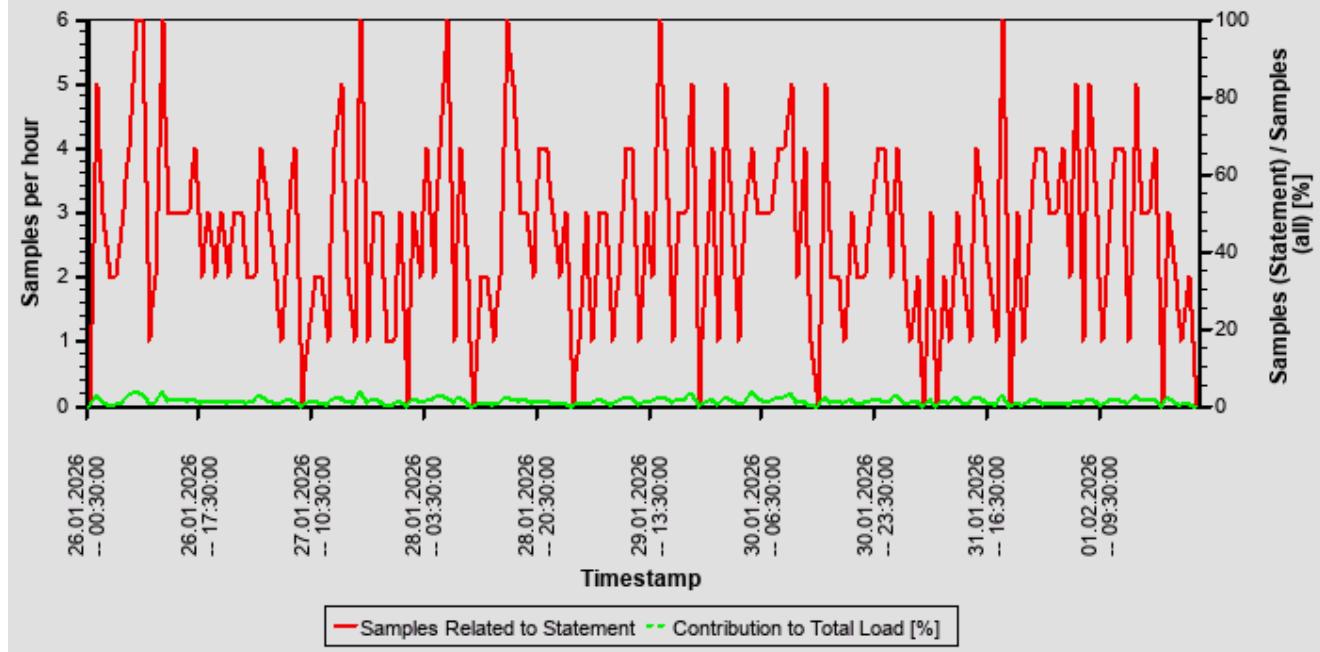
17.4.1.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	20.409	4.366	2.127	86.211
PREPARATION	0	0		
LOCK DURATION	0	0		

17.4.1.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.4.1.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrhdb02

17.4.1.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	RVV50R10C	CL_ATP_PA C_DB_SELE CT=====CM00G	7	27.11.2018	✓	CA-ATP-PAC	ATP: Product Availability Check

17.4.2 SQL Statement 81241d0f0070ca6cb0a7ae37d4adbd42

SELECT

```
"MANDT", "MATNR", "WERKS", "PSTAT", "LVORM", "BWTTY", "XCHAR", "MMSTA", "MMSTD", "MAABC", "KZKRI",
,EKGRP", "AUSME", "DISPR", "DISMM", "DISPO", "KZDIE", "PLIFZ", "WEBAZ", "PERKZ", "AUSSS", "DISLS",
,BESKZ", "SOBSL", "MINBE", "EISBE", "BSTMI", "BSTMA", "BSTFE", "BSTRF", "MABST", "LOSFX", "SBDKZ",
,LAGPR", "ALTSL", "KZAUS", "AUSDT", "NFMAT", "KZBED", "MISKZ", "FHORI", "PFREI", "FFREI", "RGEKZ",
,FEVOR", "BEARZ", "RUEZT", "TRANZ", "BASMG", "DZEIT", "MAXLZ", "LZEIH", "KZPRO", "GPMKZ", "UEETO",
,UEETK", "UNETO", "WZEIT", "ATPKZ", "VZUSL", "HERBL", "INSMK", "SPROZ", "QUAZT", "SSQSS", "MPDAU",
,KZPPV", "KZDKZ", "WSTGH", "PRFRQ", "NKMPR", "UMLMC", "LADGR", "XCHPF", "USEQU", "LGRAD", "AUFTL",
,PLVAR", "OTYPE", "OBJID", "MTVFP", "PERIV", "KZKFK", "VRVEZ", "VBAMG", "VBEAZ", "LIZYK", "BWSCL",
,KAUTB", "KORDB", "STAWN", "HERKL", "HERKR", "EXPME", "MTVER", "PRCTR", "TRAME", "MRPPP", "SAUFT",
,FXHOR", "VRMOD", "VINT1", "VINT2", "VERKZ", "STLAL", "STLAN", "PLNNR", "APLAL", "LOSGR", "SOBSK",
,FRTME", "LGPRO", "DISGR", "KAUSF", "QZGTP", "QMATV", "TAKZT", "RWPRO", "COPAM", "ABCIN", "AWSLS",
,SERNP", "CUOBJ", "STDPPD", "SFEPR", "XMCNG", "QSSYS", "LFRHY", "RDPRF", "VRBMT", "VRBWK", "VRBDT",
,VRBFK", "AUTRU", "PREFE", "PRENC", "PRENO", "PREND", "PRENE", "PRENG", "ITARK", "SERVG", "KZKUP",
,STRGR", "CUOVB", "LGFSB", "SCHGT", "CCFIX", "EPRI", "QMATA", "RESVP", "PLNTY", "UOMGR", "UMRSL",
,ABFAC", "SFCPF", "SHFLG", "SHZET", "MDACH", "KZECH", "MEGRU", "MFRGR", "PROFIL", "VKUMC", "VKTRW",
,KZAGL", "FVIDK", "FXPRU", "LOGGR", "FPRFM", "GLGMG", "VKGLG", "INDUS", "MOWNR", "MOGRU",
,CASNR", "GPNUM", "STEUC", "FABKZ", "MATGR", "VSPVB", "DPLFS", "DPLPU", "DPLHO", "MINLS", "MAXLS",
,FIXLS", "LTINC", "COMPL", "CONVT", "SHPRO", "AHDIS", "DIBER", "KZPSP", "OCMPF", "APOKZ", "MCRUE",
,LFMON", "LFGJA", "EISLO", "NCOST", "ROTATION_DATE", "UCHKZ", "UCMAT", "EXCISE_TAX_RLVNCE",
,BWESB", "SGT_COVS", "SGT_STATC", "SGT_SCOPE", "SGT_MRPSI", "SGT_PRCM", "SGT_CHINT",
,SGT_STK_PRT", "SGT_DEFSC", "SGT_MRP_ATP_STATUS", "SGT_MMSTD", "FSH_MG_ARUN_REQ",
,FSH_SEAIM", "FSH_VAR_GROUP", "FSH_KZECH", "FSH_CALENDAR_GROUP", "ARUN_FIX_BATCH", "PPSKZ",
,CONS_PROCG", "GI_PR_TIME", "MULTIPLE_EKGRP", "REF_SCHEMA", "MIN_TROC", "MAX_TROC",
,TARGET_STOCK", "NF_FLAG", "/CWM/UMLMC", "/CWM/TRAME", "/CWM/BWESB", "SCM_MATLOCID_GUID16",
,SCM_MATLOCID_GUID22", "SCM_GRPRT", "SCM_GIPRT", "SCM_SCOST", "SCM_RELDT", "SCM_RRP_TYPE",
,SCM_HEUR_ID", "SCM_PACKAGE_ID", "SCM_SSPPEN", "SCM_GET_ALERTS", "SCM_RES_NET_NAME",
,SCM_CONHAP", "SCM_HUNIT", "SCM_CONHAP_OUT", "SCM_HUNIT_OUT", "SCM_SHELF_LIFE_LOC",
,SCM_SHELF_LIFE_DUR", "SCM_MATURITY_DUR", "SCM_SHLF_LFE_REQ_MIN", "SCM_SHLF_LFE_REQ_MAX",
,SCM_LSUOM", "SCM_REORD_DUR", "SCM_TARGET_DUR", "SCM_TSTRID", "SCM_STRA1",
,SCM_PEG_PAST_ALERT", "SCM_PEG_FUTURE_ALERT", "SCM_PEG_STRATEGY",
,SCM_PEG_WO_ALERT_FST", "SCM_FIXPEG_PROD_SET", "SCM_WHATBOM", "SCM_RRP_SEL_GROUP",
,SCM_INTSRC_PROF", "SCM_PRIO", "SCM_MIN_PASS_AMOUNT", "SCM_PROFID", "SCM_GES_MNG_USE",
,SCM_GES_BST_USE", "SCM_THRUPUT_TIME", "SCM_TPOP", "SCM_SAFTY_V", "SCM_PPSAFTYSTK",
,SCM_PPSAFTYSTK_V", "SCM_REPSAFTY", "SCM_REPSAFTY_V", "SCM_REORD_V", "SCM_MAXSTOCK_V",
,SCM_SCOST_PRCNT", "SCM_PROC_COST", "SCM_NDCOSTWE", "SCM_NDCOSTWA",
,DUMMY_PLNT_INCL_EEW_PS", "/SAPMP/TOLPRPL", "/SAPMP/TOLPRMI", "/STTPEC/SERVALID",
,/VSO/R_PKGRP", "/VSO/R_LANE_NUM", "/VSO/R_PAL_VEND", "/VSO/R_FORK_DIR", "IUID_RELEVANT",
,IUID_TYPE", "UID_IEA", "DPCBT"
```

FROM

/* Redirected table: MARC */ "NSDM_V_MARC" "MARC"

WHERE

"MANDT" = ? AND "MATNR" = ? AND "WERKS" = ? LIMIT 1

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,51
Contribution to Total Execution Time [%]	1,60
Maximal CPU Consumption per Hour [%] (30.01.2026 between 10:00 and 11:00)	0,18

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Statements on Top Scanned Table

17.4.2.1 Analysis of Where Clause

Table	Field	Operator
?	MANDT	=
?	MATNR	=
?	WERKS	=

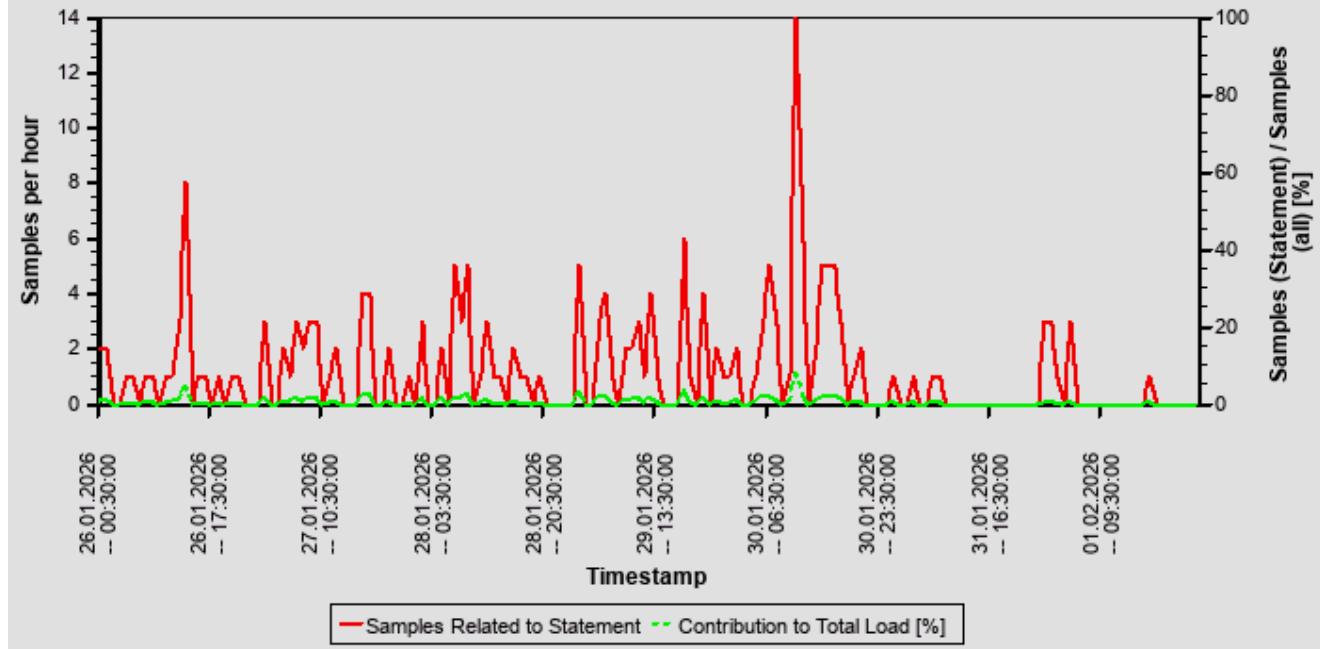
17.4.2.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	7.920	10.375	6.762	241.063
PREPARATION	0	0		
LOCK DURATION	0	0		

17.4.2.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.4.2.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02
/SAPSLL/MARITC	SAPABAP1	COLUMN	Table not partitioned	1.945.010	saphrphdb02
/SAPSLL/CLSNR	SAPABAP1	COLUMN	Table not partitioned	12.312	saphrphdb02
/SAPSLL/TUNOS	SAPABAP1	COLUMN	Table not partitioned	79	saphrphdb02
/SAPSLL/NOSCA	SAPABAP1	COLUMN	Table not partitioned	54	saphrphdb02

17.4.2.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BSI_POS_P ROCESS_IB_IDOCS	LY_CHECK_ BATCH_REL EVANTU01	43	10.07.2018		FIN	Financials

17.4.3 SQL Statement 3d69a71b1a1de5897506f779c224cea8

```

SELECT
*
FROM
"NSDM_V_MARC_DIFF"
WHERE
"MANDT" = ? AND "MATNR" = ? AND "WERKS" = ? LIMIT 1

```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,34
Contribution to Total Execution Time [%]	0,88
Maximal CPU Consumption per Hour [%] (27.01.2026 between 21:00 and 22:00)	0,27

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Statements on Top Scanned Table

17.4.3.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
MATDOC_E_XTRACT	MANDT	=			1	0	0
MATDOC_E_XTRACT	MATNR	=					
MATDOC_E_XTRACT	WERKS	=			1.986	3.331.304.86 8.547.582	0

17.4.3.2 Time Consumption

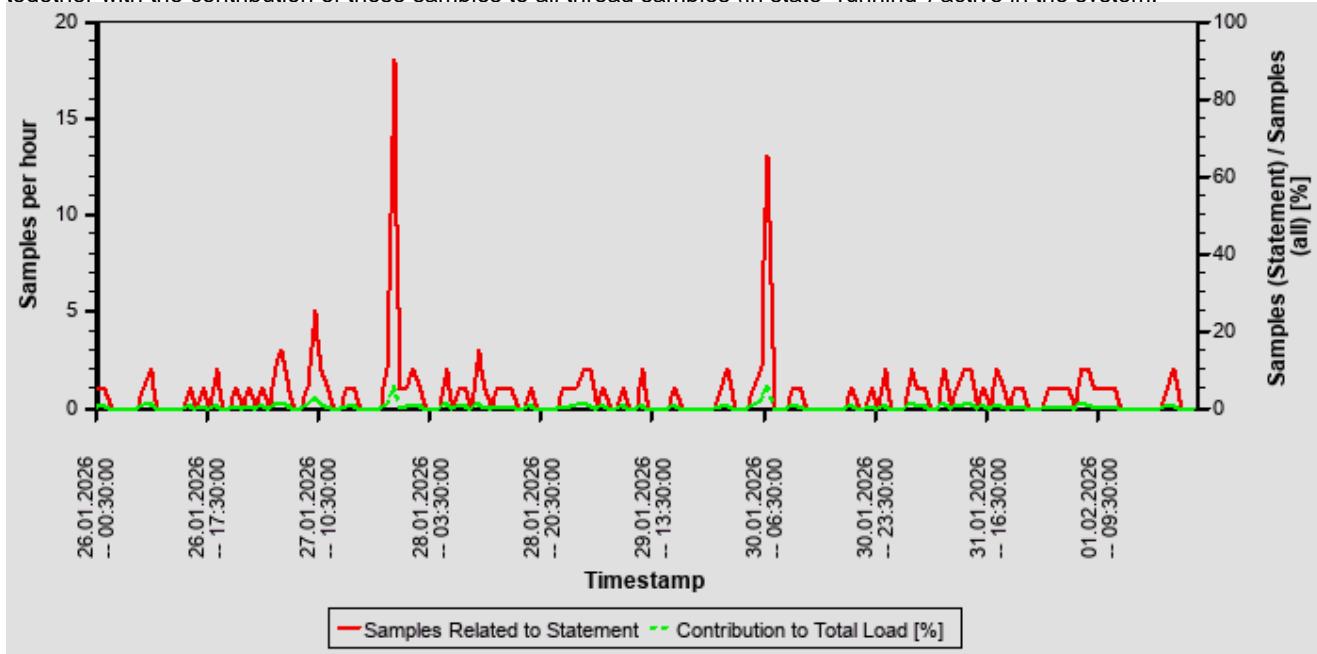
The following table gives an overview of the time consumption of the analyzed SQL statement.



Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.356	858	226	325.017
PREPARATION	0	0		
LOCK DURATION	0	0		

17.4.3.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.4.3.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02

17.4.3.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	CL_NSMD_SELECT_MARC=	2	28.03.2019	✓	LO-MD-MM	Material Master

17.4.4 SQL Statement 6f6557b376dd9c83df8cc8753200735c

DELETE

FROM "MATDOC_EXTRACT"

WHERE

"MANDT" = ? AND "KEY1" = ? AND "KEY2" = ? AND "KEY3" = ? AND "KEY4" = ? AND "KEY5" = ? AND "KEY6" = ?

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,15
Contribution to Total Execution Time [%]	0,84
Maximal CPU Consumption per Hour [%] (01.02.2026 between 00:00 and 01:00)	0,69

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statements (CPU Peak Hour)
SAP HANA SQL Statements in HRP -> Statements on Top Scanned Table

17.4.4.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
MATDOC_E_XTRACT	KEY1	=			72	0	0
MATDOC_E_XTRACT	KEY2	=			167	0	0
MATDOC_E_XTRACT	KEY3	=	✓	INDIRECT	4.489.334	0	8.548.386
MATDOC_E_XTRACT	KEY4	=			256	507.882.789. 787.968	0
MATDOC_E_XTRACT	KEY5	=			256	0	0
MATDOC_E_XTRACT	KEY6	=			256	0	0
MATDOC_E_XTRACT	MANDT	=			1	0	0

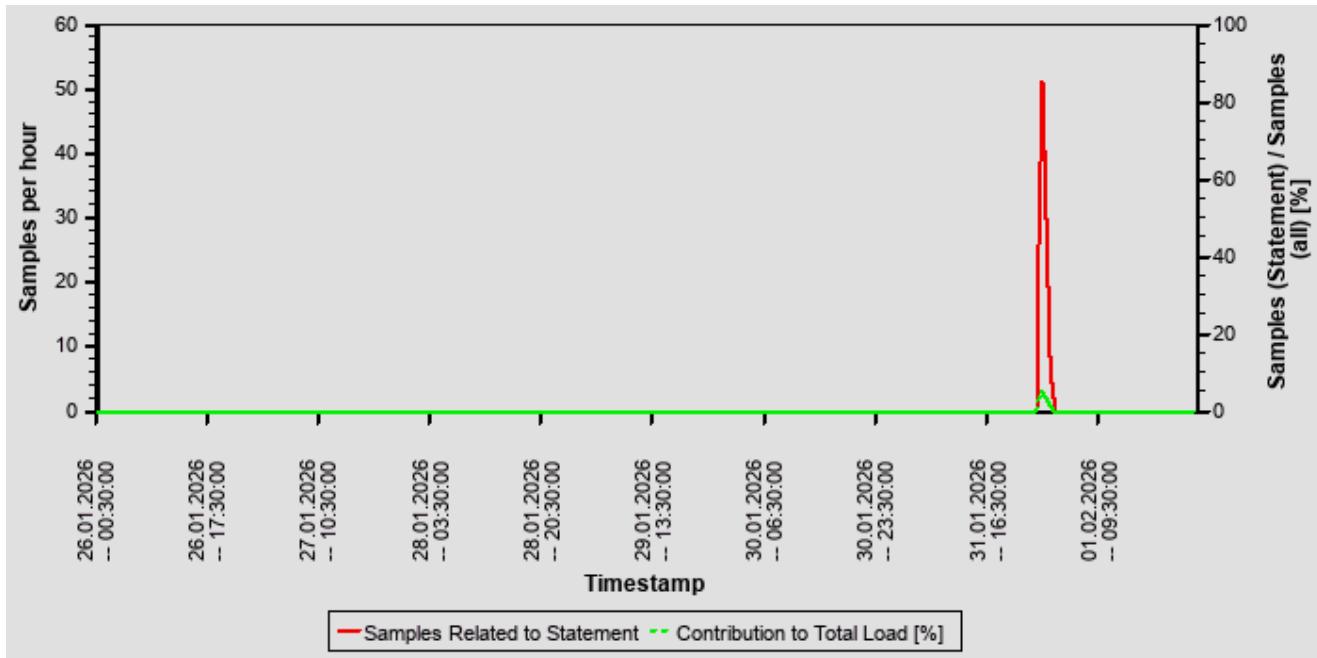
17.4.4.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.160	2.442.870	2.622	109.407.686
PREPARATION	0	19		
LOCK DURATION	0	0		

17.4.4.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.4.4.4 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,56	strong correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,11	weak correlation

17.4.4.5 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02

17.4.4.6 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BSI_FIN_MM PER_CLOSE	CL_NSMD_MTDCSA_P RECOMP=====CM 002	283	31.01.2018	✓	MM-IM-GF	Basic Functions

17.4.5 SQL Statement a764fa071a76eb89eb32f572c0e9d516

```
CALL "CL_PPH_READ_CLASSIC=>GET_MRP_ELEMENTS#stb2#20210421141424" ( ?, ? )
```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,05
Contribution to Total Execution Time [%]	0,83
Maximal CPU Consumption per Hour [%] (01.02.2026 between 05:00 and 06:00)	0,14
Maximal Memory Consumption [%] (01.02.2026 -- 04:28:55)	0,07

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Statements on Top Scanned Table

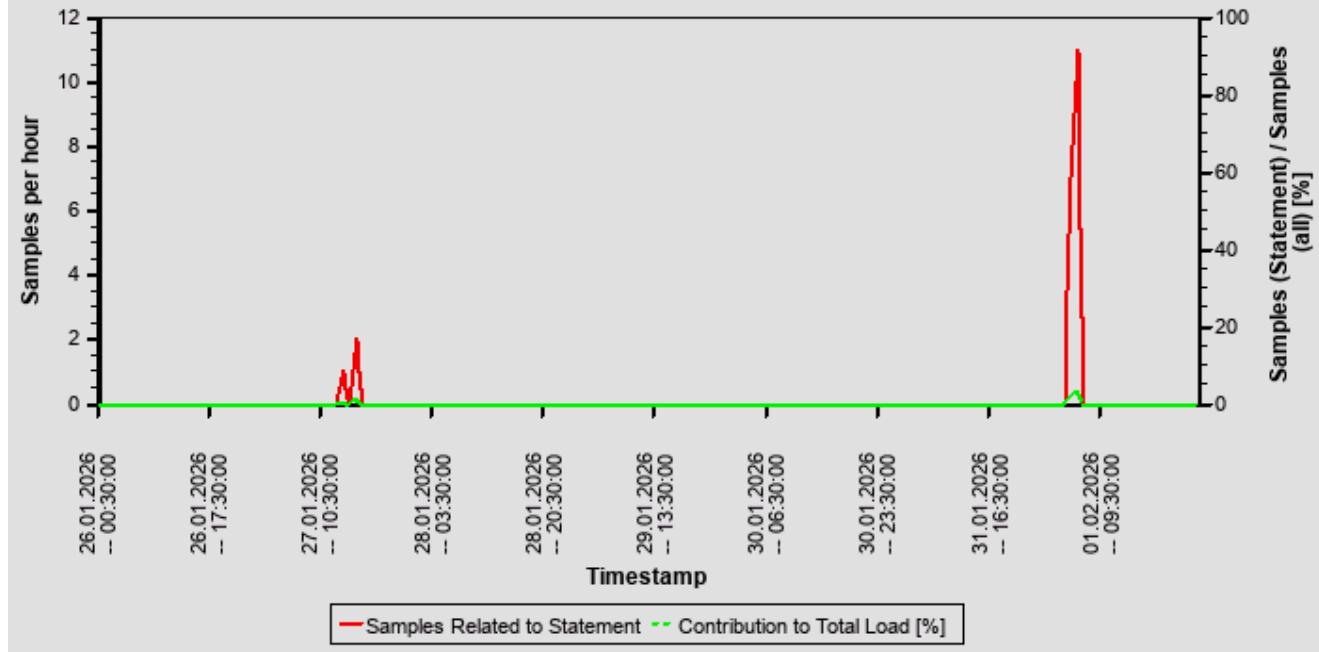
17.4.5.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.094	138.275	87.296	4.487.045
PREPARATION	0	2		
LOCK DURATION	0	0		

17.4.5.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.4.5.3 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02
VBBE	SAPABAP1	COLUMN	Table not partitioned	39.849	saphrphdb02
AFPO	SAPABAP1	COLUMN	Table not partitioned	2.004	saphrphdb02

17.4.5.4 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	MD04	CL_PPH_RE AD_CLASSI C=====CM001	1	27.11.2018	✓	PP-MRP	Material Requirements Planning

17.5 Statements on Top Scanned Table

This section shows the top non-internal statements according to "Total Elapsed Time". The "Total Elapsed Time" is the sum of the "Total Execution Time" and the "Total Preparation Time" from the SQL PLAN CACHE. It has a direct impact on the response time of the application calling the statement.

Only SQL Statement accessing the "top scanned table" are shown. The "top scanned table" is the table that contains the column with the highest number of "SCANNED_RECORDS" in M_CS_ALL_COLUMN_STATISTICS (see the following table). IN many cases, creating an index on that column might improve the accesses.

Schema	Table	Column
SAPABAP1	MATDOC_EXTRACT	WERKS

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Plan Cache
Data Source	HOST_SQL_PLAN_CACHE
Begin of Time Interval	25.01.2026 -- 23:49:43
End of Time Interval	02.02.2026 -- 00:49:43

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Total Elapsed Time [s]	Number of Executions	Time / Execution [us]	Records / Execution	Time / Record [us]
6e93a8ec63adb231a08bcebe2d81c7ce	20.409,3	4.674.766	4.365,8	3,7	1.180,7
81241d0f0070ca6cb0a7ae37d4adbd42	7.919,9	763.345	10.375,3	0,9	11.194,9
3d69a71b1a1de5897506f779c224cea8	4.355,9	5.079.690	857,5	0,2	4.053,1
6f6557b376dd9c83df8cc8753200735c	4.160,2	1.703	2.442.888,7	1.673,1	1.460,1
a764fa071a76eb89eb32f572c0e9d516	4.094,1	29.608	138.276,9	0,0	0,0

17.5.1 SQL Statement 6e93a8ec63adb231a08bcebe2d81c7ce

SELECT

```
/* FDA READ */ "MATNR" , "WERKS" , "LGORT" , "CHARG" , "ATPDATE" , SUM( "REQQTY" ) "REQQTY" ,
"STOCK_TYPE" , "LIFNR"
```

FROM

```
/* Entity name: ATPC_CDS_STOCK WITH PRIVILEGED ACCESS */ "ATPC_STOCK" "ATPC_CDS_STOCK"
```

WHERE



"CLIENT" = ? AND "MATNR" = ? AND "WERKS" = ? AND "SOBKZ" = ?

GROUP BY

"MATNR" , "WERKS" , "LGORT" , "CHARG" , "ATPDATE" , "STOCK_TYPE" , "SOBKZ" , "LIFNR"

ORDER BY

"ATPC_CDS_STOCK" . "MATNR" , "ATPC_CDS_STOCK" . "LGORT" , "ATPC_CDS_STOCK" . "LIFNR"

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,13
Contribution to Total Execution Time [%]	4,13
Maximal CPU Consumption per Hour [%] (26.01.2026 between 07:00 and 08:00)	0,09

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top MATDOC Statements (Elapsed Time)

SAP HANA SQL Statements in HRP -> Top Statements (Elapsed Time)

17.5.1.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
MATDOC_E_XTRACT	CLIENT	=					
MATDOC_E_XTRACT	MATNR	=					
MATDOC_E_XTRACT	SOBKZ	=			3	612.645.295	0
MATDOC_E_XTRACT	WERKS	=			1.986	3.331.304.86 8.547.582	0

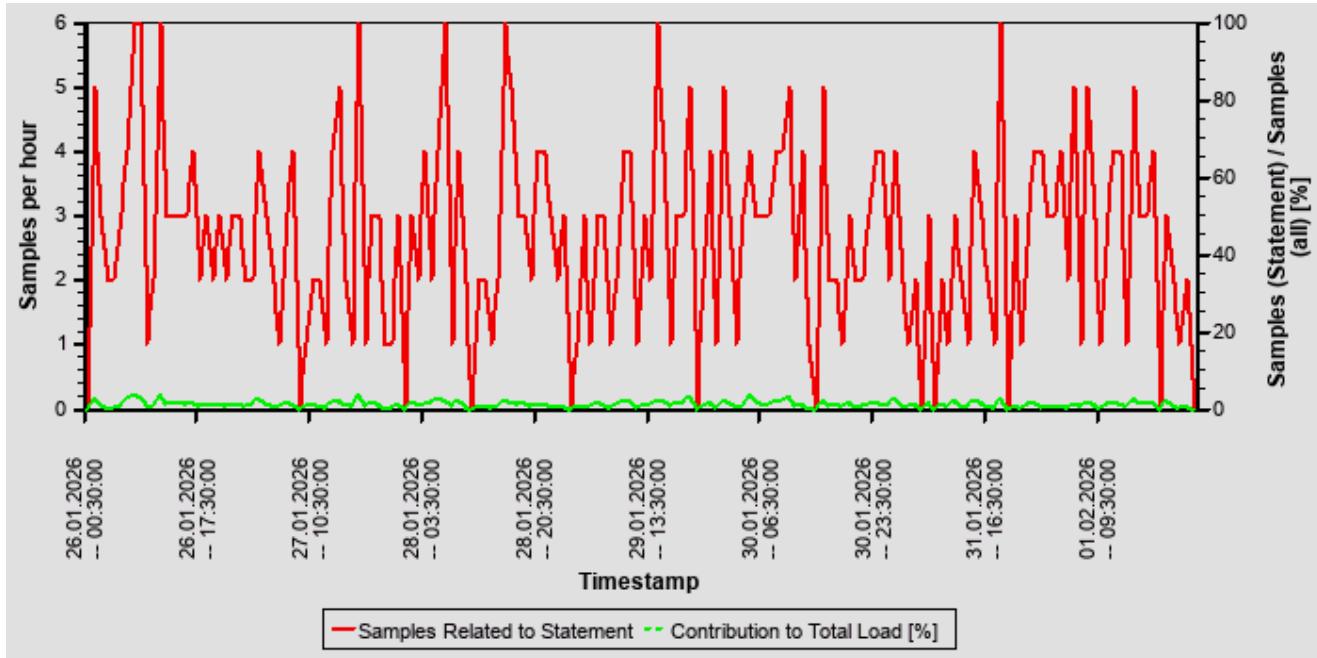
17.5.1.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	20.409	4.366	2.127	86.211
PREPARATION	0	0		
LOCK DURATION	0	0		

17.5.1.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.5.1.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02

17.5.1.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	RVV50R10C	CL_ATP_PA C_DB_SELE CT=====CM00G	7	27.11.2018	✓	CA-ATP-PAC	ATP: Product Availability Check

17.5.2 SQL Statement 81241d0f0070ca6cb0a7ae37d4adbd42

SELECT

```
"MANDT", "MATNR", "WERKS", "PSTAT", "LVORM", "BWTY", "XCHAR", "MMSTA", "MMSTD", "MAABC", "KZKRI",
"EKGPR", "AUSME", "DISPR", "DISMM", "DISPO", "KZDIE", "PLIFZ", "WEBAZ", "PERKZ", "AUSSS", "DISLS",
"BESKZ", "SOBSL", "MINBE", "EISBE", "BSTMI", "BSTMA", "BSTFE", "BSTRF", "MABST", "LOSFX", "SBDKZ",
"LAGPR", "ALTSL", "KZAUS", "AUSDT", "NFMAT", "KZBED", "MISKZ", "FHORI", "PFREI", "FFREI", "RGEKZ",
"FEVOR", "BEARZ", "RUEZT", "TRANZ", "BASMG", "DZEIT", "MAXLZ", "LZEIH", "KZPRO", "GPMKZ", "UEETO",
"UEETK", "UNETO", "WZEIT", "ATPKZ", "VZUSL", "HERBL", "INSMK", "SPROZ", "QUAZT", "SSQSS", "MPDAU",
"KZPPV", "KZDKZ", "WSTGH", "PRFRQ", "NKMPR", "UMLMC", "LADGR", "XCHPF", "USEQU", "LGRAD", "AUFTL",
"PLVAR", "OTYPE", "OBJID", "MTVFP", "PERIV", "KZKFK", "VRVEZ", "VBAMG", "VBEAZ", "LIZYK", "BWSCL",
"KAUTB", "KORDB", "STAWN", "HERKL", "HERKR", "EXPME", "MTVER", "PRCTR", "TRAME", "MRPPP", "SAUFT",
"FXHOR", "VRMOD", "VINT1", "VINT2", "VERKZ", "STLAL", "STLAN", "PLNNR", "APLAL", "LOSGR", "SOBSK",
"FRTME", "LGPRO", "DISGR", "KAUSF", "QZGTP", "QMATV", "TAKZT", "RWPRO", "COPAM", "ABCIN", "AWSLS",
"SERNP", "CUOBJ", "STDPP", "SFEPR", "XMCNG", "QSSYS", "LFRHY", "RDPRF", "VRBMT", "VRBWK", "VRBDT",
"VRBFK", "AUTRU", "PREFE", "PRENC", "PRENO", "PREND", "PRENE", "PRENG", "ITARK", "SERVG", "KZKUP",
"STRGR", "CUOVB", "LGFSS", "SCHGT", "CCFIX", "EPRI", "QMATA", "RESVP", "PLNTY", "UOMGR", "UMRSL",
"ABFAC", "SFCPP", "SHFLG", "SHZET", "MDACH", "KZECH", "MEGRU", "MFRGR", "PROFIL", "VKUMC", "VKTRW",
"KZAGL", "FVIDK", "FXPRU", "LOGGR", "FPRFM", "GLGML", "VKGLG", "INDUS", "MOWNR", "MOGRU",
```

```

"CASNR" , "GPNUM" , "STEUC" , "FABKZ" , "MATGR" , "VSPVB" , "DPLFS" , "DPLPU" , "DPLHO" , "MINLS" , "MAXLS" ,
"FIXLS" , "LTINC" , "COMPL" , "CONVT" , "SHPRO" , "AHDIS" , "DIBER" , "KZPSP" , "OCMPF" , "APOKZ" , "MCRUE" ,
"LFMON" , "LFGJA" , "EISLO" , "NCOST" , "ROTATION_DATE" , "UCHKZ" , "UCMAT" , "EXCISE_TAX_RLVNCE" ,
"BWESB" , "SGT_COVS" , "SGT_STATC" , "SGT_SCOPE" , "SGT_MRPSI" , "SGT_PRCM" , "SGT_CHINT" ,
"SGT_STK_PRT" , "SGT_DEFSC" , "SGT_MRP_ATP_STATUS" , "SGT_MMSTD" , "FSH_MG_ARUN_REQ" ,
"FSH_SEAIM" , "FSH_VAR_GROUP" , "FSH_KZECH" , "FSH_CALENDAR_GROUP" , "ARUN_FIX_BATCH" , "PPSKZ" ,
"CONS_PROCG" , "GI_PR_TIME" , "MULTIPLE_EKGRP" , "REF_SCHEMA" , "MIN_TROC" , "MAX_TROC" ,
"TARGET_STOCK" , "NF_FLAG" , "/CWM/UMLMC" , "/CWM/BWESB" , "SCM_MATLOCID_GUID16" ,
"SCM_MATLOCID_GUID22" , "SCM_GRPRT" , "SCM_GIPRT" , "SCM_SCOST" , "SCM_RELDT" , "SCM_RRP_TYPE" ,
"SCM_HEUR_ID" , "SCM_PACKAGE_ID" , "SCM_SSPPEN" , "SCM_GET_ALERTS" , "SCM_RES_NET_NAME" ,
"SCM_CONHAP" , "SCM_HUNIT" , "SCM_CONHAP_OUT" , "SCM_HUNIT_OUT" , "SCM_SHELF_LIFE_LOC" ,
"SCM_SHELF_LIFE_DUR" , "SCM_MATURITY_DUR" , "SCM_SHLF_LFE_REQ_MIN" , "SCM_SHLF_LFE_REQ_MAX" ,
"SCM_LSUOM" , "SCM_REORD_DUR" , "SCM_TARGET_DUR" , "SCM_TSTRID" , "SCM_STRA1" ,
"SCM_PEG_PAST_ALERT" , "SCM_PEG_FUTURE_ALERT" , "SCM_PEG_STRATEGY" ,
"SCM_PEG_WO_ALERT_FST" , "SCM_FIXPEG_PROD_SET" , "SCM_WHATBOM" , "SCM_RRP_SEL_GROUP" ,
"SCM_INTSRC_PROF" , "SCM_PRIO" , "SCM_MIN_PASS_AMOUNT" , "SCM_PROFID" , "SCM_GES_MNG_USE" ,
"SCM_GES_BST_USE" , "SCM_THRUPUT_TIME" , "SCM_TPOP" , "SCM_SAFTY_V" , "SCM_PPSAFTYSTK" ,
"SCM_PPSAFTYSTK_V" , "SCM_REPSAFTY" , "SCM_REPSAFTY_V" , "SCM_REORD_V" , "SCM_MAXSTOCK_V" ,
"SCM_SCOST_PRCNT" , "SCM_PROC_COST" , "SCM_NDCOSTWE" , "SCM_NDCOSTWA" ,
"DUMMY_PLNT_INCL_EEW_PS" , "/SAPMP/TOLPRPL" , "/SAPMP/TOLPRMI" , "/STTPEC/SERVALID" ,
"/VSO/R_PKGRP" , "/VSO/R_LANE_NUM" , "/VSO/R_PAL_VEND" , "/VSO/R_FORK_DIR" , "IUID_RELEVANT" ,
"IUID_TYPE" , "UID_IEA" , "DPCBT"

```

FROM

/* Redirected table: MARC */ "NSDM_V_MARC" "MARC"

WHERE

"MANDT" = ? AND "MATNR" = ? AND "WERKS" = ? LIMIT 1

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,51
Contribution to Total Execution Time [%]	1,60
Maximal CPU Consumption per Hour [%] (30.01.2026 between 10:00 and 11:00)	0,18

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top MATDOC Statements (Elapsed Time)

17.5.2.1 Analysis of Where Clause

Table	Field	Operator
?	MANDT	=
?	MATNR	=
?	WERKS	=

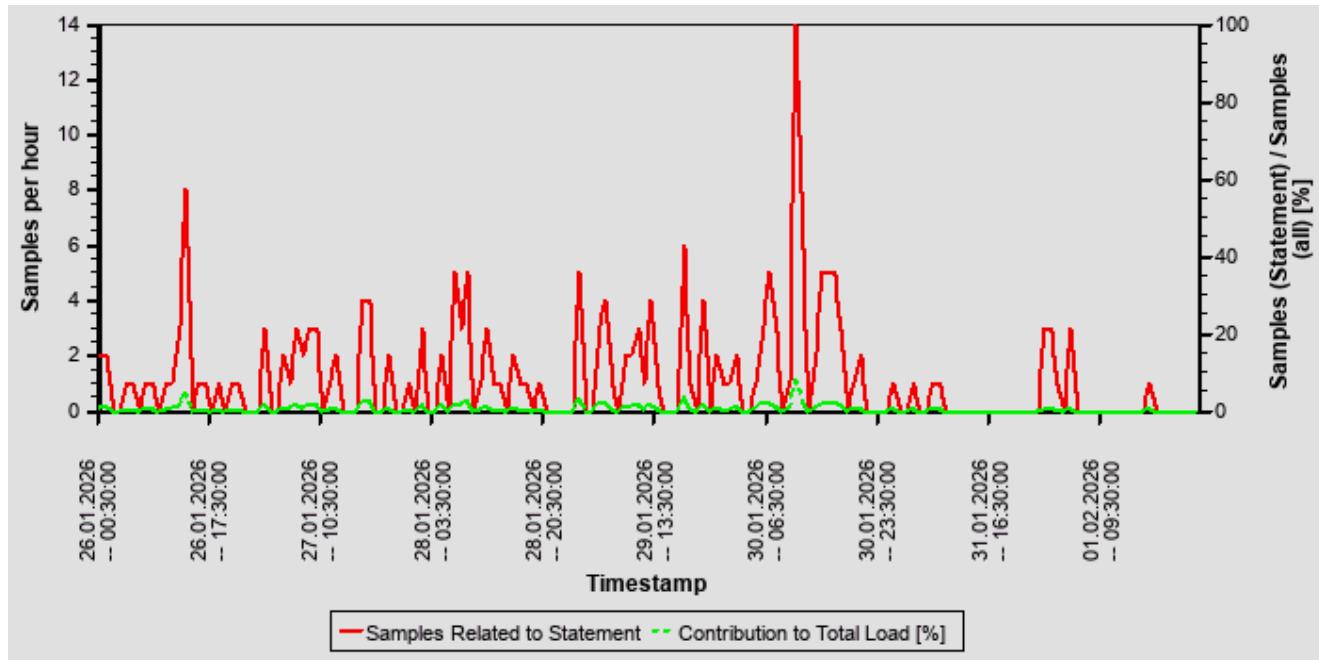
17.5.2.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	7.920	10.375	6.762	241.063
PREPARATION	0	0		
LOCK DURATION	0	0		

17.5.2.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.5.2.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02
/SAPSLL/MARITC	SAPABAP1	COLUMN	Table not partitioned	1.945.010	saphrphdb02
/SAPSLL/CLSNR	SAPABAP1	COLUMN	Table not partitioned	12.312	saphrphdb02
/SAPSLL/TUNOS	SAPABAP1	COLUMN	Table not partitioned	79	saphrphdb02
/SAPSLL/NOSCA	SAPABAP1	COLUMN	Table not partitioned	54	saphrphdb02

17.5.2.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BSI_POS_P ROCESS_IB_IDOCS	LY_CHECK_ BATCH_REL EVANTU01	43	10.07.2018		FIN	Financials

17.5.3 SQL Statement 3d69a71b1a1de5897506f779c224cea8

```

SELECT
*
FROM
"NSDM_V_MARC_DIFF"
WHERE
"MANDT" = ? AND "MATNR" = ? AND "WERKS" = ? LIMIT 1
Statement Impact
  
```

Indicator	Value
Contribution to Total CPU Load [%]	0,34
Contribution to Total Execution Time [%]	0,88

Indicator	Value
Maximal CPU Consumption per Hour [%] (27.01.2026 between 21:00 and 22:00)	0,27
Note: The statement as identified by its statement hash can also be found in other sections of this report:	
Other Sections Dealing with this Statement	
SAP HANA SQL Statements in HRP -> Top MATDOC Statements (Elapsed Time)	

17.5.3.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
MATDOC_E_XTRACT	MANDT	=			1	0	0
MATDOC_E_XTRACT	MATNR	=					
MATDOC_E_XTRACT	WERKS	=			1.986	3.331.304.86 8.547.582	0

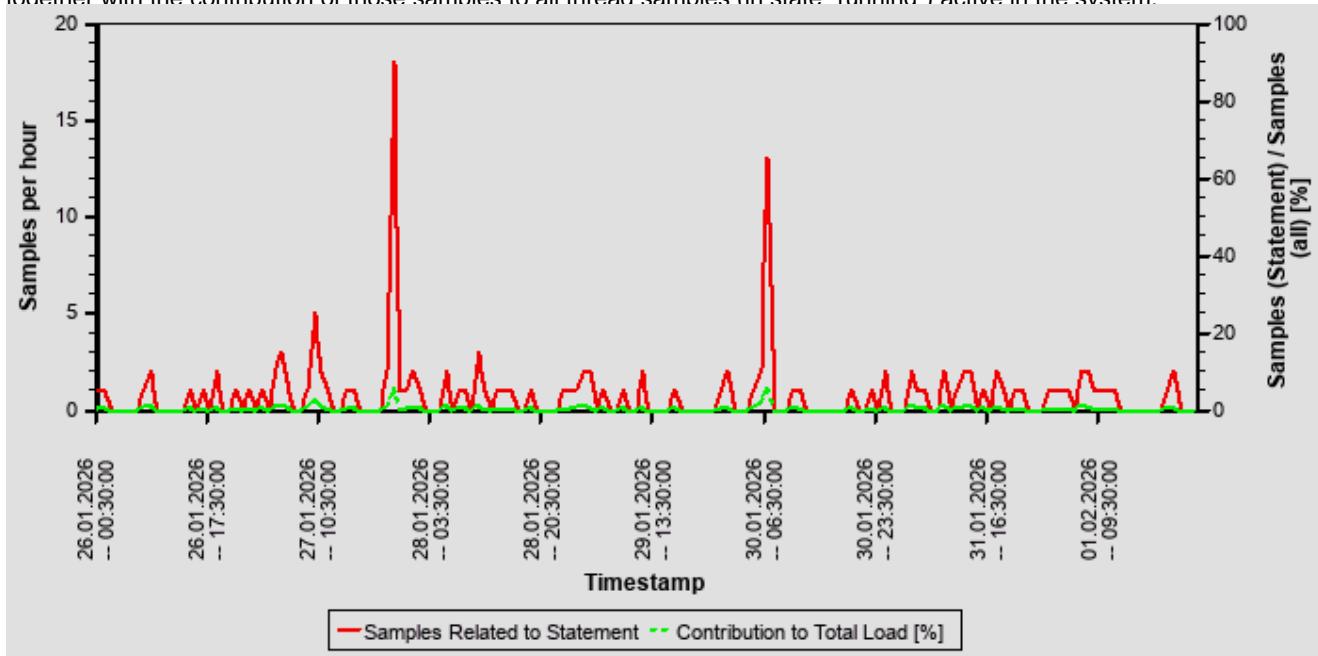
17.5.3.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.356	858	226	325.017
PREPARATION	0	0		
LOCK DURATION	0	0		

17.5.3.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.5.3.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02

17.5.3.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	CL_NSMD_SELECT_MARC= =====CM002	2	28.03.2019	✓	LO-MD-MM	Material Master

17.5.4 SQL Statement 6f6557b376dd9c83df8cc8753200735c

```
DELETE
FROM "MATDOC_EXTRACT"
WHERE
"MANDT" = ? AND "KEY1" = ? AND "KEY2" = ? AND "KEY3" = ? AND "KEY4" = ? AND "KEY5" = ? AND "KEY6" = ?
```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,15
Contribution to Total Execution Time [%]	0,84
Maximal CPU Consumption per Hour [%] (01.02.2026 between 00:00 and 01:00)	0,69

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement
SAP HANA SQL Statements in HRP -> Top MATDOC Statements (Elapsed Time)
SAP HANA SQL Statements in HRP -> Top Statements (CPU Peak Hour)

17.5.4.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
MATDOC_EXTRACT	KEY1	=			72	0	0
MATDOC_EXTRACT	KEY2	=			167	0	0
MATDOC_EXTRACT	KEY3	=	✓	INDIRECT	4.489.334	0	8.548.386
MATDOC_EXTRACT	KEY4	=			256	507.882.789. 787.968	0
MATDOC_EXTRACT	KEY5	=			256	0	0
MATDOC_EXTRACT	KEY6	=			256	0	0
MATDOC_EXTRACT	MANDT	=			1	0	0

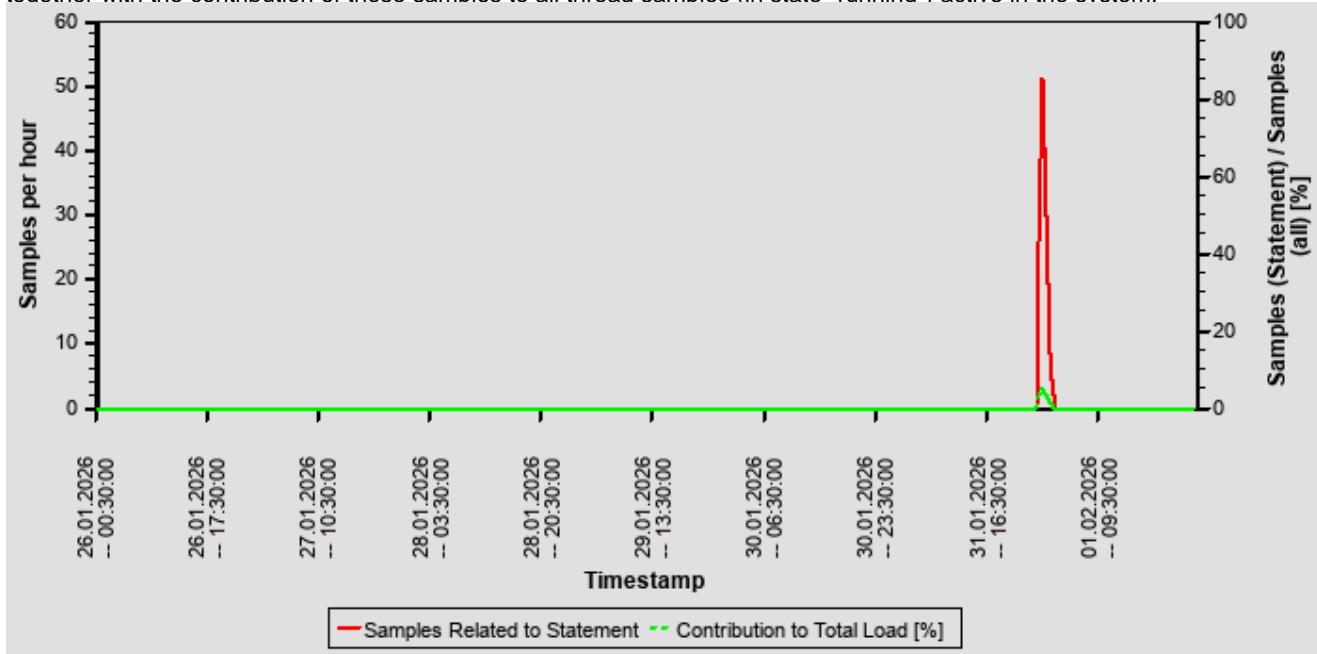
17.5.4.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.160	2.442.870	2.622	109.407.686
PREPARATION	0	19		
LOCK DURATION	0	0		

17.5.4.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.5.4.4 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,56	strong correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,11	weak correlation

17.5.4.5 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02

17.5.4.6 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BSI_FIN_MM PER_CLOSE	CL_NSMD_MTDCSA_P RECOMP=====CM 002	283	31.01.2018	✓	MM-IM-GF	Basic Functions

17.5.5 SQL Statement a764fa071a76eb89eb32f572c0e9d516

CALL "CL_PPH_READ_CLASSIC=>GET_MRP_ELEMENTS#stb2#20210421141424" (?, ?)
Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,05
Contribution to Total Execution Time [%]	0,83
Maximal CPU Consumption per Hour [%] (01.02.2026 between 05:00 and 06:00)	0,14
Maximal Memory Consumption [%] (01.02.2026 -- 04:28:55)	0,07

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top MATDOC Statements (Elapsed Time)

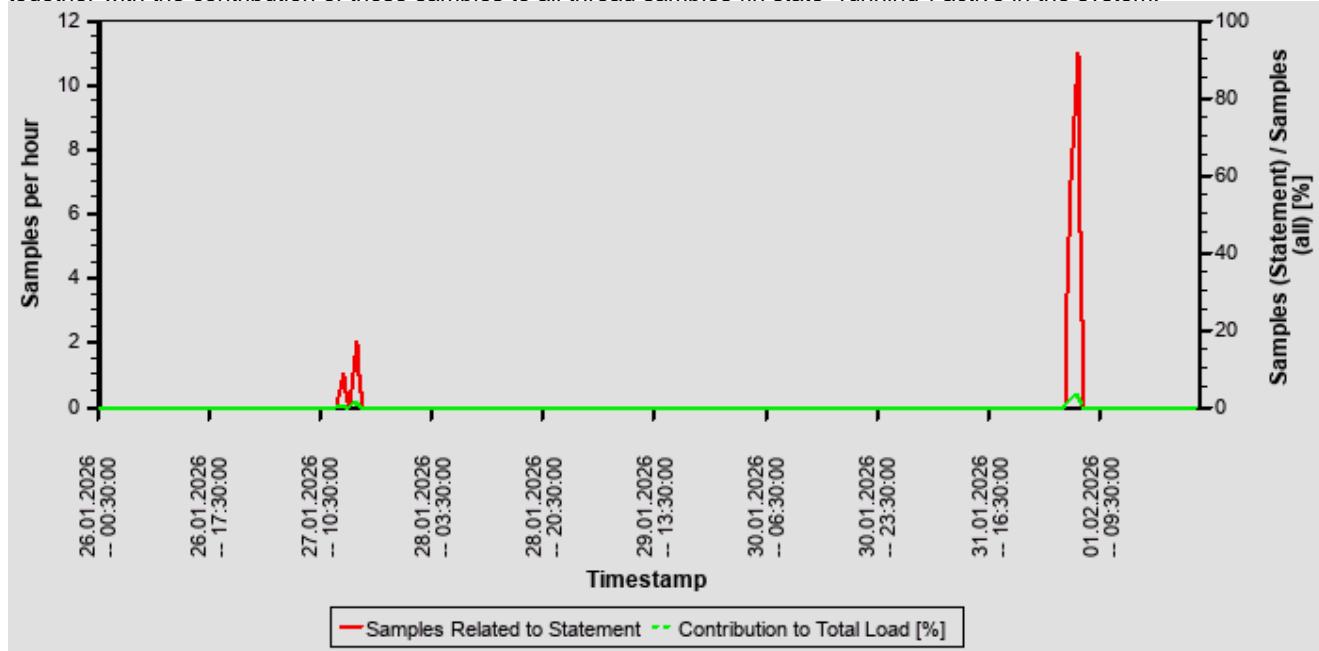
17.5.5.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.094	138.275	87.296	4.487.045
PREPARATION	0	2		
LOCK DURATION	0	0		

17.5.5.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.5.5.3 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02
VBBE	SAPABAP1	COLUMN	Table not partitioned	39.849	saphrphdb02
AFPO	SAPABAP1	COLUMN	Table not partitioned	2.004	saphrphdb02

17.5.5.4 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	MD04	CL_PPH_RE AD_CLASSI C=====CM001	1	27.11.2018	✓	PP-MRP	Material Requirements Planning

17.6 Top Statements (Total Memory)

This section shows the top statements according to memory consumption as obtained from the SQL PLAN CACHE. It considers the product of the number of executions and the average memory consumption per execution.

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Plan Cache
Data Source	M_SQL_PLAN_CACHE

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Number of Executions	Time / Execution [us]	Records / Execution	Executionsx Avg Memx Avg Time[GBx s]	Memory / Execution [MB]
617ffc7ca85016b04c418978f3ae1f89	1.592	70.292.293,8	452.969,0	2.253.314	20.619,2
c4f0c4a244be1f8d7bf043b1ec29e247	25	156.543.211,6	108.286,5	174.923	45.769,2
d6fd6678833f9a2e25e7b53239c50e9a	911.928	102.313,2	0,0	123.392	1.354,2
44bc5e591890a04cfcd66ad4beefd6cb	546	29.255.543,6	766,9	104.693	6.711,5
e9e927d2eadedfc9a03f3d47ecb66663	1	310.327.309,0	0,0	90.873	299.857,0

17.6.1 SQL Statement 617ffc7ca85016b04c418978f3ae1f89

SELECT DISTINCT

"RCLNT" , "RLDNR" , "RBUKRS" , "GJAHR" , "BELNR" , "DOCLN" , "RYEAR" , "DOCNR_LD" , "RRCTY" , "RMVCT" , "VORGN" , "VRGNG" , "BTTYPE" , "AWTYP" , "AWSYS" , "AWORG" , "AWREF" , "AWITEM" , "AWITGRP" , "SUBTA" , "XREVERSING" , "XREVERSED" , "XTRUEREV" , "AWTYP_REV" , "AWORG_REV" , "AWREF_REV" , "SUBTA_REV" , "XSETTLING" , "XSETTLED" , "PREC_AWTYP" , "PREC_AWSYS" , "PREC_AWORG" , "PREC_AWREF" ,

"PREC_AWITEM", "PREC_SUBTA", "PREC_AWMULT", "PREC_BUKRS", "PREC_GJAHR", "PREC_BELNR", "PREC_DOCLN", "XSECONDARY", "CLOSING_RUN_ID", "SRC_AWTYP", "SRC_AWSYS", "SRC_AWORG", "SRC_AWREF", "SRC_AWITEM", "SRC_AWSUBIT", "XCOMMITMENT", "OBS_REASON", "RTCUR", "RWCUR", "RHCUR", "RKCUR", "ROCUR", "RVCUR", "RBCUR", "RCCUR", "RDCUR", "RECUR", "RFCUR", "RGCUR", "RCO_OCUR", "RUNIT", "RVUNIT", "RRUNIT", "RIUNIT", "QUNIT1", "QUNIT2", "QUNIT3", "CO_MEINH", "RACCT", "RCNTR", "PRCTR", "RFAREA", "RBUSA", "KOKRS", "SEGMENT", "SCNTR", "PPRCTR", "SFAREA", "SBUSA", "RASSC", "PSEGMENT", "TSL", "WSL", "WSL2", "WSL3", "HSL", "KSL", "OSL", "VSL", "BSL", "CSL", "DSL", "ESL", "FSL", "GSL", "KFSL", "KFSL2", "KFSL3", "PSL", "PSL2", "PSL3", "PFSL", "PFSL2", "PFSL3", "CO_OSL", "HSLALT", "KSLALT", "OSLALT", "VSLALT", "BSLALT", "CSLALT", "DSLALT", "ESLALT", "FSLALT", "GSLALT", "HSLEXT", "KSLEXT", "OSLEXT", "VSLEXT", "BSLEXT", "CSLEXT", "DSLEXT", "ESLEXT", "FSLEXT", "GSLEXT", "HVKWRT", "MSL", "MFSL", "VMSL", "VMFSL", "RMSL", "QUANT1", "QUANT2", "QUANT3", "CO_MEGBTR", "CO_MEFBTR", "HSALK3", "KSALK3", "OSALK3", "VSALK3", "HSALKV", "KSALKV", "OSALKV", "VSALKV", "HPVPRS", "KPVPRS", "OPVPRS", "VPVPRS", "HSTPRS", "KSTPRS", "OSTPRS", "VSTPRS", "HVKSAL", "LBKUM", "DRCRK", "POPER", "PERIV", "FISCYEARPER", "BUDAT", "BLDAT", "BLART", "BUZEI", "ZUONR", "BSCHL", "BSTAT", "LINETYPE", "KTOSL", "SLALITTYPE", "XSPLITMOD", "USNAM", "TIMESTAMP", "EPRCTR", "RHOART", "GLACCOUNT_TYPE", "KTOPL", "LOKKT", "KTOP2", "REBZG", "REBZJ", "REBZZ", "REBZT", "RBEST", "EBELN_LOGSYS", "EBELN", "EBELP", "ZEKKN", "SGTXT", "KDAUF", "KDPOS", "MATNR", "WERKS", "LIFNR", "KUNNR", "FBUDA", "COCO_NUM", "WWERT", "KOART", "UMSKZ", "MWSKZ", "HBKID", "HKTID", "VALUT", "XOPVW", "AUGDT", "AUGBL", "AUGGJ", "AFABE", "ANLN1", "ANLN2", "BZDAT", "ANBWA", "MOVCAT", "DEPR_PERIOD", "ANLGR", "ANLGR2", "SETTLEMENT_RULE", "ANLKL", "KTOGR", "PANL1", "PANL2", "UBZDT_PN", "XVABG_PN", "PROZS_PN", "XMANPROPVAL_PN", "KALNR", "VPRSV", "MLAST", "KZBWS", "XOBEW", "SOBKZ", "VTSTAMP", "MAT_KDAUF", "MAT_KDPOS", "MAT_PSPNR", "MAT_PS_POSID", "MAT_LIFNR", "BWTAR", "BWKEY", "HPEINH", "KPEINH", "OPEINH", "VPEINH", "MLPTYP", "MLCATEG", "QSBVALT", "QSPPROCESS", "PERART", "MLPOSNR", "INV_MOV_CATEG", "BUKRS_SENDER", "RACCT_SENDER", "ACCAS_SENDER", "ACCASTY_SENDER", "OBJNR", "HRKFT", "HKGRP", "PAROB1", "PAROBSRC", "USPOB", "CO_BELKZ", "CO_BEKNZ", "BELTP", "MUVFLG", "GKONT", "GKOAR", "ERLKZ", "PERNR", "PAOBJNR", "XPAOBJNR_CO_REL", "SCOPE", "LOGSYSO", "PBUKRS", "PSCOPE", "LOGSYSP", "BWSTRAT", "OBJNR_HK", "AUFNR_ORG", "UKOSTL", "ULSTAR", "UPRZNR", "UPRCTR", "ACCAS", "ACCASTY", "LSTAR", "AUFNR", "AUTYP", "PS_PSP_PNR", "PS_POSID", "PS_PRJ_PNR", "PS_PSPID", "NPLNR", "NPLNR_VORGN", "PRZNR", "KSTRG", "BEMOT", "RSRCE", "QMNUM", "SERVICE_DOC_TYPE", "SERVICE_DOC_ID", "SERVICE_DOC_ITEM_ID", "SERVICE_CONTRACT_TYPE", "SERVICE_CONTRACT_ID", "SERVICE_CONTRACT_ITEM_ID", "ERKRS", "PACCAS", "PACCASTY", "PLSTAR", "PAUFNR", "PAUTYP", "PPS_PSP_PNR", "PPS_POSID", "PPS_PRJ_PNR", "PPS_PSPID", "PKDAUF", "PKDPOS", "PPAOBJNR", "PNPLNR", "PNPLNR_VORGN", "PPRZNR", "PKSTRG", "PSERVICE_DOC_TYPE", "PSERVICE_DOC_ID", "PSERVICE_DOC_ITEM_ID", "CO_ACCASTY_N1", "CO_ACCASTY_N2", "CO_ACCASTY_N3", "CO_ZLENR", "CO_BELNR", "CO_BUZEI", "CO_BUZEI1", "CO_BUZEI2", "CO_BUZEI5", "CO_BUZEI6", "CO_BUZEI7", "CO_REFBZ", "CO_REFBZ1", "CO_REFBZ2", "CO_REFBZ5", "CO_REFBZ6", "CO_REFBZ7", "OVERTIMECAT", "WORK_ITEM_ID", "ARRID", "VORN", "AUFPS", "UVORN", "EQUNR", "TPLNR", "ISTRU", "ILART", "PLKNZ", "ARTPR", "PRIOK", "MAUFNR", "MATKL_MM", "PLANNED_PARTS_WORK", "FKART", "VKORG", "VTWEG", "SPART", "MATNR_COPA", "MATKL", "KDGRP", "LAND1", "BRSCH", "BZIRK", "KUNRE", "KUNWE", "KONZS", "ACDOC_COPA_EEW_DUMMY_PA", "DUMMY_MRKT_SGMNT_EEW_PS", "RE_BUKRS", "RE_ACCOUNT", "FIKRS", "FISTL", "MEASURE", "RFUND", "RGRANT_NBR", "RBUDGET_PD", "SFUND", "SGRANT_NBR", "SBUDGET_PD", "BDGT_ACCOUNT", "BDGT_ACCOUNT_COCODE", "BDGT_CNSMPN_DATE", "BDGT_CNSMPN_PERIOD", "BDGT_CNSMPN_YEAR", "BDGT_RELEVANT", "BDGT_CNSMPN_TYPE", "BDGT_CNSMPN_AMOUNT_TYPE", "VNAME", "EGRUP", "RECID", "VPTNR", "BTYP", "ETYPE", "PRODPER", "BILLM", "POM", "CBRUNID", "JVACTIVITY", "PVNAME", "PEGRUP", "S_RECIND", "CBRACCT", "CBOBJNR", "SWENR", "SGENR", "SGRNR", "SMENR

Statement Impact

Indicator	Value
Contribution to Total Execution Time [%]	9,62
Maximal Memory Consumption [%]	1,19

17.6.1.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	111.902	70.290.397	445	169.339.753
PREPARATION	3	1.897		
LOCK DURATION	0	0		

17.6.1.2 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02

17.6.1.3 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	SAPFGLBCF_V2	CL_FINS_ACDOC_CHANGE=======CM002	65	27.11.2018	✓	FI-GL	General Ledger Accounting

17.6.2 SQL Statement c4f0c4a244be1f8d7bf043b1ec29e247

SELECT

"RCLNT" , "RLDNR" , "RRCTY" , "RVERS" , "BUKRS" , "RYEAR" , "RACCT" , "RBUSA" , "RTCUR" , "DRCRK" , "RPMAX" , "TSLVT" , "TSL01" , "TSL02" , "TSL03" , "TSL04" , "TSL05" , "TSL06" , "TSL07" , "TSL08" , "TSL09" , "TSL10" , "TSL11" , "TSL12" , "TSL13" , "TSL14" , "TSL15" , "TSL16" , "HSLVT" , "HSL01" , "HSL02" , "HSL03" , "HSL04" , "HSL05" , "HSL06" , "HSL07" , "HSL08" , "HSL09" , "HSL10" , "HSL11" , "HSL12" , "HSL13" , "HSL14" , "HSL15" , "HSL16" , "CSPRED" , "KSLVT" , "KSL01" , "KSL02" , "KSL03" , "KSL04" , "KSL05" , "KSL06" , "KSL07" , "KSL08" , "KSL09" , "KSL10" , "KSL11" , "KSL12" , "KSL13" , "KSL14" , "KSL15" , "KSL16"

FROM

"GLT0"

WHERE

"RCLNT" = ? AND "RLDNR" = ? AND "RRCTY" = ? AND "RVERS" = ?

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,78
Maximal CPU Consumption per Hour [%] (26.01.2026 between 12:00 and 13:00)	0,99
Maximal Memory Consumption [%] (28.01.2026 -- 12:48:09)	1,22

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement
SAP HANA SQL Statements in HRP -> Top Statements (CPU Peak Hour)
SAP HANA SQL Statements in HRP -> Top Statements (Thread Samples)
SAP HANA SQL Statements in HRP -> Top Statement (Maximal Memory in Trace)

17.6.2.1 Analysis of Where Clause

Table	Field	Operator
?	RCLNT	=
?	RLDNR	=
?	RRCTY	=
?	RVERS	=

17.6.2.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	3.902	156.090.408	148.781.211	163.064.831
PREPARATION	11	452.804		
LOCK DURATION	0	0		

17.6.2.3 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a specific time interval into account.

Activity	Total Memory [GB]	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	1.117	45.769,2	45.567,3	46.204,5

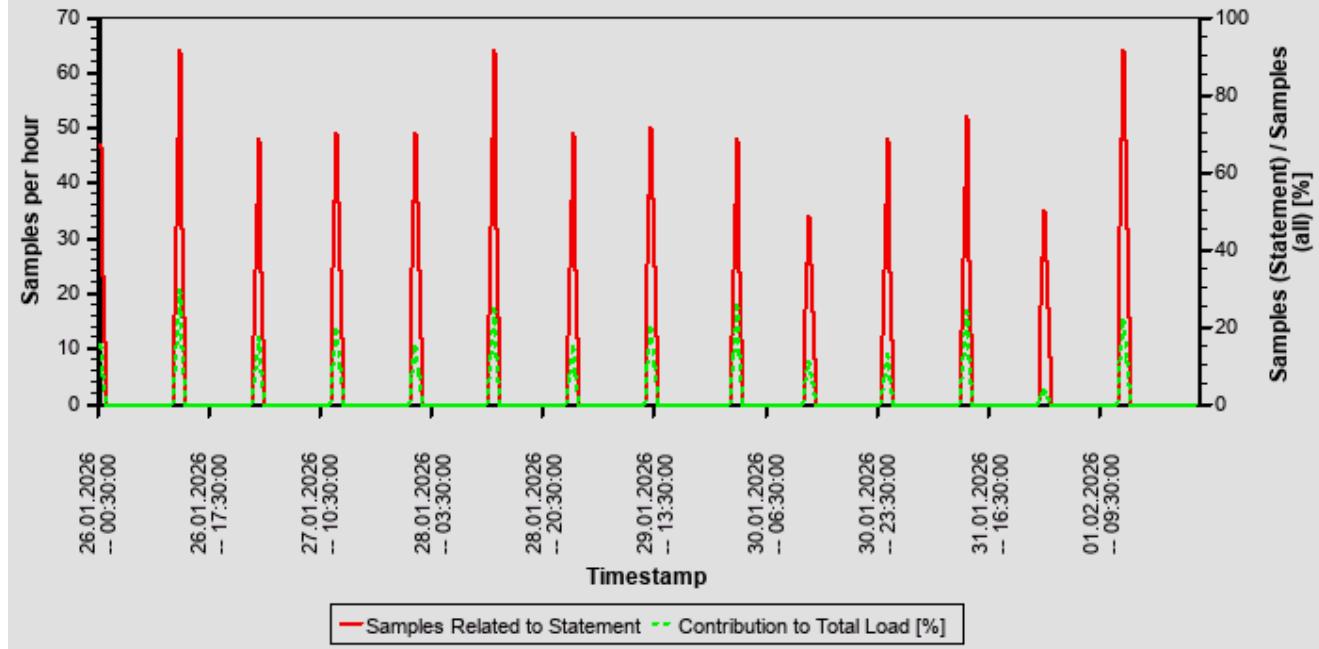
17.6.2.3.1 High Memory Consumption

The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	1,2
Average Statement Size / Effective Allocation Limit [%]	1,2

17.6.2.4 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.6.2.5 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU

consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,30	weak correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,16	weak correlation

17.6.2.6 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FINSC_LD_CMP	SAPABAP1	COLUMN	Table not partitioned	394	saphrphdb02
FINSC_001A	SAPABAP1	COLUMN	Table not partitioned	253	saphrphdb02
FINSC_LEDGER	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02
FINSC_ACTVE_APPL	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02

17.6.2.7 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_02PJR0PETCJ 8UCN1KL0DZ6R60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_2Z6X74TBFC66B2D9CJ10 XXH55	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3UBJNZIPHGX GCXZ60RV7VQB60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3YPSLHADJZR SBMZ3QA7YB2H3D	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_489KBC8KPT4 TWK5PY5RY7PO95	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_5007ZM0TD8D 8LIROK6RGFYGAW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_55RB1H8Z3NA65YNO1 SBDX7WND	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_6ZPMKSSGE5J18I4IZ5PT 5RWG9	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_8C45JUC7GCD 34ENOH7S9M7FUW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_9917SIASLVFJJ 7TDNCAY64IRT	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_ARZBF8H8822L7ZAIXG4B EK2YW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting

17.6.3 SQL Statement d6fd6678833f9a2e25e7b53239c50e9a

```
call _SYS_STATISTICS.STATISTICS_SCHEDULABLEWRAPPER(-GDPR-, ?, ?, ?, ?)
Statement Impact
```

Indicator	Value
Contribution to Total CPU Load [%]	0,20
Contribution to Total Execution Time [%]	8,02

Indicator	Value
Maximal CPU Consumption per Hour [%] (01.02.2026 between 14:00 and 15:00)	0,06

17.6.3.1 Known Issue

Information about this statement (as identified by its STATEMENT_HASH) can be found in the following SAP Note:

Recommendation: Check the mentioned SAP Note(s) for the recommendation concerning the statement and apply the recommendation if applicable.

STATEMENT_HASH	SAP Note	Type	Object
d6fd6678833f9a2e25e7b53239c50e9a	2000002	CALL	STATISTICS_SCHEDULABLEWRAPPER

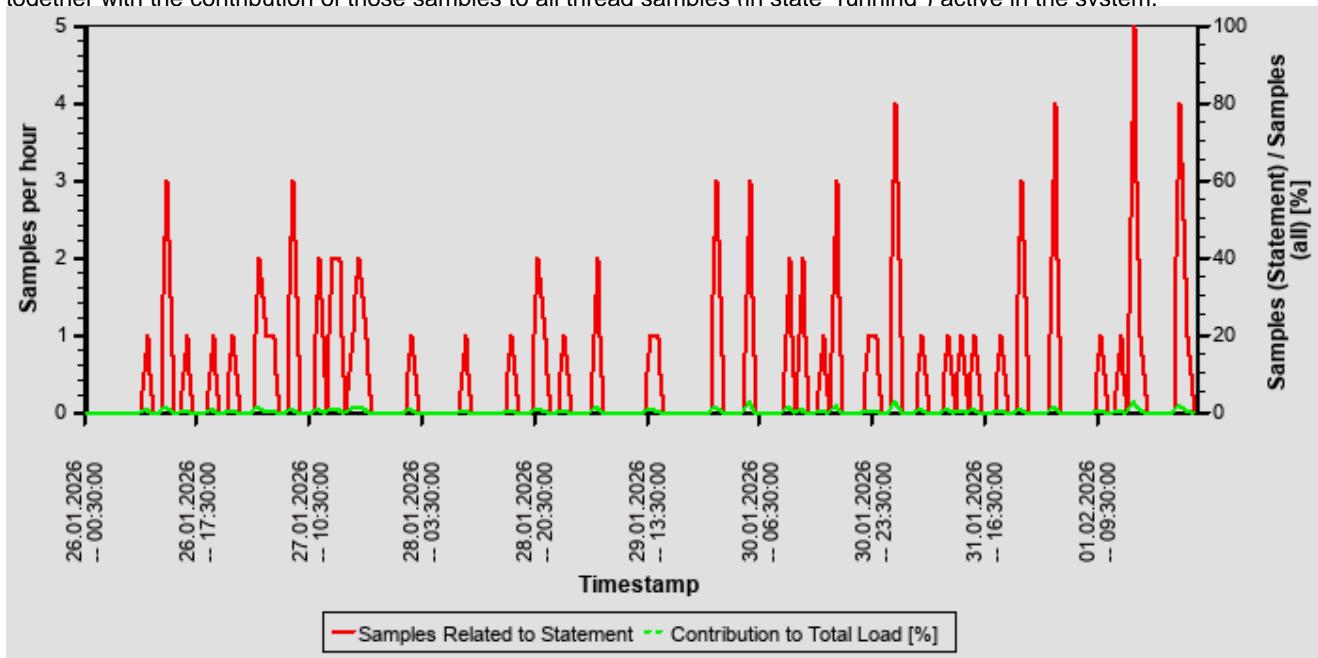
17.6.3.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	93.252	102.258	4.332	1.725.909.044
PREPARATION	50	55		
LOCK DURATION	0	0		

17.6.3.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.6.3.4 Internal SQL Statement

This SQL statement was executed from an internal database connection.

17.6.4 SQL Statement 44bc5e591890a04cfcd66ad4beef6cb

```
SELECT
/* FDA READ */ *
FROM
```



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SAP HANA SQL Statements in
HRP

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/* Redirected table: ANEK */ "FAAV_ANEK" "ANEK"

WHERE

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,18
Contribution to Total Execution Time [%]	1,37
Maximal CPU Consumption per Hour [%] (01.02.2026 between 03:00 and 04:00)	1,04
Maximal Memory Consumption [%] (30.01.2026 -- 03:37:27)	0,18

Note: The statement as identified by its statement hash can also be found in other sections of this report.

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top ACDOCA Statements (Elapsed Time)

17.6.4.1 Analysis of Where Clause

Table	Field	Operator
?	ANLN1	IN
?	BUKRS	=
?	GJAHR	BETWEEN
?	MANDT	=

17.6.4.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	15.945	29.203.742	3.127.062	43.496.678
PREPARATION	28	51.802		
LOCK DURATION	0	0		

17.6.4.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.6.4.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FAAC_CMP_DA0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_VALVIEW0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_VALVIEW1A	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02
FAAC_AP0	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02

17.6.4.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_1N134HIADSQ DREXQQ44IV2Z9K	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_6B868RJSWGT UTNCL9USYKF5L4	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_7HA0CA522L418A714NKA CBV2G	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_7MVFCXSV2Z8 TX5K7U0CUKTAFC	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_8CA3ZTW1T3AOWB 8QHDMWA1DS8	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_8SKP4V6LDJN 0G5YLUCM6SJ288	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions
ERP	BIREQU_9M1ZF7YSBXE BTUI9KD89ZYXOO	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_F0QQJPJXEGR JEAQ3GS3CIJY88	LABRAF20	761	01.03.2019	✓	FI-AA-AA	Basic Functions

17.6.5 SQL Statement e9e927d2eadedfc9a03f3d47ecb66663

SELECT

```
/* FDA READ */ "MANDT", "MATNR", "WERKS", "PSTAT", "LVORM", "BWTTY", "XCHAR", "MMSTA", "MMSTD",  
"MAABC", "KZKRI", "EKGRP", "AUSME", "DISPR", "DISMM", "DISPO", "KZDIE", "PLIFZ", "WEBAZ", "PERKZ",  
"AUSSS", "DISLS", "BESKZ", "SOBSL", "MINBE", "EISBE", "BSTMI", "BSTMA", "BSTFE", "BSTRF", "MABST",  
"LOSFX", "SBDKZ", "LAGPR", "ALTS", "KZAUS", "AUSDT", "NFMAT", "KZBED", "MISKZ", "FHORI", "PFREI",  
"FFREI", "RGEKZ", "FEVOR", "BEARZ", "RUEZT", "TRANZ", "BASMG", "DZEIT", "MAXLZ", "LZEIH", "KZPRO",  
"GPMKZ", "UEETO", "UEETK", "UNETO", "WZEIT", "ATPKZ", "VZUSL", "HERBL", "INSMK", "SPROZ", "QUAZT",  
"SSQSS", "MPDAU", "KZPPV", "KZDKZ", "WSTGH", "PRFRQ", "NKMPR", "UMLMC", "LADGR", "XCHPF",  
"USEQU", "LGRAD", "AUFTL", "PLVAR", "OTYPE", "OBJID", "MTVFP", "PERIV", "KZKFK", "VRVEZ", "VBAMG",  
"VBEAZ", "LIZYK", "BWSCL", "KAUTB", "KORDB", "STAWN", "HERKL", "HERKR", "EXPME", "MTVER", "PRCTR",  
"TRAME", "MRPP", "SAUFT", "FXHOR", "VRMOD", "VINT1", "VINT2", "VERKZ", "STLAL", "STLAN", "PLNNR",  
"APLAL", "LOSGR", "SOBSK", "FRTME", "LGPRO", "DISGR", "KAUSF", "QZGTP", "QMATA", "TAKZT", "RWPRO",  
"COPAM", "ABCIN", "AWSLS", "SERNP", "CUOBJ", "STDPD", "SFEPR", "XMCNG", "QSSYS", "LFRHY", "RDPRF",  
"VRBMT", "VRBWK", "VRBDT", "VRBFK", "AUTRU", "PREFE", "PRENC", "PRENO", "PREND", "PRENE", "PRENG",  
"ITARK", "SERVG", "KZKUP", "STRGR", "CUOVB", "LGFSB", "SCHGT", "CCFIX", "EPRI", "QMATA", "RESVP",  
"PLNTY", "UOMGR", "UMRSL", "ABFAC", "SFCPF", "SHFLG", "SHZET", "MDACH", "KZEC", "MEGRU", "MFRGR",  
"PROFIL", "VKUMC", "VKTRW", "KZAGL", "FVIDK", "FXPRU", "LOGGR", "FPRFM", "GLGMG", "VKGLG", "INDUS",  
"MOWNR", "MOGRU", "CASNR", "GPNUM", "STEUC", "FABKZ", "MATGR", "VSPVB", "DPLFS", "DPLPU",  
"DPLHO", "MINLS", "MAXLS", "FIXLS", "LTINC", "COMPL", "CONVT", "SHPRO", "AHDIS", "DIBER", "KZPSP",  
"OCMPF", "APOKZ", "MCRUE", "LFMON", "LFGJA", "EISLO", "NCOST", "ROTATION_DATE", "UCHKZ", "UCMAT",  
"EXCISE_TAX_RLVNCE", "BWESB", "SGT_COVS", "SGT_STATC", "SGT_SCOPE", "SGT_MRPSI", "SGT_PRCM",  
"SGT_CHINT", "SGT_STK_PRT", "SGT_DEFSC", "SGT_MRP_ATP_STATUS", "SGT_MMSTD",  
"FSH_MG_ARUN_REQ", "FSH_SEAIM", "FSH_VAR_GROUP", "FSH_KZEC", "FSH_CALENDAR_GROUP",  
"ARUN_FIX_BATCH", "PPSKZ", "CONS_PROCG", "GI_PR_TIME", "MULTIPLE_EKGRP", "REF_SCHEMA",  
"MIN_TROC", "MAX_TROC", "TARGET_STOCK", "NF_FLAG", "/CWM/UMLMC", "/CWM/TRAME", "/CWM/BWESB",  
"SCM_MATLOCID_GUID16", "SCM_MATLOCID_GUID22", "SCM_GRPRT", "SCM_GIPRT", "SCM_SCOST",  
"SCM_RELDT", "SCM_RRP_TYPE", "SCM_HEUR_ID", "SCM_PACKAGE_ID", "SCM_SSPPEN", "SCM_GET_ALERTS",  
"SCM_RES_NET_NAME", "SCM_CONHAP", "SCM_HUNIT", "SCM_CONHAP_OUT", "SCM_HUNIT_OUT",  
"SCM_SHELF_LIFE_LOC", "SCM_SHELF_LIFE_DUR", "SCM_MATURITY_DUR", "SCM_SHLF_LFE_REQ_MIN",  
"SCM_SHLF_LFE_REQ_MAX", "SCM_LSUOM", "SCM_REORD_DUR", "SCM_TARGET_DUR", "SCM_TSTRID",  
"SCM_STRA1", "SCM_PEG_PAST_ALERT", "SCM_PEG_FUTURE_ALERT", "SCM_PEG_STRATEGY",  
"SCM_PEG_WO_ALERT_FST", "SCM_FIXPEG_PROD_SET", "SCM_WHATBOM", "SCM_RRP_SEL_GROUP",  
"SCM_INTSRC_PROF", "SCM_PRIO", "SCM_MIN_PASS_AMOUNT", "SCM_PROFID", "SCM_GES_MNG_USE",  
"SCM_GES_BST_USE", "SCM_THRUPUT_TIME", "SCM_TPOP", "SCM_SAFTY_V", "SCM_PPSAFTYSTK",  
"SCM_PPSAFTYSTK_V", "SCM_REPSAFTY", "SCM_REPSAFTY_V", "SCM_REORD_V", "SCM_MAXSTOCK_V",  
"SCM_SCOST_PRCNT", "SCM_PROC_COST", "SCM_NDCOSTWE", "SCM_NDCOSTWA",  
"DUMMY_PLNT_INCL_EEW_PS", "/SAPMP/TOLPRPL", "/SAPMP/TOLPRMI", "/STTPEC/SERVALID",  
"/VSO/R_PKGRP", "/VSO/R_LANE_NUM", "/VSO/R_PAL_VEND", "/VSO/R_FORK_DIR", "UID_RELEVANT",  
"UID_TYPE", "UID_IEA", "DPCBT"
```

FROM

/* Redirected table: MARC */ "NSDM_V_MARC" "MARC"

WHERE

"MANDT" = ? LIMIT ?

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,02
Maximal CPU Consumption per Hour [%] (01.02.2026 between 13:00 and 14:00)	0,09
Maximal Memory Consumption [%] (01.02.2026 -- 13:40:49)	7,92

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statement (Maximal Memory in Trace)



Confidential

SAP HANA SQL Statements in
HRP

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17.6.5.1 Analysis of Where Clause

Table	Field	Operator
?	MANDT	=

17.6.5.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	310	310.034.787	310.034.787	310.034.787
PREPARATION	0	292.522		
LOCK DURATION	0	0		

17.6.5.3 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a specific time interval into account.

Activity	Total Memory [GB]	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	293	299.857,0	299.857,0	299.857,0

17.6.5.3.1 High Memory Consumption

The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	7,9
Average Statement Size / Effective Allocation Limit [%]	7,9

17.6.5.4 Thread Distribution

The following table(s) shows both (if available) the "thread distribution" in terms of "thread state" and for thread samples in state "Running" (that is consuming CPU resources) the distribution of thread type and method. The information is obtained from the view HOST_SERVICE_THREAD_SAMPLES in the time interval analyzed. By this, some insight is given to the internal activities when the statement is processed, helping to understand which activities are responsible for the resource and/or time consumption.

For more information concerning threads and thread samples, see also [SAP Note 2114710](#).

Thread State	Area	Samples
Job Exec Waiting	Idle	12
Running	SQL	6

Thread Type (Thread Method) when THREAD_STATE = "Running"	Samples
JobWorker (PlanExecutor calc)	6

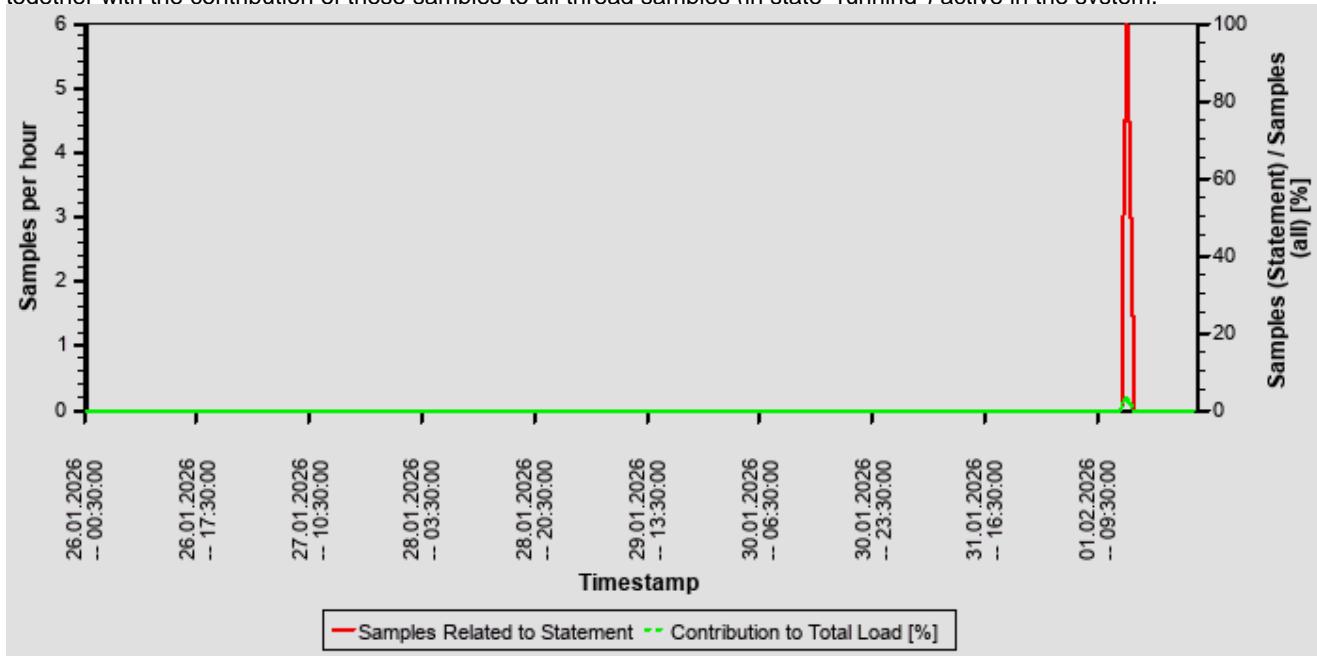
The following table shows the "thread distribution" in terms of "thread detail" and for all thread samples.

Thread Type	Thread Method	Thread Detail	Samples
JobWorker	PlanExecutor calc	plan176688474@saphrphdb 02:30003/pop16 (JERequestedAttributes)	6
JobWorker	PlanExecutor calc	plan176688464@saphrphdb 02:30003/pop0 (RowPlanOperator)	6

Thread Type	Thread Method	Thread Detail	Samples
SqlExecutor	ExecQidltab	SELECT /* FDA READ */ "MANDT" , "MATNR" , "WERKS" , "PSTAT" , "LVORM" , "BWTY" , "XCHAR" , "MMSTA" , "MMSTD" , "MAABC" , "KZKRI" , "EKGRP" , "AUSME" , "DISPR" , "DISMM" , "DISPO" , "KZDIE" , "PLIFZ" , "WEBAZ" , "PERKZ" , "AUSSS" , "DISLS" , "BESKZ"	6

17.6.5.5 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.6.5.6 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	-0,03	no significant correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,63	strong correlation

17.6.5.7 Information from Expensive Statement Trace

The following tables show some details of the up to 10 executions selected by various criteria and collected in the considered time interval, as found in the "Expensive Statement Trace".

Top Statements by Memory Size

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
01.02.2026 13:40:49	310.233	SELECT	0	299.857	380.480	4	cannot allocate enough memory: search table error: [9] Memory allocation failed exception 1000002: Allocation failed \$size\$=9621 776384 \$name\$=Results \$type\$=pool \$inuse_count\$=91 \$allocat ed_size\$=3323894 98264 \$alignment\$=8 \$f ai lu re _typ e\$=S TA TE ME NT _M EM OR Y_ LI MI T \$failure_flag\$= ,Exception in executor plan176688 474@saphrp hdb02:3000 3 while executing pop 17

Top Statements by Duration

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
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TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
01.02.2026 13:40:49	310.233	SELECT	0	299.857	380.480	4	cannot allocate enough memory: search table error: [9] Memory allocation failed exception 1000002: Allocation failed \$size\$=9621 776384 \$name\$=Results \$type\$=pool \$inuse_count\$=91 \$allocat ed_size\$=3323894 98264 \$alignment\$=8 \$f ai lu re _typ e\$=S TA TE ME NT _M EM OR Y_ LI MI T \$failure_flag\$= ,Exception in executor plan176688 474@saphrp hdb02:3000 3 while executing pop 17

Top Statements by CPU Time

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
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TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
01.02.2026 13:40:49	310.233	SELECT	0	299.857	380.480	4	cannot allocate enough memory: search table error: [9] Memory allocation failed exception 1000002: Allocation failed \$size\$=9621 776384 \$name\$=Results \$type\$=pool \$inuse_count\$=91 \$allocat ed_size\$=3323894 98264 \$alignment\$=8 \$f ai lu re _typ e\$=S TA TE ME NT _M EM OR Y_ LI MI T \$failure_flag\$= ,Exception in executor plan176688 474@saphrp hdb02:3000 3 while executing pop 17

Displayed in the following table are the values for WORKLOAD_CLASS_NAME (the name of the effective workload class), PRIORITY (the effective statement priority), STATEMENT_THREAD_LIMIT (the effective statement thread limit), and STATEMENT_MEMORY_LIMIT (the effective statement memory limit) used in the statement execution listed above.

Note: Using very restrictive values increases the runtimes of the statements. Changed values in course of the week might explain performance differences.

First Observation	Last Observation	WORKLOAD_CL ASS_NAME	PRIORITY	STATEMENT_TH READ_LIMIT	STATEMENT_ME MORY_LIMIT
01.02.2026 13:40:49	01.02.2026 13:40:49	_SYS_DEFAULT	5	16	300

17.6.5.8 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02
/SAPSLL/MARITC	SAPABAP1	COLUMN	Table not partitioned	1.945.010	saphrphdb02
/SAPSLL/CLSNR	SAPABAP1	COLUMN	Table not partitioned	12.312	saphrphdb02
/SAPSLL/TUNOS	SAPABAP1	COLUMN	Table not partitioned	79	saphrphdb02
/SAPSLL/NOSCA	SAPABAP1	COLUMN	Table not partitioned	54	saphrphdb02

17.6.5.9 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	SE16N	LSE16NF95	587	03.06.2020	✓	CO	Controlling

17.7 Top Statement (Maximal Memory in Trace)

This section shows the top statements according to the maximal memory usage as of observed in the expensive statement trace, i.e. M_EXPENSIVE_STATEMENTS.

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Expensive Statement Trace
Data Source	M_EXPENSIVE_STATEMENTS
First Day	26.01.2026
Last Day	01.02.2026

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Time / Execution [us]	Records / Execution	Time / Record [us]	Maximum Memory [MB]
e9e927d2eadeedfc9a03f3d47ecb66663	310.327.309,0	0,0	0,0	299.857,0
3814bd2f05a2424b990c68ca625d2f11	153.052.265,0	1.708.368,0	89,6	111.703,0
04371f4b175ae0f4eaf9756f7a31d116	344.016.759,5	500,0	688.033,5	89.958,0
eb85674bb8f4fc34154206bde0b7ec4a	170.283.099,4	3.873,6	43.959,9	53.523,0
c4f0c4a244be1f8d7bf043b1ec29e247	157.062.935,7	108.649,9	1.445,6	46.205,0

17.7.1 SQL Statement e9e927d2eadeedfc9a03f3d47ecb66663

SELECT

```
/* FDA READ */ "MANDT" , "MATNR" , "WERKS" , "PSTAT" , "LVORM" , "BWTTY" , "XCHAR" , "MMSTA" , "MMSTD" ,
"MAABC" , "KZKRI" , "EKGRP" , "AUSME" , "DISPR" , "DISMM" , "DISPO" , "KZDIE" , "PLIFF" , "WEBAZ" , "PERKZ" ,
"AUSSS" , "DISLS" , "BESKZ" , "SOBSL" , "MINBE" , "EISBE" , "BSTMI" , "BSTMA" , "BSTFE" , "BSTRF" , "MABST" ,
"LOSFX" , "SBDKZ" , "LAGPR" , "ALTSI" , "KZAUS" , "AUSDT" , "NFMAT" , "KZBED" , "MISKZ" , "FHORI" , "PFREI" ,
"FFREI" , "RGEKZ" , "FEVOR" , "BEARZ" , "RUEZT" , "TRANZ" , "BASMG" , "DZEIT" , "MAXLZ" , "LZEIH" , "KZPRO" ,
"GPMKZ" , "UEETO" , "UEETK" , "UNETO" , "WZEIT" , "ATPKZ" , "VZUSL" , "HERBL" , "INSMK" , "SPROZ" , "QUAZT" ,
"SSQSS" , "MPDAU" , "KZPPV" , "KZDKZ" , "WSTGH" , "PRFRQ" , "NKMPR" , "UMLMC" , "LADGR" , "XCHPF" ,
"USEQU" , "LGRAD" , "AUFTL" , "PLVAR" , "OTYPE" , "OBJID" , "MTVFP" , "PERIV" , "KZKFK" , "VRVEZ" , "VBAMG" ,
"VBEAZ" , "LIZYK" , "BWSCL" , "KAUTB" , "KORDB" , "STAWN" , "HERKL" , "HERKR" , "EXPME" , "MTVER" , "PRCTR" ,
"TRAME" , "MRPPB" , "SAUFT" , "FXHOR" , "VRMOD" , "VINT1" , "VINT2" , "VERKZ" , "STLAL" , "STLAN" , "PLNNR" ,
"APLAL" , "LOSGR" , "SOBSK" , "FRTME" , "LGPRO" , "DISGR" , "KAUSF" , "QZGTP" , "QMATT" , "TAKZT" , "RWPRO" ,
"COPAM" , "ABCIN" , "AWSLS" , "SERNP" , "CUOBJ" , "STDPD" , "SFEPR" , "XMCNG" , "QSSYS" , "LFRHY" , "RDPRF" ,
"VRBMT" , "VRBWK" , "VRBDT" , "VRBFK" , "AUTRU" , "PREFE" , "PRENC" , "PRENO" , "PREND" , "PRENE" , "PRENG" ,
"ITARK" , "SERVG" , "KZKUP" , "STRGR" , "CUOBV" , "LGFSD" , "SCHGT" , "CCFIX" , "EPRIOD" , "QMATA" , "RESVP" ,
"PLNTY" , "UOMGR" , "UMRSL" , "ABFAC" , "SFCPE" , "SHFLG" , "SHZET" , "MDACH" , "KZECHE" , "MEGRU" , "MFRGR" ,
"PROFIL" , "VKUMC" , "VKTRW" , "KZAGL" , "FVIDK" , "FXPRU" , "LOGGR" , "FPRFM" , "GLGMG" , "VKGLG" , "INDUS" ,
"MWONR" , "MOGRU" , "CASNR" , "GPNUM" , "STEUC" , "FABKZ" , "MATGR" , "VSPVB" , "DPLFS" , "DPLPU" ,
```

"DPLHO" , "MINLS" , "MAXLS" , "FIXLS" , "LTINC" , "COMPL" , "CONVT" , "SHPRO" , "AHDIS" , "DIBER" , "KZPSP" , "OCMPF" , "APOKZ" , "MCRUE" , "LFGJA" , "EISLO" , "NCOST" , "ROTATION_DATE" , "UCHKZ" , "UCMAT" , "EXCISE_TAX_RLVNCE" , "BWESB" , "SGT_COVS" , "SGT_STATC" , "SGT_SCOPE" , "SGT_MRPSI" , "SGT_PRCM" , "SGT_CHINT" , "SGT_STK_PRT" , "SGT_DEFSC" , "SGT_MRP_ATP_STATUS" , "SGT_MMSTD" , "FSH_MG_ARUN_REQ" , "FSH_SEAIM" , "FSH_VAR_GROUP" , "FSH_KZECH" , "FSH_CALENDAR_GROUP" , "ARUN_FIX_BATCH" , "PPSKZ" , "CONS_PROCG" , "GI_PR_TIME" , "MULTIPLE_EKGRP" , "REF_SCHEMA" , "MIN_TROC" , "MAX_TROC" , "TARGET_STOCK" , "NF_FLAG" , "/CWM/UMLMC" , "/CWM/TRAME" , "/CWM/BWESB" , "SCM_MATLOCID_GUID16" , "SCM_MATLOCID_GUID22" , "SCM_GRPRT" , "SCM_SCOST" , "SCM_RELDT" , "SCM_RRP_TYPE" , "SCM_HEUR_ID" , "SCM_PACKAGE_ID" , "SCM_SSPEN" , "SCM_GET_ALERTS" , "SCM_RES_NET_NAME" , "SCM_CONHAP" , "SCM_HUNIT" , "SCM_CONHAP_OUT" , "SCM_HUNIT_OUT" , "SCM_SHELF_LIFE_LOC" , "SCM_SHELF_LIFE_DUR" , "SCM_MATURITY_DUR" , "SCM_SHLF_LFE_REQ_MIN" , "SCM_SHLF_LFE_REQ_MAX" , "SCM_LSUOM" , "SCM_REORD_DUR" , "SCM_TARGET_DUR" , "SCM_TSTRID" , "SCM_STRA1" , "SCM_PEG_PAST_ALERT" , "SCM_PEG_FUTURE_ALERT" , "SCM_PEG_STRATEGY" , "SCM_PEG_WO_ALERT_FST" , "SCM_FIXPEG_PROD_SET" , "SCM_WHATBOM" , "SCM_RRP_SEL_GROUP" , "SCM_INTSRC_PROF" , "SCM_PRIO" , "SCM_MIN_PASS_AMOUNT" , "SCM_PROFID" , "SCM_GES_MNG_USE" , "SCM_GES_BST_USE" , "SCM_THRUPUT_TIME" , "SCM_TPOP" , "SCM_SAFTY_V" , "SCM_PPSAFTYSTK" , "SCM_PPSAFTYSTK_V" , "SCM_REPSAFTY" , "SCM_REPSAFTY_V" , "SCM_REORD_V" , "SCM_MAXSTOCK_V" , "SCM_SCOST_PRCNT" , "SCM_PROC_COST" , "SCM_NDCOSTWE" , "SCM_NDCOSTWA" , "DUMMY_PLNT_INCL_EEW_PS" , "/SAPMP/TOLPRPL" , "/SAPMP/TOLPRMI" , "/STTPEC/SERVALID" , "/VSO/R_PKGRP" , "/VSO/R_LANE_NUM" , "/VSO/R_PAL_VEND" , "/VSO/R_FORK_DIR" , "IUID_RELEVANT" , "IUID_TYPE" , "UIDIEA" , "DPCBT"

FROM

/* Redirected table: MARC */ "NSDM_V_MARC" "MARC"

WHERE

"MANDT" = ? LIMIT ?

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,02
Maximal CPU Consumption per Hour [%] (01.02.2026 between 13:00 and 14:00)	0,09
Maximal Memory Consumption [%] (01.02.2026 -- 13:40:49)	7,92

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statements (Total Memory)

17.7.1.1 Analysis of Where Clause

Table	Field	Operator
?	MANDT	=

17.7.1.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	310	310.034.787	310.034.787	310.034.787
PREPARATION	0	292.522		
LOCK DURATION	0	0		

17.7.1.3 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a specific time interval into account.

Activity	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	299.857,0	299.857,0	299.857,0

17.7.1.3.1 High Memory Consumption

The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	7,9
Average Statement Size / Effective Allocation Limit [%]	7,9

17.7.1.4 Thread Distribution

The following table(s) shows both (if available) the "thread distribution" in terms of "thread state" and for thread samples in state "Running" (that is consuming CPU resources) the distribution of thread type and method. The information is obtained from the view HOST_SERVICE_THREAD_SAMPLES in the time interval analyzed. By this, some insight is given to the internal activities when the statement is processed, helping to understand which activities are responsible for the resource and/or time consumption.

For more information concerning threads and thread samples, see also [SAP Note 2114710](#).

Thread State	Area	Samples
Job Exec Waiting	Idle	12
Running	SQL	6

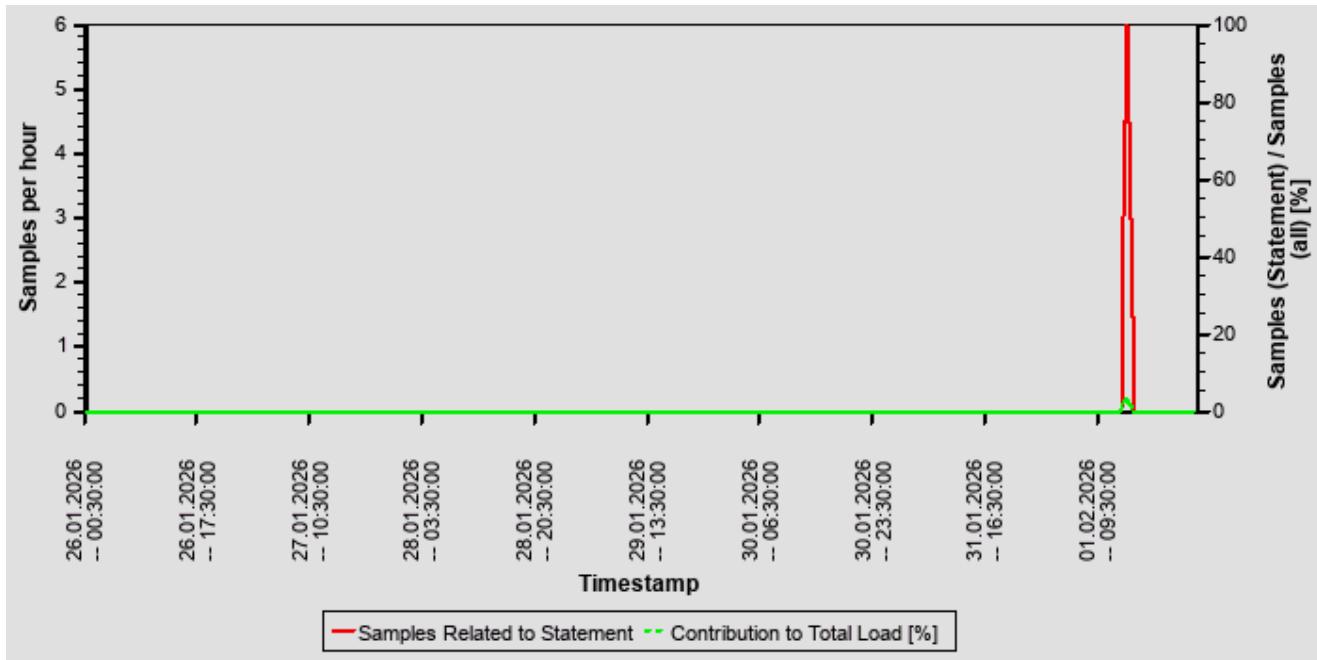
Thread Type (Thread Method) when THREAD_STATE = "Running"	Samples
JobWorker (PlanExecutor calc)	6

The following table shows the "thread distribution" in terms of "thread detail" and for all thread samples.

Thread Type	Thread Method	Thread Detail	Samples
JobWorker	PlanExecutor calc	plan176688474@saphrphdb 02:30003/pop16 (JERequestedAttributes)	6
JobWorker	PlanExecutor calc	plan176688464@saphrphdb 02:30003/pop0 (RowPlanOperator)	6
SqlExecutor	ExecQidItab	SELECT /* FDA READ */ "MANDT" , "MATNR" , "WERKS" , "PSTAT" , "LVORM" , "BWTTY" , "XCHAR" , "MMSTA" , "MMSTD" , "MAABC" , "KZKRI" , "EKGRP" , "AUSME" , "DISPR" , "DISMM" , "DISPO" , "KZDIE" , "PLIFZ" , "WEBAZ" , "PERKZ" , "AUSSS" , "DISLS" , "BESKZ"	6

17.7.1.5 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.7.1.6 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	-0,03	no significant correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,63	strong correlation

17.7.1.7 Information from Expensive Statement Trace

The following tables show some details of the up to 10 executions selected by various criteria and collected in the considered time interval, as found in the "Expensive Statement Trace".

Top Statements by Memory Size

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
01.02.2026 13:40:49	310.233	SELECT	0	299.857	380.480	4	cannot allocate enough memory: search table error: [9] Memory allocation failed exception 1000002: Allocation failed \$size\$=9621 776384 \$name\$=Results \$type\$=pool \$inuse_count\$=91 \$allocat ed_size\$=3323894 98264 \$alignment\$=8 \$f ai lu re _typ e\$=S TA TE ME NT _M EM OR Y_ LI MI T \$failure_flag\$= ,Exception in executor plan176688 474@saphrp hdb02:3000 3 while executing pop 17

Top Statements by Duration

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
-----------	---------------	-----------	---------	------------------	---------------	------------	------------

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
01.02.2026 13:40:49	310.233	SELECT	0	299.857	380.480	4	cannot allocate enough memory: search table error: [9] Memory allocation failed exception 1000002: Allocation failed \$size\$=9621 776384 \$name\$=Results \$type\$=pool \$inuse_count\$=91 \$allocat ed_size\$=3323894 98264 \$alignment\$=8 \$f ai lu re _typ e\$=S TA TE ME NT _M EM OR Y_ LI MI T \$failure_flag\$= ,Exception in executor plan176688 474@saphrp hdb02:3000 3 while executing pop 17

Top Statements by CPU Time

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
-----------	---------------	-----------	---------	------------------	---------------	------------	------------

TIMESTAMP	DURATION [ms]	OPERATION	RECORDS	MEMORY_SIZE [MB]	CPU_TIME [ms]	ERROR_CODE	ERROR_TEXT
01.02.2026 13:40:49	310.233	SELECT	0	299.857	380.480	4	cannot allocate enough memory: search table error: [9] Memory allocation failed exception 1000002: Allocation failed \$size\$=9621 776384 \$name\$=Results \$type\$=pool \$inuse_count\$=91 \$allocat ed_size\$=3323894 98264 \$alignment\$=8 \$f ai lu re _typ e\$=S TA TE ME NT _M EM OR Y_ LI MI T \$failure_flag\$= ,Exception in executor plan176688 474@saphrp hdb02:3000 3 while executing pop 17

Displayed in the following table are the values for WORKLOAD_CLASS_NAME (the name of the effective workload class), PRIORITY (the effective statement priority), STATEMENT_THREAD_LIMIT (the effective statement thread limit), and STATEMENT_MEMORY_LIMIT (the effective statement memory limit) used in the statement execution listed above.

Note: Using very restrictive values increases the runtimes of the statements. Changed values in course of the week might explain performance differences.

First Observation	Last Observation	WORKLOAD_CL ASS_NAME	PRIORITY	STATEMENT_TH READ_LIMIT	STATEMENT_ME MORY_LIMIT
01.02.2026 13:40:49	01.02.2026 13:40:49	_SYS_DEFAULT	5	16	300

17.7.1.8 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MARC	SAPABAP1	COLUMN	Table not partitioned	150.340.256	saphrphdb02
/SAPSLL/MARITC	SAPABAP1	COLUMN	Table not partitioned	1.945.010	saphrphdb02
/SAPSLL/CLSNR	SAPABAP1	COLUMN	Table not partitioned	12.312	saphrphdb02
/SAPSLL/TUNOS	SAPABAP1	COLUMN	Table not partitioned	79	saphrphdb02
/SAPSLL/NOSCA	SAPABAP1	COLUMN	Table not partitioned	54	saphrphdb02

17.7.1.9 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	SE16N	LSE16NF95	587	03.06.2020	✓	CO	Controlling

17.7.2 SQL Statement 3814bd2f05a2424b990c68ca625d2f1 1

SELECT DISTINCT

```
"RCLNT", "RLDNR", "RBUKRS", "GJAHR", "BELNR", "DOCLN", "RYEAR", "DOCNR_LD", "RRCTY", "RMVCT",
"VORGN", "VRGNG", "BTTYPE", "AWTYP", "AWSYS", "AWORG", "AWREF", "AWITEM", "AWITGRP", "SUBTA",
"XREVERSING", "XREVERSED", "XTRUEREV", "AWTYP_REV", "AWORG_REV", "AWREF_REV", "SUBTA_REV",
"XSETTLING", "XSETTLED", "PREC_AWTYP", "PREC_AWSYS", "PREC_AWORG", "PREC_AWREF",
"PREC_AWITEM", "PREC_SUBTA", "PREC_AWMULT", "PREC_BUKRS", "PREC_GJAHR", "PREC_BELNR",
"PREC_DOCLN", "XSECONDARY", "CLOSING_RUN_ID", "SRC_AWTYP", "SRC_AWSYS", "SRC_AWORG",
"SRC_AWREF", "SRC_AWITEM", "SRC_AWSUBIT", "XCOMMITMENT", "OBS_REASON", "RTCUR", "RWCUR",
"RHCUR", "RKCUR", "ROCUR", "RVCUR", "RBCUR", "RCCUR", "RDCUR", "RECUR", "RFCUR", "RGCUR",
"RCO_OCUR", "RUNIT", "RVUNIT", "RRUNIT", "RIUNIT", "QUNIT1", "QUNIT2", "QUNIT3", "CO_MEINH", "RACCT",
"RCNTR", "PRCTR", "RFAREA", "RBUSA", "KOKRS", "SEGMENT", "SCNTR", "PPRCTR", "SFAREA", "SBUSA",
"RASSC", "PSEGMENT", "TSL", "WSL", "WSL2", "WSL3", "HSL", "KSL", "OSL", "VSL", "BSL", "CSL", "DSL",
"ESL", "FSL", "GSL", "KFSL", "KFSL2", "KFSL3", "PSL", "PSL2", "PSL3", "PFSL", "PFSL2", "PFSL3", "CO_OSL",
"HSLALT", "KSLALT", "OSLALT", "VSLALT", "BSLALT", "CSLALT", "DSLALT", "ESLALT", "FSLALT", "GSLALT",
"HSLEXT", "KSLEXT", "OSLEXT", "VSLEXT", "BSLEXT", "CSLEXT", "DSLEXT", "ESLEXT", "FSLEXT", "GSLEXT",
"HVWKWRT", "MSL", "MFSL", "VMSL", "VMFSL", "RMSL", "QUANT1", "QUANT2", "QUANT3", "CO_MEGBTR",
"CO_MEFBTR", "HSALK3", "KSALK3", "OSALK3", "VSALK3", "HSALKV", "KSALKV", "OSALKV", "VSALKV",
"HPVPRS", "KPVPRS", "OPVPRS", "VPVPRS", "HSTPRS", "KSTPRS", "OSTPRS", "VSTPRS", "HVKSAL", "LBKUM",
"DRCRK", "POPER", "PERIV", "FISCYEARPER", "BUDAT", "BLDAT", "BLART", "BUZEI", "ZUONR", "BSCHL",
"BSTAT", "LINETYPE", "KTOSL", "SLALITTYPE", "XSPLITMOD", "USNAM", "TIMESTAMP", "EPRCTR", "RHOART",
"GLACCOUNT_TYPE", "KTOPL", "LOKKT", "KTOP2", "REBZG", "REBZJ", "REBZZ", "REBZT", "RBEST",
"EBELN_LOGSYS", "EBELN", "EBELP", "ZEKKN", "SGTXT", "KDAUF", "KDPOS", "MATNR", "WERKS", "LIFNR",
"KUNNR", "FBUDA", "COCO_NUM", "WWERT", "KOART", "UMSKZ", "MWSKZ", "HBKID", "HKTID", "VALUT",
"XOPVW", "AUGDT", "AUGBL", "AUGJJ", "AFABE", "ANLN1", "ANLN2", "BZDAT", "ANBWA", "MOVCAT",
"DEPR_PERIOD", "ANLGR", "ANLGR2", "SETTLEMENT_RULE", "ANLKL", "KTOGR", "PANL1", "PANL2",
"UBZDT_PN", "XVABG_PN", "PROZS_PN", "XMANPROVAL_PN", "KALNR", "VPRSV", "MLAST", "KZBWS",
"XOBEW", "SOBKZ", "VTSTAMP", "MAT_KDAUF", "MAT_KDPOS", "MAT_PSPNR", "MAT_PS_POSID",
"MAT_LIFNR", "BWTAR", "BWKEY", "HPEINH", "KPEINH", "OPEINH", "VPEINH", "MLPTYP", "MLCATEG",
"QSBVALT", "QSPPROCESS", "PERART", "MLPOSNR", "INV_MOV_CATEG", "BUKRS_SENDER",
"RACCT_SENDER", "ACCAS_SENDER", "ACCASTY_SENDER", "OBJNR", "HRKFT", "HKGRP", "PAROB1",
"PAROBSRC", "USPOB", "CO_BELKZ", "CO_BEKNZ", "BELTP", "MUVFLG", "GKONT", "GKOAR", "ERLKZ",
"PERNR", "PAOBJNR", "XPAOBJNR_CO_REL", "SCOPE", "LOGSYO", "PBUKRS", "PSCOPE", "LOGSYSP",
"BWSTRAT", "OBJNR_HK", "AUFNR_ORG", "UKOSTL", "ULSTAR", "UPRZNR", "UPRCTR", "ACCAS", "ACCASTY",
"LSTAR", "AUFNR", "AUTYP", "PS_PSP_PNR", "PS_POSID", "PS_PRJ_PNR", "PS_PSPID", "NPLNR",
"NPLNR_VORGN", "PRZNR", "KSTRG", "BEMOT", "RSRCE", "QMNUM", "SERVICE_DOC_TYPE",
"SERVICE_DOC_ID", "SERVICE_DOC_ITEM_ID", "SERVICE_CONTRACT_TYPE", "SERVICE_CONTRACT_ID",
"SERVICE_CONTRACT_ITEM_ID", "ERKRS", "PACCAS", "PACCASTY", "PLSTAR", "PAUFNR", "PAUTYP",
"PPS_PSP_PNR", "PPS_POSID", "PPS_PRJ_PNR", "PPS_PSPID", "PKDAUF", "PKDPOS", "PPAOBJNR",
"PNPLNR", "PNPLNR_VORGN", "PPRZNR", "PKSTRG", "PSERVICE_DOC_TYPE", "PSERVICE_DOC_ID",
"PSERVICE_DOC_ITEM_ID", "CO_ACCASTY_N1", "CO_ACCASTY_N2", "CO_ACCASTY_N3", "CO_ZLENR",
"CO_BELNR", "CO_BUZEI", "CO_BUZEI1", "CO_BUZEI2", "CO_BUZEI5", "CO_BUZEI6", "CO_BUZEI7",
"CO_REFBZ", "CO_REFBZ1", "CO_REFBZ2", "CO_REFBZ5", "CO_REFBZ6", "CO_REFBZ7", "OVERTIMECAT",
"WORK_ITEM_ID", "ARBID", "VORNR", "AUFPS", "UVORN", "EQUNR", "TPLNR", "ISTRU", "ILART", "PLKNZ",
"ARTPR", "PRIOK", "MAUFNR", "MATKL_MM", "PLANNED_PARTS_WORK", "FKART", "VKORG", "VTWEG",
"SPART", "MATNR_COPA", "MATKL", "KDGRP", "LAND1", "BRSCH", "BZIRK", "KUNRE", "KUNWE", "KONZS",
"ACDOC_COPA_EEW_DUMMY_PA", "DUMMY_MRKT_SGMNT_EEW_PS", "RE_BUKRS", "RE_ACCOUNT", "FIKRS",
"FISTL", "MEASURE", "RFUND", "RGRANT_NBR", "RBUDGET_PD", "SFUND", "SGRANT_NBR", "SBUDGET_PD",
"BDGT_ACCOUNT", "BDGT_ACCOUNT_COCODE", "BDGT_CNSMPN_DATE", "BDGT_CNSMPN_PERIOD",
"BDGT_CNSMPN_YEAR", "BDGT_RELEVANT", "BDGT_CNSMPN_TYPE", "BDGT_CNSMPN_AMOUNT_TYPE",
```

"VNAME" , "EGRUP" , "RECID", "VPTNR" , "BTYPE" , "ETYPE" , "PRODPER" , "BILLM" , "POM" , "CBRUNID" , "JVACTIVITY" , "PVNAME" , "PEGRUP" , "S_RECIND" , "CBRACCT" , "CBOBJNR" , "SWENR" , "SGENR" , "SGRNR" , "SMENR

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,05
Maximal CPU Consumption per Hour [%] (01.02.2026 between 03:00 and 04:00)	0,19
Maximal Memory Consumption [%] (01.02.2026 -- 03:42:01)	2,95

17.7.2.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	153	152.659.037	152.659.037	152.659.037
PREPARATION	0	393.228		
LOCK DURATION	0	0		

17.7.2.2 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a specific time interval into account.

Activity	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	111.703,4	111.703,4	111.703,4

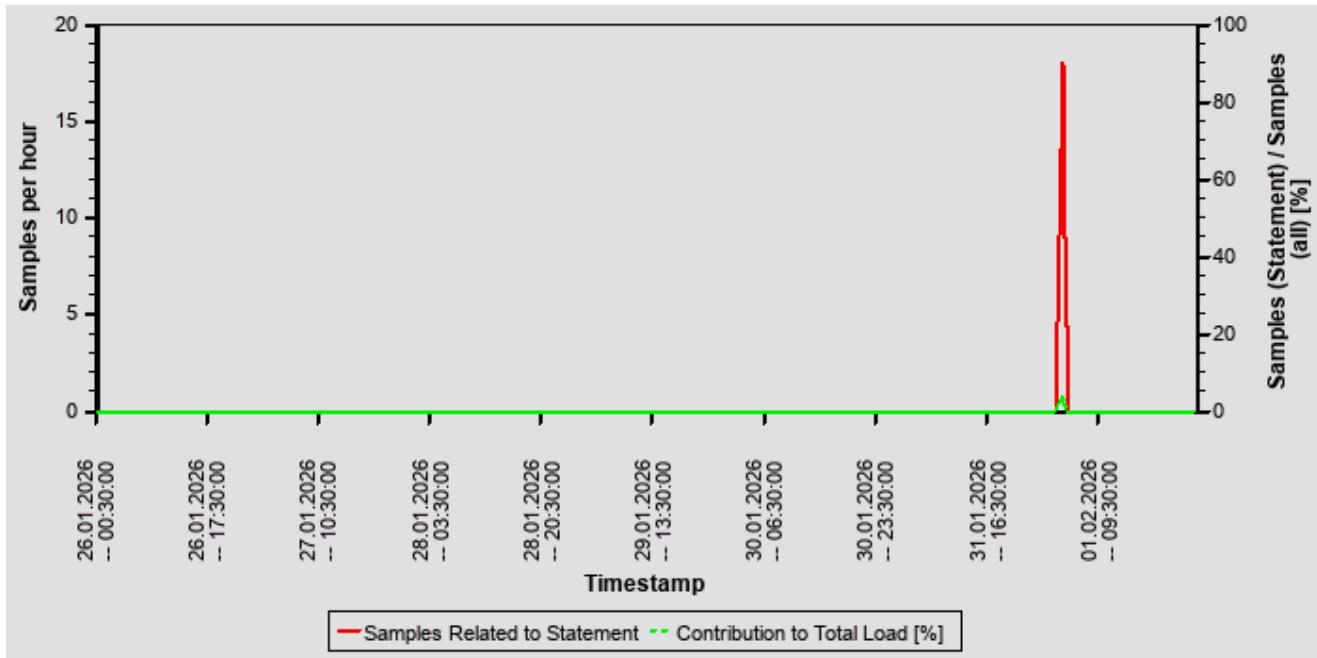
17.7.2.2.1 High Memory Consumption

The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	2,9
Average Statement Size / Effective Allocation Limit [%]	2,9

17.7.2.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.7.2.4 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrhdb02

17.7.2.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding
ERP	SAP_COLLECTOR_PERFMON_SU SAGE_COL	CL_SUS_IMP_CUP_B_FIN_ACDOC A001CM001	45	17.06.2019	✓

17.7.3 SQL Statement 04371f4b175ae0f4eaf9756f7a31d116

SELECT

```
/* FDA READ */ "MANDT", "MATNR", "BWKEY", "BWTAR", "LVORM", "LBKUM", "SALK3", "VPRSV", "VERPR",  
"STPRS", "PEINH", "BKLAS", "SALKV", "VMKUM", "VMSAL", "VMVPR", "VMVER", "VMSTP", "VMPEI", "VMBKL",  
"VMSAV", "VJKUM", "VJSAL", "VJVPR", "VJVER", "VJSTP", "VJPEI", "VJBKL", "VJSAV", "LFGJA", "LFMON",  
"BWTTY", "STPRV", "LAEPR", "ZKPRS", "ZKDAT", "TIMESTAMP", "BWPRS", "BWPRH", "VJBWS", "VJBWH",  
"VVJSL", "VVJLB", "VVMLB", "VVSAL", "ZPLPR", "ZPLP1", "ZPLP2", "ZPLP3", "ZPLD1", "ZPLD2", "ZPLD3",  
"PPERZ", "PPERL", "PPERV", "KALKZ", "KALKL", "KALKV", "KALSC", "XLIFO", "MYPOL", "BWPH1", "BWPS1",  
"ABWKZ", "PSTAT", "KALN1", "KALNR", "BWVA1", "BWVA2", "BWVA3", "VERS1", "VERS2", "VERS3", "HRKFT",  
"KOSGR", "PPRDZ", "PPRDL", "PPRDV", "PDATZ", "PDATL", "PDATV", "EKALR", "VPLPR", "MLMAA", "MLAST",  
"LPLPR", "VKSAL", "HKMAT", "SPERW", "KZIWL", "WLNL", "ABCIW", "BWSPA", "LPLPX", "VPLPX", "FPLPX",  
"LBWST", "VBWST", "FBWST", "EKLAS", "QKLAS", "MTUSE", "MTORG", "OWNPR", "XBEWM", "BWPEI",  
"MBRUE", "OKLAS", "DUMMY_VAL_INCL_EEW_PS", "OIPPINV"
```

FROM

```
/* Redirected table: MBEW */ "MBVMBEW" "MBEW"
```

WHERE

```
"MANDT" = ? LIMIT ?
```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,13
Maximal CPU Consumption per Hour [%] (01.02.2026 between 13:00 and 14:00)	0,79
Maximal Memory Consumption [%] (01.02.2026 -- 13:35:19)	2,37

17.7.3.1 Analysis of Where Clause

Table	Field	Operator
?	MANDT	=

17.7.3.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	688	343.869.382	320.115.492	367.623.271
PREPARATION	0	147.378		
LOCK DURATION	0	0		

17.7.3.3 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a specific time interval into account.

Activity	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	89.332,4	88.707,0	89.957,8

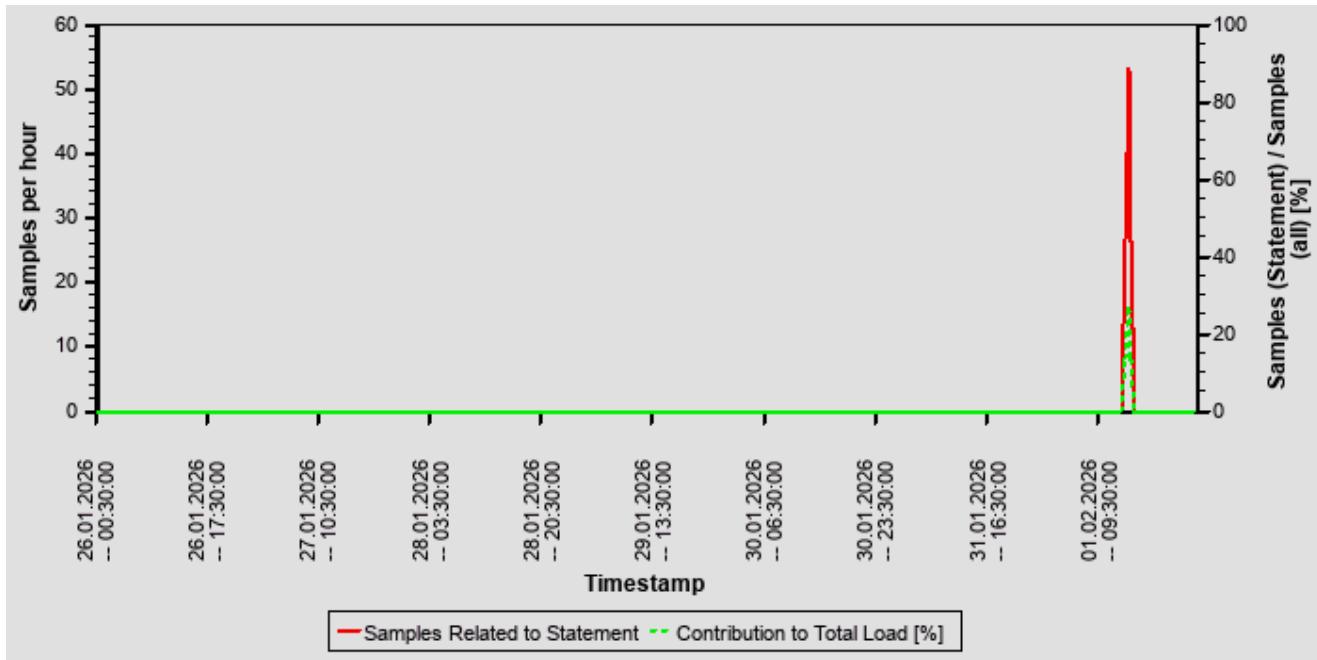
17.7.3.3.1 High Memory Consumption

The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	2,4
Average Statement Size / Effective Allocation Limit [%]	2,4

17.7.3.4 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.7.3.5 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	-0,03	no significant correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,63	strong correlation

17.7.3.6 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
CKMLCR	SAPABAP1	COLUMN	HASH	1.915.217.611	saphrphdb02
MBEW	SAPABAP1	COLUMN	Table not partitioned	147.487.712	saphrphdb02
ACDOCA_M_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	92.901.738	saphrphdb02
FMLT_CURTP_ML	SAPABAP1	COLUMN	Table not partitioned	226	saphrphdb02

17.7.3.7 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	SE16N	LSE16NF95	587	03.06.2020	✓	CO	Controlling

17.7.4 SQL Statement eb85674bb8f4fc34154206bde0b7ec4a

SELECT



*

FROM
 "FAGLFLEXT"
 WHERE
 "RCLNT" = ? AND "TIMESTAMP" >= ? AND "TIMESTAMP" <= ?
Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,50
Maximal CPU Consumption per Hour [%] (28.01.2026 between 06:00 and 07:00)	0,48
Maximal Memory Consumption [%] (01.02.2026 -- 00:58:08)	1,40

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statements (CPU Peak Hour)

17.7.4.1 Analysis of Where Clause

Table	Field	Operator
?	RCLNT	=
?	TIMESTAMP	<=
?	TIMESTAMP	>=

17.7.4.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	849	169.813.281	167.092.428	175.517.245
PREPARATION	2	469.819		
LOCK DURATION	0	0		

17.7.4.3 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a specific time interval into account.

Activity	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	53.280,0	53.280,0	53.280,0

17.7.4.3.1 High Memory Consumption

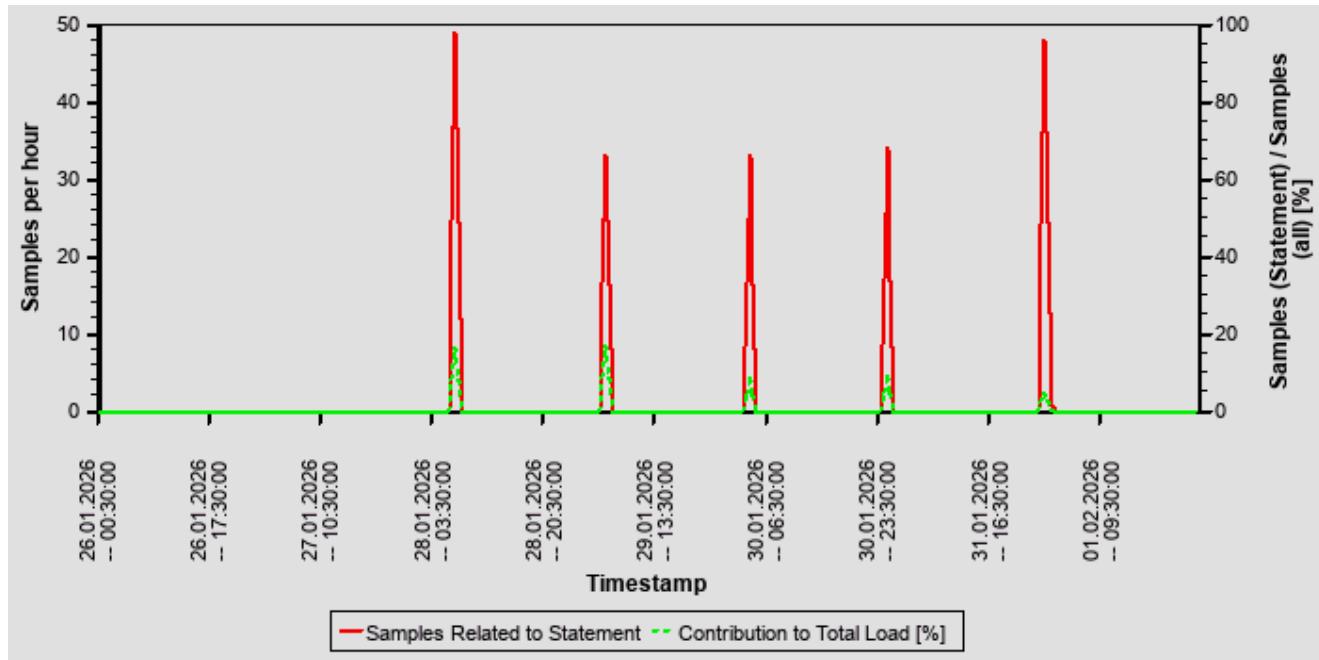
The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	1,4
Average Statement Size / Effective Allocation Limit [%]	1,4

17.7.4.4 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.





17.7.4.5 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,37	medium correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,10	no significant correlation

17.7.4.6 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FINSC_LD_CMP	SAPABAP1	COLUMN	Table not partitioned	394	saphrphdb02
FINSC_LEDGER_REP	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02
FAGLFLEXT_BCK	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02

17.7.4.7 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding
ERP	/SDF/MON_SCHEDULER	/SAPDS/LRS_BASISU20	333	08.06.2015	✓
ERP	<AUTO ABAP PROCESSING>	/SAPDS/LRS_BASISU20	333	08.06.2015	✓
ERP	<BGRFC WATCHDOG>	/SAPDS/LRS_BASISU20	333	08.06.2015	✓
ERP	EFWK RESOURCE MANAGER	/SAPDS/LRS_BASISU20	333	08.06.2015	✓

17.7.5 SQL Statement c4f0c4a244be1f8d7bf043b1ec29e247

```

SELECT
"RCLNT", "RLDNR", "RRCTY", "RVERS", "BUKRS", "RYEAR", "RACCT", "RBUSA", "RTCUR", "DRCRK", "RPMAX"
, "TSLVT", "TSL01", "TSL02", "TSL03", "TSL04", "TSL05", "TSL06", "TSL07", "TSL08", "TSL09", "TSL10", "TSL11",
"TSL12", "TSL13", "TSL14", "TSL15", "TSL16", "HSLVT", "HSL01", "HSL02", "HSL03", "HSL04", "HSL05", "HSL06",
"HSL07", "HSL08", "HSL09", "HSL10", "HSL11", "HSL12", "HSL13", "HSL14", "HSL15", "HSL16", "CSPRED",
"KSLVT", "KSL01", "KSL02", "KSL03", "KSL04", "KSL05", "KSL06", "KSL07", "KSL08", "KSL09", "KSL10", "KSL11",
"KSL12", "KSL13", "KSL14", "KSL15", "KSL16"
FROM
"GLT0"
WHERE
"RCLNT" = ? AND "RLDNR" = ? AND "RRCTY" = ? AND "RVERS" = ?
Statement Impact

```

Indicator	Value
Contribution to Total CPU Load [%]	1,78
Maximal CPU Consumption per Hour [%] (26.01.2026 between 12:00 and 13:00)	0,99
Maximal Memory Consumption [%] (28.01.2026 -- 12:48:09)	1,22

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement
SAP HANA SQL Statements in HRP -> Top Statements (Total Memory)
SAP HANA SQL Statements in HRP -> Top Statements (CPU Peak Hour)
SAP HANA SQL Statements in HRP -> Top Statements (Thread Samples)

17.7.5.1 Analysis of Where Clause

Table	Field	Operator
?	RCLNT	=
?	RLDNR	=
?	RRCTY	=
?	RVERS	=

17.7.5.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	2.198	156.980.674	148.781.211	163.064.831
PREPARATION	1	82.262		
LOCK DURATION	0	0		

17.7.5.3 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a specific time interval into account.

Activity	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	45.831,4	45.678,5	46.024,5

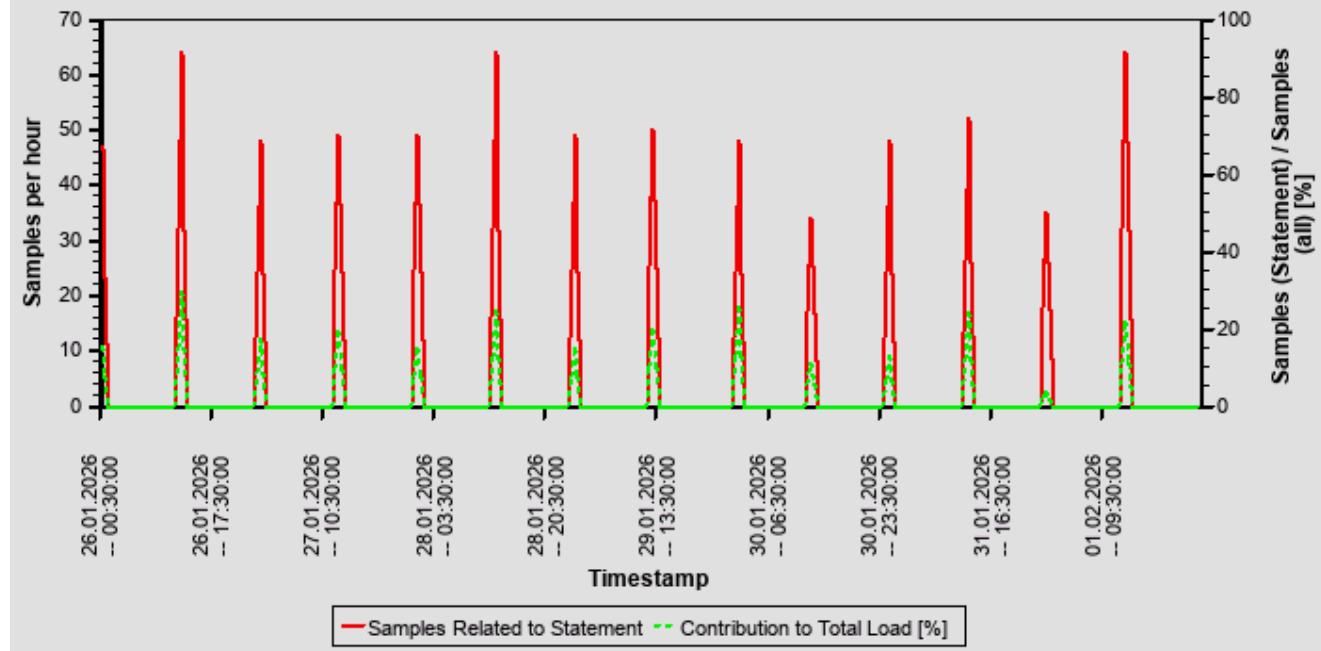
17.7.5.3.1 High Memory Consumption

The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	1,2
Average Statement Size / Effective Allocation Limit [%]	1,2

17.7.5.4 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.7.5.5 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,30	weak correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,16	weak correlation

17.7.5.6 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FINSC_LD_CMP	SAPABAP1	COLUMN	Table not partitioned	394	saphrphdb02
FINSC_001A	SAPABAP1	COLUMN	Table not partitioned	253	saphrphdb02
FINSC_LEDGER	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02
FINSC_ACTVE_APPL	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02

17.7.5.7 Origin of SQL Statement



The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_02PJR0PETCJ 8UCN1KL0DZ6R60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_2Z6X74TBFC66B2D9CJ10 XXH55	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3UBJNZIPHGX GCXZ60RV7VQB60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3YPSLHADJZR SBMZ3QA7YB2H3D	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_489KBC8KPT4 TWK5PY5RY7PO95	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_5007ZM0TD8D 8LIROK6RGFYGAW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_55RB1H8Z3NA65YNO1 SBDX7WND	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_6ZPMKSSGE5J18I4IZ5PT 5RWG9	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_8C45JUC7GCD 34ENOH7S9M7FUW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_9917SIASLVFJJ 7TDNCAY64IRT	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_ARZBF8H8822L7ZAIXG4B EK2YW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting

17.8 Top Statements (Thread Samples)

This section shows the top statements according to the number of observed "threads" ("Number of Samples") in the SERVICE THREAD SAMPLES. A statement might occupy a high number of threads if (a) it has a long execution time, (b) it is executed very often, or (c) it has a highly parallelized execution. In any case, it shows statements with a high resource consumption on the SAP HANA database.

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Thread Samples
Data Source	HOST_SERVICE_THREAD_SAMPLES
First Day	26.01.2026
Last Day	01.02.2026

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Time / Execution [us]	Records / Execution	Time / Record [us]	Number of Samples
47b3bd84eec1cce26c 1ba82cde2ee2a0	517,4	1,0	517,4	1.275
dc718a097243ad453d 8133c7742ba743	2.649.078,9	1,0	2.649.078,9	854
c4f0c4a244be1f8d7bf0 43b1ec29e247	157.062.935,7	108.649,9	1.445,6	701
1fa05502938f0afe1a4 a782b6b9bd775	2.302.723,1	1,0	2.302.723,1	682
4b9f72884af3e12dbba 6e74eba0846d5	326,7	1,0	326,7	527

17.8.1 SQL Statement 47b3bd84eec1cce26c1ba82cde2ee2a0

INSERT

```
INTO "RSAU_BUF_DATA" ( "AREA" , "SUBID" , "SLGDATTIM" , "SLGPROC" , "SLGMAND" , "SID" , "INSTANCE" ,
"COUNTER" , "SLGLTRM2" , "SLGUSER" , "SLGTC" , "SLGREPNA" , "TERM_IPV6" , "SAL_DATA" ) VALUES( ? , ? , ? ,
? , ? , ? , ? , ? , ? , ? , ? , ? , ? , ? , ? )
```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	3,24
Contribution to Total Execution Time [%]	0,90
Maximal CPU Consumption per Hour [%] (28.01.2026 between 09:00 and 10:00)	0,32

17.8.1.1 Known Issue

Information about this statement (as identified by its STATEMENT_HASH) can be found in the following SAP Note:

Recommendation: Check the mentioned SAP Note(s) for the recommendation concerning the statement and apply the recommendation if applicable.

STATEMENT_HASH	SAP Note	Type	Object
47b3bd84eec1cce26c1ba82cde2ee2a0	2000002	INSERT	RSAU_BUF_DATA

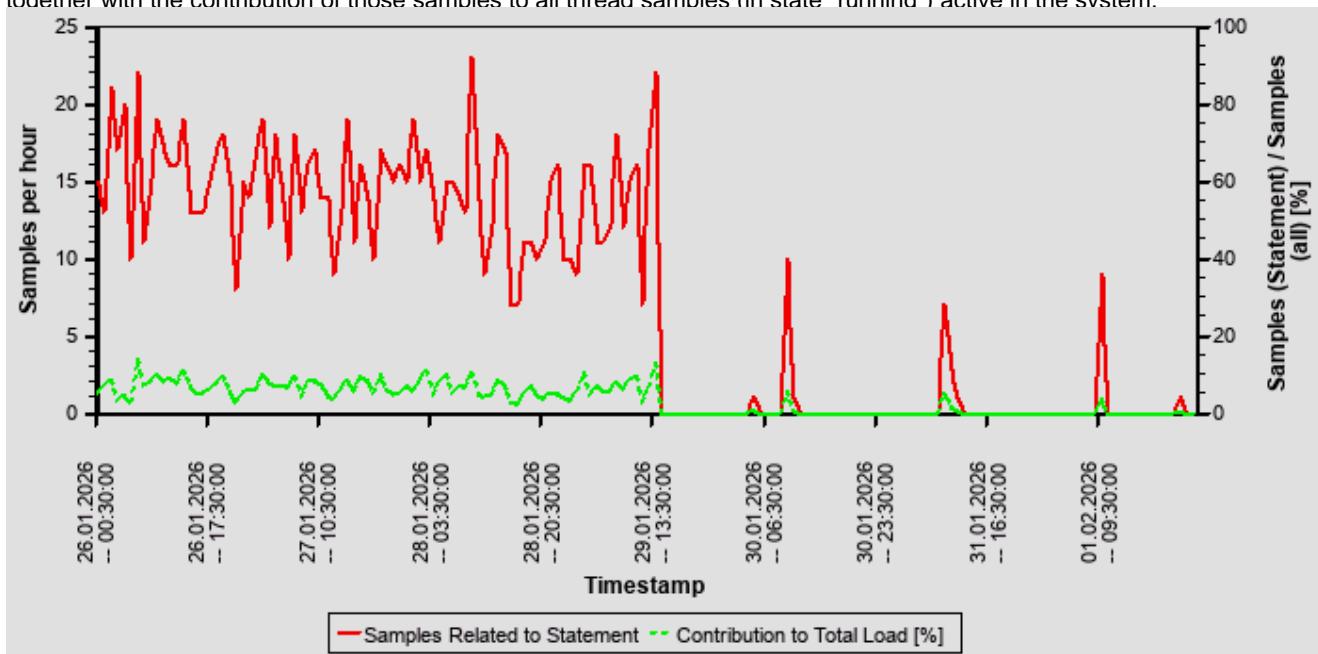
17.8.1.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	517	357	2.453.652
PREPARATION	0		
LOCK DURATION	0		

17.8.1.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.8.2 SQL Statement dc718a097243ad453d8133c7742ba743

SELECT

```
HOST,ROUND(SUM(MEMORY_SIZE_IN_TOTAL)/(1024*1024*1024),3) AS "Column memory in use (Loaded)
GB",ROUND(SUM(MEMORY_SIZE_IN_DELTA)/(1024*1024*1024),3) AS "Memory Size in delta
GB",ROUND(SUM(MEMORY_SIZE_IN_HISTORY_MAIN + MEMORY_SIZE_IN_HISTORY_DELTA)/(1024*1024*1024),3)
AS "Memory size in history GB",ROUND(SUM(CASE WHEN LOADED = 'GDPR-' THEN'-GDPR-' WHEN
ESTIMATED_MAX_MEMORY_SIZE_IN_TOTAL - MEMORY_SIZE_IN_TOTAL < 0 THEN '-GDPR-' ELSE
ESTIMATED_MAX_MEMORY_SIZE_IN_TOTAL - MEMORY_SIZE_IN_TOTAL END)/(1024*1024*1024),3) AS "Column
memory Unloaded GB"FROM M_CS_TABLESGROUP BY HOSTORDER BY HOST
```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	2,17
Contribution to Total Execution Time [%]	0,54
Maximal CPU Consumption per Hour [%] (31.01.2026 between 13:00 and 14:00)	0,58

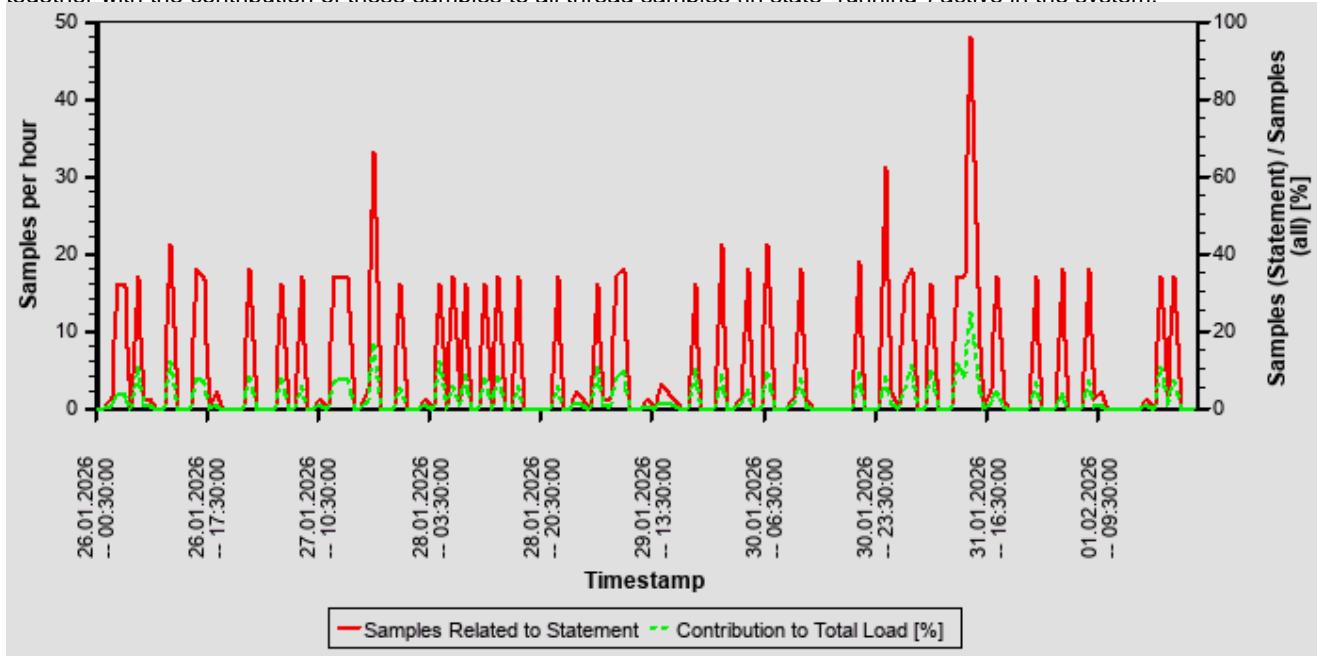
17.8.2.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	2.649.079	2.003.111	6.423.442
PREPARATION	0		
LOCK DURATION	0		

17.8.2.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.8.2.3 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
P_PROCEDURES_	SYS	ROW	Table not partitioned	12.943	saphrphdb02
P_GRANTEDPRIVS_	SYS	ROW	Table not partitioned	3.469	saphrphdb02
P_PRINCIPALS_	SYS	ROW	Table not partitioned	209	saphrphdb02
P_SCHEMAS_	SYS	ROW	Table not partitioned	95	saphrphdb02
P_OBJTYPES_	SYS	ROW	Table not partitioned	37	saphrphdb02

17.8.3 SQL Statement c4f0c4a244be1f8d7bf043b1ec29e247

SELECT

```
"RCLNT", "RLDNR", "RRCTY", "RVERS", "BUKRS", "RYEAR", "RACCT", "RBUSA", "RTCUR", "DRCRK", "RPMAX",
,"TSLVT", "TSL01", "TSL02", "TSL03", "TSL04", "TSL05", "TSL06", "TSL07", "TSL08", "TSL09", "TSL10", "TSL11",
,"TSL12", "TSL13", "TSL14", "TSL15", "TSL16", "HSLVT", "HSL01", "HSL02", "HSL03", "HSL04", "HSL05", "HSL06",
,"HSL07", "HSL08", "HSL09", "HSL10", "HSL11", "HSL12", "HSL13", "HSL14", "HSL15", "HSL16", "CSPRED",
,"KSLVT", "KSL01", "KSL02", "KSL03", "KSL04", "KSL05", "KSL06", "KSL07", "KSL08", "KSL09", "KSL10", "KSL11",
,"KSL12", "KSL13", "KSL14", "KSL15", "KSL16"
```

FROM

"GLT0"

WHERE

"RCLNT" = ? AND "RLDNR" = ? AND "RRCTY" = ? AND "RVERS" = ?

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,78
Maximal CPU Consumption per Hour [%] (26.01.2026 between 12:00 and 13:00)	0,99
Maximal Memory Consumption [%] (28.01.2026 -- 12:48:09)	1,22

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statements (Total Memory)

SAP HANA SQL Statements in HRP -> Top Statements (CPU Peak Hour)

SAP HANA SQL Statements in HRP -> Top Statement (Maximal Memory in Trace)

17.8.3.1 Analysis of Where Clause

Table	Field	Operator
?	RCLNT	=
?	RLDNR	=
?	RRCTY	=
?	RVERS	=

17.8.3.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	156.980.674	148.781.211	163.064.831
PREPARATION	82.262		
LOCK DURATION	0		

17.8.3.3 Memory Consumption

The following table provides an overview of the memory consumption of the analyzed SQL statement as obtained from the monitoring view M_SQL_PLAN_STATISTICS (or – if not yet available – M_SQL_PLAN_CACHE), that is, without taking a



specific time interval into account.

Activity	Average Memory [MB]	Minimal Memory [MB]	Maximal Memory [MB]
EXECUTION_MEMORY_SIZE	45.831,4	45.678,5	46.024,5

17.8.3.3.1 High Memory Consumption

The memory consumption of this statement is relatively high when compared with the minimum "effective allocation limit" of the index server(s) as obtained from M_SERVICE_MEMORY. See the following table for details. Note that the excessive memory consumption of a single statement might impact the stability of the whole SAP HANA system. See [SAP Note 1999997](#) for details and for an option to restrict the maximum memory allocated by a single statement.

(Minimal) Effective Allocation Limit [GB]	3.699,7
Maximal Statement Size / Effective Allocation Limit [%]	1,2
Average Statement Size / Effective Allocation Limit [%]	1,2

17.8.3.4 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.

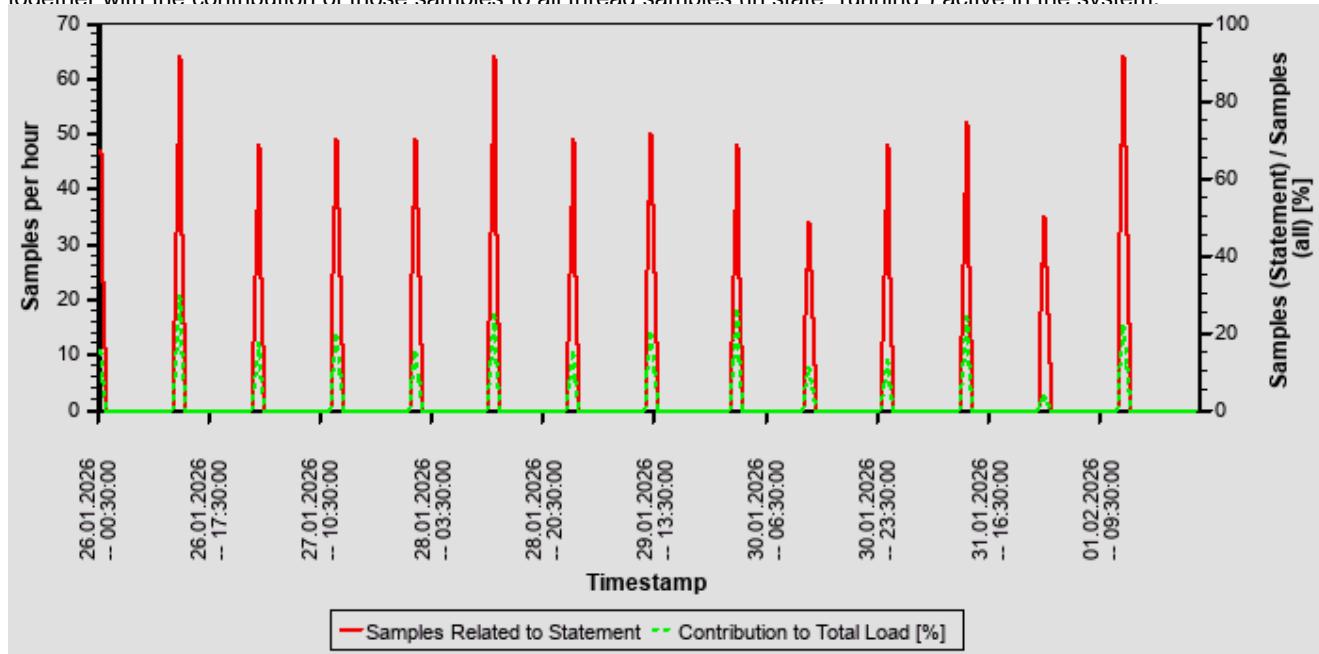


Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
FINSC_LD_CMP	SAPABAP1	COLUMN	Table not partitioned	394	saphrphdb02
FINSC_001A	SAPABAP1	COLUMN	Table not partitioned	253	saphrphdb02
FINSC_LEDGER	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02
FINSC_ACTVE_APPL	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02

17.8.3.7 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_02PJR0PETCJ 8UCN1KL0DZ6R60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_2Z6X74TBFC66B2D9CJ10 XXH55	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3UBJNZIPHGX GCXZ60RV7VQB60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3YPSLHADJZR SBMZ3QA7YB2H3D	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_489KBC8KPT4 TWK5PY5RY7PO95	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_5007ZM0TD8D 8LIROK6RGFYGAW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_55RB1H8Z3NA65YNO1 SBDX7WND	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_6ZPMKSSGE5J18I4IZ5PT 5RWG9	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_8C45JUC7GCD 34ENOH7S9M7FUW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_9917SIASLVFJJ 7TDNCAY64IRT	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_ARZBF8H8822L7ZAIXG4B EK2YW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting

17.8.4 SQL Statement 1fa05502938f0afe1a4a782b6b9bd775

```
SELECT ROUND(SUM(MEMORY_SIZE_IN_TOTAL)/(1024*1024*1024),3) AS "Column memory in use (Loaded) GB",
ROUND(SUM(MEMORY_SIZE_IN_DELTA)/(1024*1024*1024),3) AS "Memory Size in delta GB",
ROUND(SUM(MEMORY_SIZE_IN_HISTORY_MAIN + MEMORY_SIZE_IN_HISTORY_DELTA) / (1024*1024*1024),3) AS "Memory size in history GB", ROUND(SUM( CASE WHEN LOADED = '-GDPR-' THEN '-GDPR-' WHEN ESTIMATED_MAX_MEMORY_SIZE_IN_TOTAL - MEMORY_SIZE_IN_TOTAL < 0 THEN '-GDPR-' ELSE ESTIMATED_MAX_MEMORY_SIZE_IN_TOTAL - MEMORY_SIZE_IN_TOTAL END)/(1024*1024*1024),3) AS "Column memory Unloaded GB"
```

FROM

M_CS_TABLES

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,73
Maximal CPU Consumption per Hour [%] (29.01.2026 between 07:00 and 08:00)	0,39

17.8.4.1 Time Consumption

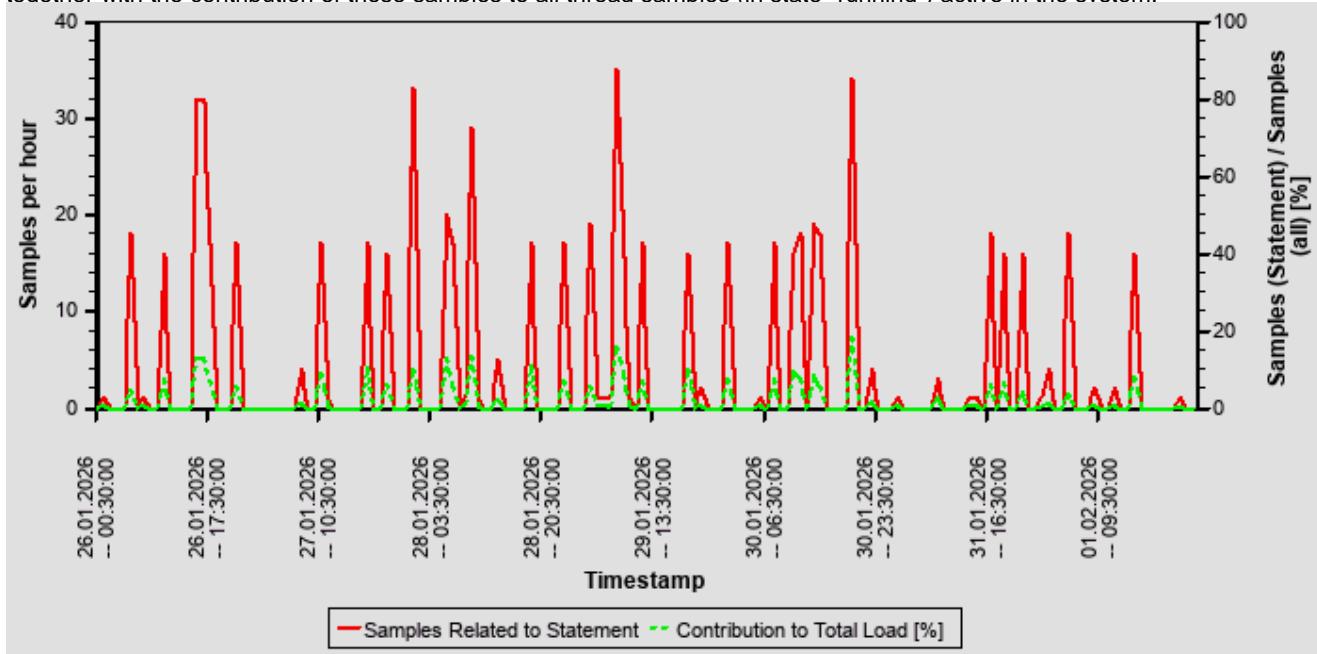
The following table gives an overview of the time consumption of the analyzed SQL statement.



Activity	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	2.302.723	1.958.853	6.300.947
PREPARATION	0		
LOCK DURATION	0		

17.8.4.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.8.4.3 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
P PROCEDURES_	SYS	ROW	Table not partitioned	12.943	saphrphdb02
P_GRANTEDPRIVS_	SYS	ROW	Table not partitioned	3.469	saphrphdb02
P_PRINCIPALS_	SYS	ROW	Table not partitioned	209	saphrphdb02
P_SCHEMAS_	SYS	ROW	Table not partitioned	95	saphrphdb02
P_OBJTYPES_	SYS	ROW	Table not partitioned	37	saphrphdb02

17.8.5 SQL Statement 4b9f72884af3e12dbba6e74eba0846d5

```
/* procedure: "SAPABAP1"."1LT/00001216UPD1" line: 2 col: 904 (at pos 1044) */ INSERT INTO
"SAPABAP1"."1CADMC/00001216" ( "IUUC_SEQUENCE" , "IUUC_TIMESTAMP" , "IUUC_PROCESSED" , "MANDT" ,
"LINE_TYPE" , "VBELN" , "POSNR" , "IUUC_OPERAT_FLAG" ) VALUES (
"SAPABAP1"."SEQ_1CADMC/00001216".NEXTVAL, to_char(CURRENT_UTCTIMESTAMP, '-GDPR-'), 0,
__typed_NString__(\$1, 3), __typed_NString__(\$2, 1), __typed_NString__(\$3, 10), __typed_NString__(\$4, 6), '-GDPR-')
Statement Impact
```

Indicator	Value
Contribution to Total CPU Load [%]	1,34
Contribution to Total Execution Time [%]	2,99
Maximal CPU Consumption per Hour [%] (27.01.2026 between 15:00 and 16:00)	0,10

17.8.5.1 Time Consumption

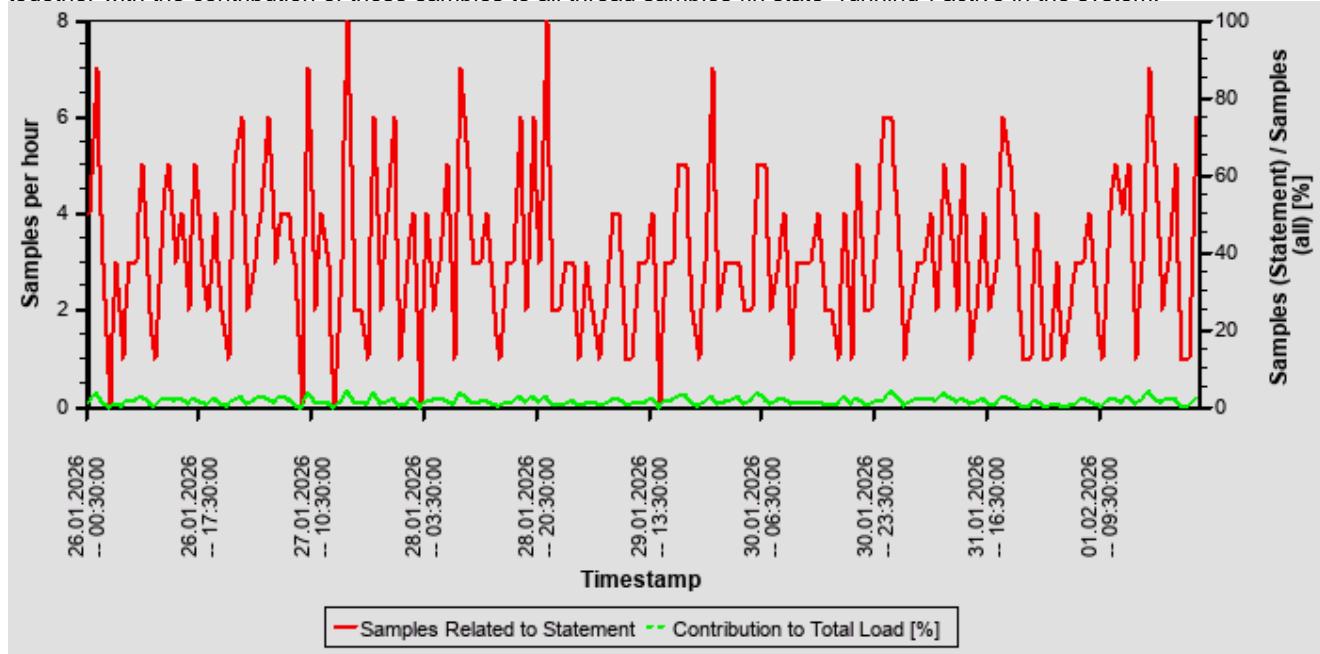


The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	327	278	172.070
PREPARATION	0		
LOCK DURATION	0		

17.8.5.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.8.5.3 Root Statement

The following table shows details on the "ROOT STATEMENT", which is responsible for the observed SQL statement.

ROOT_STATEMENT_HASH	ROOT_STATEMENT_TEXT	Samples
4a4c270ef48e053bc203bf55f9b0e657	UPSERT "YHF_ORDER_TAKE" ("ERDAT", "AUDAT", "VBTYP", "TRVOG", "AUART", "NETWR", "WAERK", "VKORG", "VTWEG", "SP...	529

17.8.5.4 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding
ERP	BSI_HF_ORDER_REFRESH	YHFR_FILL_ORDERTAKE_TABLES	142	30.05.2022	

17.8.5.5 Internal SQL Statement

This SQL statement was executed from an internal database connection.

17.9 Top Statements (CPU Peak Hour)

This section shows the top statements according to the number of observed "threads" ("Number of Samples") in the SERVICE THREAD SAMPLES. A statement might occupy a high number of threads if (a) it has a long execution time, (b) it is executed very often, or (c) it has a highly parallelized execution. In any case, it shows statements with a high resource consumption on the SAP HANA database.

For this section, the hour with the highest number of thread samples in thread state "Running" is determined, that is, the "CPU peak hour". The top statements observed in this hour are listed and analyzed.

Hour of Maximal CPU Consumption

From	To
01.02.2026 --	01.02.2026 -- 01:00:00

See the following table for details of the selection:

Database Start	20.01.2026 -- 13:43:58
Data Collection	02.02.2026 -- 05:20:54
Analysis Type	Analysis of Thread Samples
Data Source	HOST_SERVICE_THREAD_SAMPLES
First Day	26.01.2026
Last Day	01.02.2026

The selected statements - identified by their "Statement Hash" - are listed in the following table. Further details of these statements can be found in the subsections.

Statement Hash	Time / Execution [us]	Records / Execution	Time / Record [us]	Number of Samples in CPU Peak Hour
8dbe670f7abd419f99c18f0b23a2f6b4	251.077,0	0,0	0,0	360
6f6557b376dd9c83df8cc8753200735c	2.442.888,7	1.673,1	1.460,1	51
eb85674bb8f4fc34154206bde0b7ec4a	170.283.099,4	3.873,6	43.959,9	48
a9eea893b480e7fd7d15adedbadc278b	23.405,0	0,0	0,0	42
c4f0c4a244be1f8d7bf043b1ec29e247	157.062.935,7	108.649,9	1.445,6	35

17.9.1 SQL Statement 8dbe670f7abd419f99c18f0b23a2f6b4

```
/* procedure: "SAPABAP1"."CL_FML_BH_AMDP=>DET_ACDOMA_VS_EXTRACT_DIFF" variable: ET_DB_DATA line: 16
col: 5 (at pos 795), procedure: "SAPABAP1"."CL_FML_BH_AMDP=>UPDATE_EXTRACT_ERROR_IND" variable:
LT_KALNR line: 23 col: 5 (at pos 766), procedure:
"SAPABAP1"."CL_FML_BH_AMDP=>UPDATE_EXTRACT_ERROR_IND#stb2#20181127000626" variable:
IT_FINSC_LD_CMP line: 10 col:3 (at pos 275) */ WITH "_SYS_IT_FINSC_LD_CMP_2" AS (select *
FROM"CL_FML_BH_AMDP=>UPDATE_EXTRACT_ERROR_IND=>P00000#tft#20181127000626"),
"_SYS_LT_KALNR_2" AS (SELECT kalnr
FROM
"_SYS_SS2_TMP_TABLE_7886103_LT_HDVIEW_2_16AB3A633F3AF8498A49E9DF2723D419_2"
"LT_HDVIEW") SELECT CAST(N'-GDPR-' AS NVARCHAR(16)) AS tabname, a.rclnt AS mandt, a.rldnr AS rldnr, a.kalnr
AS kalnr, SUM(vmsl) AS ldkum, SUM(hvkwrt) AS hvksal, CASE WHEN Id_cmp.mlrelindh = '-GDPR-' THEN SUM(hsl)
ELSE 0 END AS hsalk3, CASE WHEN Id_cmp.mlrelindk = '-GDPR-' THEN SUM(ksl) ELSE 0 END AS ksalk3, CASE
WHEN Id_cmp.mlrelindo = '-GDPR-' THEN SUM(osl) ELSE 0 END AS osalk3, CASE WHEN Id_cmp.mlrelindv = '-GDPR-' THEN
SUM(vsl) ELSE 0 END AS vsalk3, CASE WHEN Id_cmp.mlrelindb = '-GDPR-' THEN SUM(bsl) ELSE 0 END AS bsalk3,
CASE WHEN Id_cmp.mlrelindc = '-GDPR-' THEN SUM(csl) ELSE 0 END AS csalk3, CASE WHEN
Id_cmp.mlrelindd = '-GDPR-' THEN SUM(dsl) ELSE 0 END AS dsalk3, CASE WHEN Id_cmp.mlrelinde = '-GDPR-' THEN
SUM(esl) ELSE 0 END AS esalk3, CASE WHEN Id_cmp.mlrelindf = '-GDPR-' THEN SUM(fsl) ELSE 0 END AS fsalk3,
CASE WHEN Id_cmp.mlrelindg = '-GDPR-' THEN SUM(gsl) ELSE 0 END AS gsalk3
FROM
"CL_FML_BH_AMDP=>ACDOCA#covw" AS a INNER JOIN "_SYS_IT_FINSC_LD_CMP_2" AS Id_cmp ON Id_cmp.rldnr =
a.rldnr INNER JOIN "_SYS_LT_KALNR_2" AS k ON k.kalnr = a.kalnr LEFT OUTER JOIN
"CL_FML_BH_AMDP=>FAGL_CARRY_FORW#covw" AS bcf ON a.rclnt = bcf.mandt AND a.rbuksr = bcf.rbuksr AND
a.rldnr = bcf.rldnr
```

WHERE

a.rclnt = SESSION_CONTEXT('-GDPR-') AND a.rbuks = __typed_NString__(\$1, 4) AND a.ktosl = '-GDPR-' AND a.rrcty = '-GDPR-' AND (-- "chunk 1: no BCF has been done -> all records there-- " -> evaluation should work (bcf.vtrhj IS NULL AND a.poper <> '-GDPR-')-- "chunk 2: BCF has been done -> records

FROM

year before could be aged / archived-- " -> evaluation for current year should work OR (bcf.vtrhj IS NOT NULL AND ((a.yyear = bcf.vtrhj AND a.poper = '-GDPR-') OR (a.yyear >= bcf.vtrhj

AND a.poper <> '-GDPR-')))

GROUP BY

a.rclnt, a.rldnr, a.kalnr, Id_cmp.mlrelindh, Id_cmp.mlrelindk, Id_cmp.mlrelindo, Id_cmp.mlrelindv, Id_cmp.mlrelindb, Id_cmp.mlrelindc, Id_cmp.mlrelindd, Id_cmp.mlrelinde, Id_cmp.mlrelindf, Id_cmp.mlrelindg UNION ALL SELECT CAST(N'-GDPR-' AS NVARCHAR(16)) AS tablename, e.rclnt AS mandt, e.rldnr AS rldnr, e.kalnr AS kalnr, 0 - SUM(vmsl) AS lbkum, 0 - SUM(hvkwr) AS hvksal, CASE WHEN Id_cmp.mlrelindh = '-GDPR-' THEN 0 - SUM(hsl) ELSE 0 END AS hsalk3, CASE WHEN Id_cmp.mlrelindk = '-GDPR-' THEN 0 - SUM(ksl) ELSE 0 END AS ksalk3, CASE WHEN Id_cmp.mlrelindo = '-GDPR-' THEN 0 - SUM(osl) ELSE 0 END AS osalk3, CASE WHEN Id_cmp.mlrelindv = '-GDPR-' THEN 0 - SUM(vsl) ELSE 0 END AS vsalk3, CASE WHEN Id_cmp.mlrelindb = '-GDPR-' THEN 0 - SUM(bsl) ELSE 0 END AS bsalk3, CASE WHEN Id_cmp.mlrelindc = '-GDPR-' THEN 0 - SUM(csl) ELSE 0 END AS csalk3, CASE WHEN Id_cmp.mlrelindd = '-GDPR-' THEN 0 - SUM(dsl) ELSE 0 END AS dsalk3, CASE WHEN Id_cmp.mlrelinde = '-GDPR-' THEN 0 - SUM(esl) ELSE 0 END AS esalk3, CASE WHEN Id_cmp.mlrelindf = '-GDPR-' THEN 0 - SUM(fsl) ELSE 0 END AS fsalk3, CASE WHEN Id_cmp.mlrelindg = '-GDPR-' THEN 0 - SUM(gsl) ELSE 0 END AS gsalk3

FROM

"CL_FML_BH_AMDP=>ACDOCA_M_EXTRACT#covw" AS e INNER JOIN "_SYS_IT_FINSC_LD_CMP_2" AS Id_cmp ON Id_cmp.rldn

r = e.rldnr INNER JOIN "_SYS_LT_KALNR_2" AS k ON k.kalnr = e.kalnr

WHERE

rclnt = SESSION_CONTEXT('-GDPR-') AND rbuks = __typed_NString__(\$1, 4) AND fiscyearper = '
-GDPR-'

GROUP BY

e.rclnt, e.rldnr, e.kalnr, Id_cmp.mlrelindh, Id_cmp.mlrelindk, Id_cmp.mlrelindo, Id_cmp.mlrelindv, Id_cmp.mlrelindb, Id_cmp.mlrelindc, Id_cmp.mlrelindd, I

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,91
Contribution to Total Execution Time [%]	0,74
Maximal CPU Consumption per Hour [%] (01.02.2026 between 00:00 and 01:00)	4,85
Maximal Memory Consumption [%]	0,11

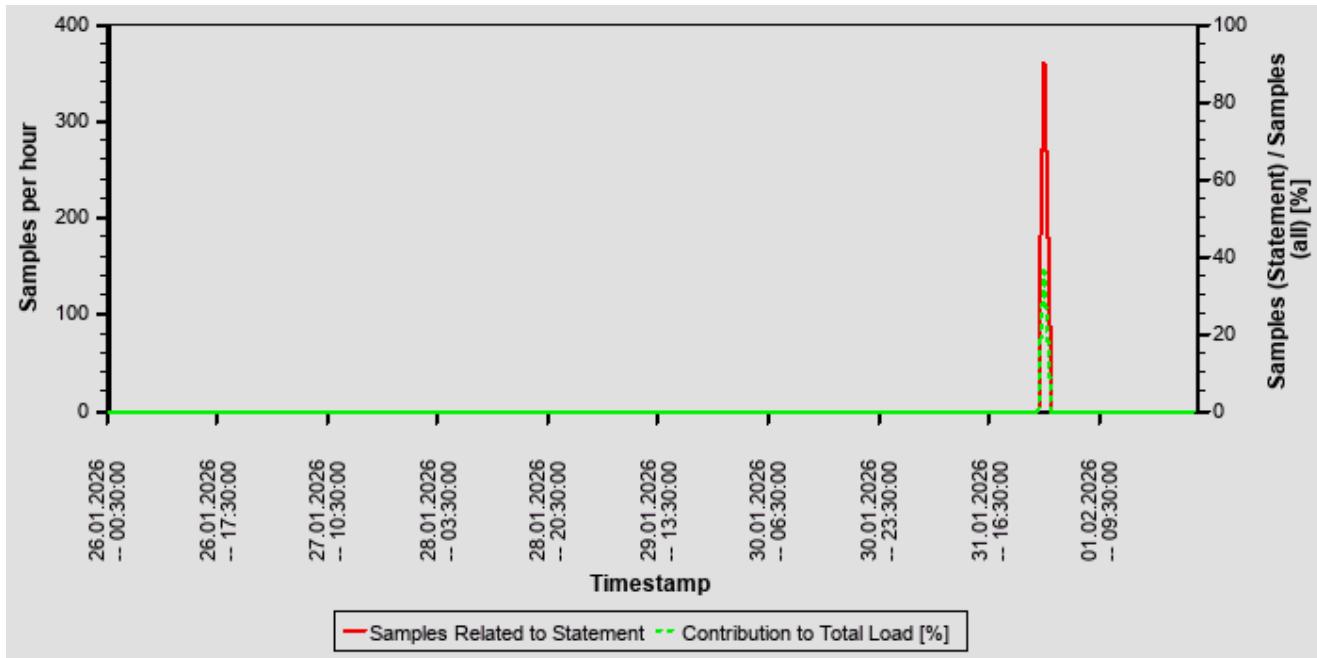
17.9.1.1 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	3.664	250.933	5.015	5.419.772
PREPARATION	2	144		
LOCK DURATION	0	0		

17.9.1.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.9.1.3 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,55	strong correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,09	no significant correlation

17.9.1.4 Root Statement

The following table shows details on the "ROOT STATEMENT", which is responsible for the observed SQL statement.

ROOT_STATEMENT_HASH	ROOT_STATEMENT_TEXT	Samples
c8163019d182ed5b82702bee1b5a3b38	CALL "CL_FML_BH_AMDP=>UPDATE_EXT RACT_ERROR_IND#stb2#2018112 7000626" (?, ?, ?)	545

17.9.1.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	CL_FML_BH_AMDP===== =====CM004	1	27.11.2018	✓	CO-PC-ACT	Actual Costing/Material Ledger

17.9.1.6 Internal SQL Statement

This SQL statement was executed from an internal database connection.

17.9.2 SQL Statement 6f6557b376dd9c83df8cc8753200735c



```

DELETE
FROM "MATDOC_EXTRACT"
WHERE
"MANDT" = ? AND "KEY1" = ? AND "KEY2" = ? AND "KEY3" = ? AND "KEY4" = ? AND "KEY5" = ? AND "KEY6" = ?
Statement Impact

```

Indicator	Value
Contribution to Total CPU Load [%]	0,15
Contribution to Total Execution Time [%]	0,84
Maximal CPU Consumption per Hour [%] (01.02.2026 between 00:00 and 01:00)	0,69

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement
SAP HANA SQL Statements in HRP -> Top MATDOC Statements (Elapsed Time)
SAP HANA SQL Statements in HRP -> Statements on Top Scanned Table

17.9.2.1 Analysis of Where Clause

Table	Field	Operator	Supported by Single Column Index	Compression	Distinct Values	SCANNED RECORD COUNT	INDEX LOOKUP COUNT
MATDOC_E_XTRACT	KEY1	=			72	0	0
MATDOC_E_XTRACT	KEY2	=			167	0	0
MATDOC_E_XTRACT	KEY3	=	✓	INDIRECT	4.489.334	0	8.548.386
MATDOC_E_XTRACT	KEY4	=			256	507.882.789. 787.968	0
MATDOC_E_XTRACT	KEY5	=			256	0	0
MATDOC_E_XTRACT	KEY6	=			256	0	0
MATDOC_E_XTRACT	MANDT	=			1	0	0

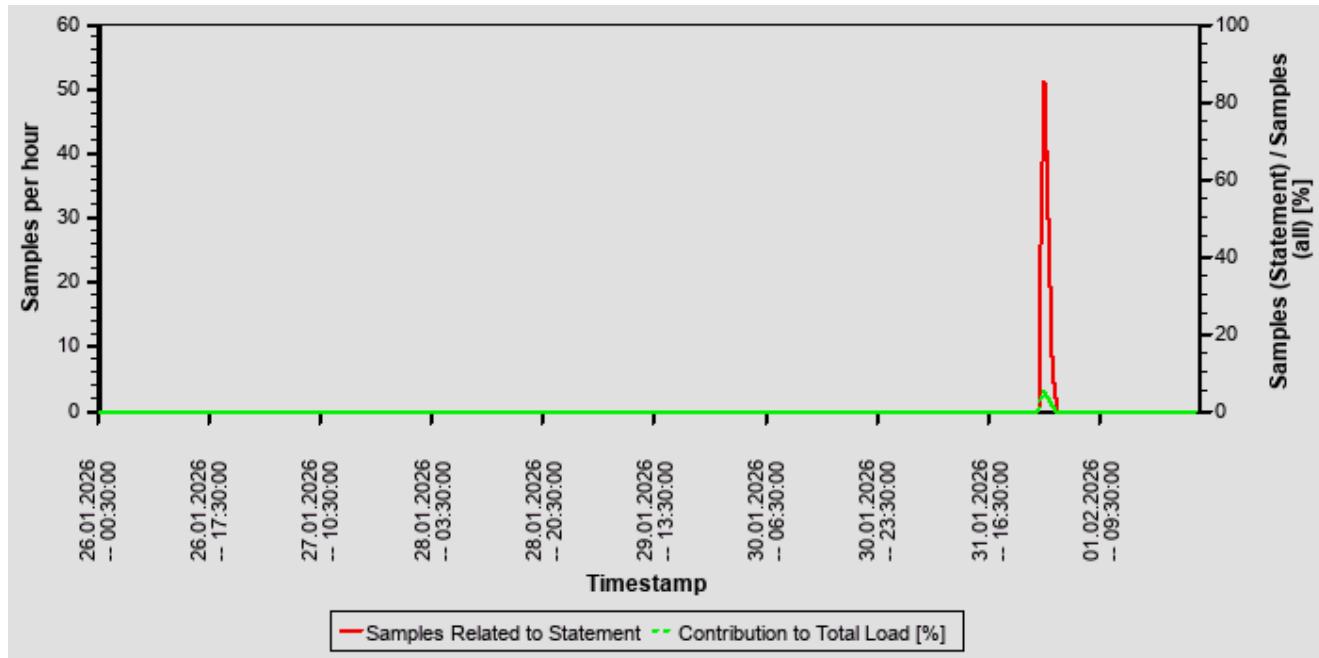
17.9.2.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	4.160	2.442.870	2.622	109.407.686
PREPARATION	0	19		
LOCK DURATION	0	0		

17.9.2.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.9.2.4 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,56	strong correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,11	weak correlation

17.9.2.5 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
MATDOC_EXTRACT	SAPABAP1	COLUMN	Table not partitioned	175.570.123	saphrphdb02

17.9.2.6 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BSI_FIN_MM PER_CLOSE	CL_NSMD_MTDCSA_P RECOMP=====CM 002	283	31.01.2018	✓	MM-IM-GF	Basic Functions

17.9.3 SQL Statement eb85674bb8f4fc34154206bde0b7ec4a

SELECT

*

FROM



"FAGLFLEXT"

WHERE

"RCLNT" = ? AND "TIMESTAMP" >= ? AND "TIMESTAMP" <= ?

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,50
Maximal CPU Consumption per Hour [%] (28.01.2026 between 06:00 and 07:00)	0,48
Maximal Memory Consumption [%] (01.02.2026 -- 00:58:08)	1,40

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement

SAP HANA SQL Statements in HRP -> Top Statement (Maximal Memory in Trace)

17.9.3.1 Analysis of Where Clause

Table	Field	Operator
?	RCLNT	=
?	TIMESTAMP	<=
?	TIMESTAMP	>=

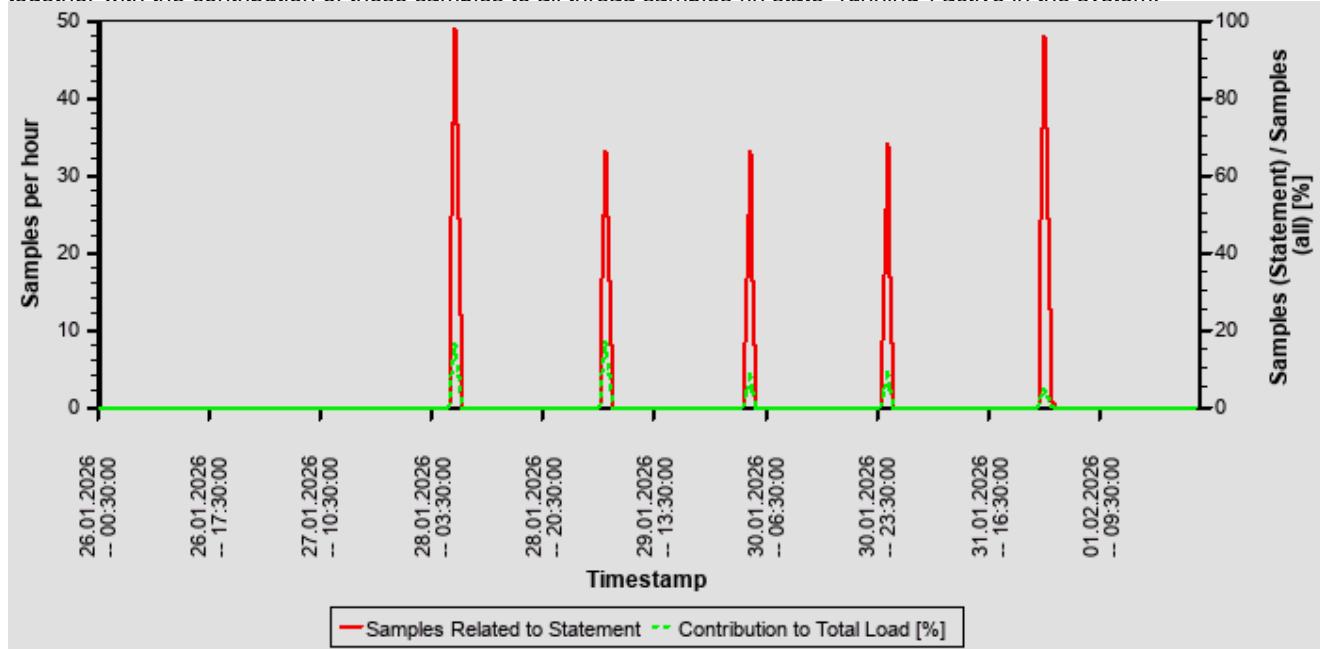
17.9.3.2 Time Consumption

The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	849	169.813.281	167.092.428	175.517.245
PREPARATION	2	469.819		
LOCK DURATION	0	0		

17.9.3.3 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.9.3.4 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,37	medium correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,10	no significant correlation

17.9.3.5 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FINSC_LD_CMP	SAPABAP1	COLUMN	Table not partitioned	394	saphrphdb02
FINSC_LEDGER_REP	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02
FAGLFLEXT_BCK	SAPABAP1	COLUMN	Table not partitioned	0	saphrphdb02

17.9.3.6 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding
ERP	/SDF/MON_SCHEDULER	/SAPDS/LRS_BASISU20	333	08.06.2015	✓
ERP	<AUTO ABAP PROCESSING>	/SAPDS/LRS_BASISU20	333	08.06.2015	✓
ERP	<BGRFC WATCHDOG>	/SAPDS/LRS_BASISU20	333	08.06.2015	✓
ERP	EFWK RESOURCE MANAGER	/SAPDS/LRS_BASISU20	333	08.06.2015	✓

17.9.4 SQL Statement a9eea893b480e7fd7d15adedbadc278b

```
/* procedure: "SAPABAP1"."CL_FML_BH_AMDP=>UPDATE_EXTRACT_ERROR_IND" variable: LT_HDVIEW line: 11 col: 5 (at pos 375) */SELECT hd.kalnr, hd.aexterrind
```

FROM

```
"CL_FML_BH_AMDP=>CKMLHD#covw" AS hd INNER JOIN "CL_FML_BH_AMDP=>T001K#covw" AS t001k ON t001k.mandt = hd.
```

```
mandt AND t001k.bwkey = hd.bwkey
```

WHERE

```
hd.mandt = SESSION_CONTEXT( '-GDPR-' ) AND hd.kalnr BETWEEN __typed_NString__( $1, 12 ) AND __typed_NString__( $2, 12 ) AND t001k.bukrs = __typed_NString__( $3, 4 )
```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	0,11
Maximal CPU Consumption per Hour [%] (01.02.2026 between 00:00 and 01:00)	0,57

17.9.4.1 Time Consumption

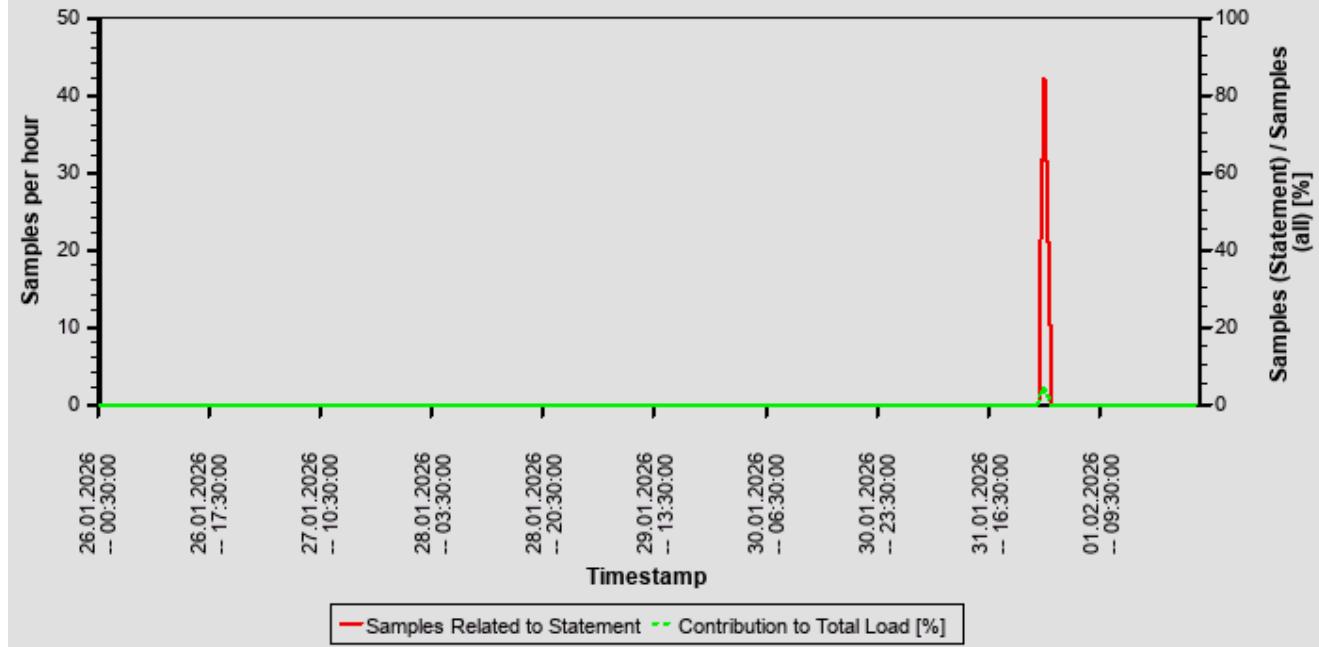


The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	342	23.404	839	177.175
PREPARATION	0	1		
LOCK DURATION	0	0		

17.9.4.2 Statement History (Thread Sample 'Running')

The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.9.4.3 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates strongly with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,55	strong correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,09	no significant correlation

17.9.4.4 Root Statement

The following table shows details on the "ROOT STATEMENT", which is responsible for the observed SQL statement.

ROOT_STATEMENT_HASH	ROOT_STATEMENT_TEXT	Samples
c8163019d182ed5b82702bee1b5a3b38	CALL "CL_FML_BH_AMDP=>UPDATE_EXT RACT_ERROR_IND#stb2#2018112 7000626" (?, ?, ?)	44

17.9.4.5 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	CL_FML_BH_AMDP===== =====CM004	1	27.11.2018	✓	CO-PC-ACT	Actual Costing/Material Ledger

17.9.4.6 Internal SQL Statement

This SQL statement was executed from an internal database connection.

17.9.5 SQL Statement c4f0c4a244be1f8d7bf043b1ec29e247

```

SELECT
"RCLNT" , "RLDNR" , "RRCTY" , "RVERS" , "BUKRS" , "RYEAR" , "RACCT" , "RBUSA" , "RTCUR" , "DRCRK" , "RPMAX"
, "TSLVT" , "TSL01" , "TSL02" , "TSL03" , "TSL04" , "TSL05" , "TSL06" , "TSL07" , "TSL08" , "TSL09" , "TSL10" , "TSL11"
, "TSL12" , "TSL13" , "TSL14" , "TSL15" , "TSL16" , "HSLVT" , "HSL01" , "HSL02" , "HSL03" , "HSL04" , "HSL05" , "HSL06"
, "HSL07" , "HSL08" , "HSL09" , "HSL10" , "HSL11" , "HSL12" , "HSL13" , "HSL14" , "HSL15" , "HSL16" , "CSPRED"
, "KSLVT" , "KSL01" , "KSL02" , "KSL03" , "KSL04" , "KSL05" , "KSL06" , "KSL07" , "KSL08" , "KSL09" , "KSL10" , "KSL11"
, "KSL12" , "KSL13" , "KSL14" , "KSL15" , "KSL16"
FROM
"GLT0"
WHERE
"RCLNT" = ? AND "RLDNR" = ? AND "RRCTY" = ? AND "RVERS" = ?

```

Statement Impact

Indicator	Value
Contribution to Total CPU Load [%]	1,78
Maximal CPU Consumption per Hour [%] (26.01.2026 between 12:00 and 13:00)	0,99
Maximal Memory Consumption [%] (28.01.2026 -- 12:48:09)	1,22

Note: The statement as identified by its statement hash can also be found in other sections of this report:

Other Sections Dealing with this Statement
SAP HANA SQL Statements in HRP -> Top Statements (Total Memory)
SAP HANA SQL Statements in HRP -> Top Statements (Thread Samples)
SAP HANA SQL Statements in HRP -> Top Statement (Maximal Memory in Trace)

17.9.5.1 Analysis of Where Clause

Table	Field	Operator
?	RCLNT	=
?	RLDNR	=
?	RRCTY	=
?	RVERS	=

17.9.5.2 Time Consumption

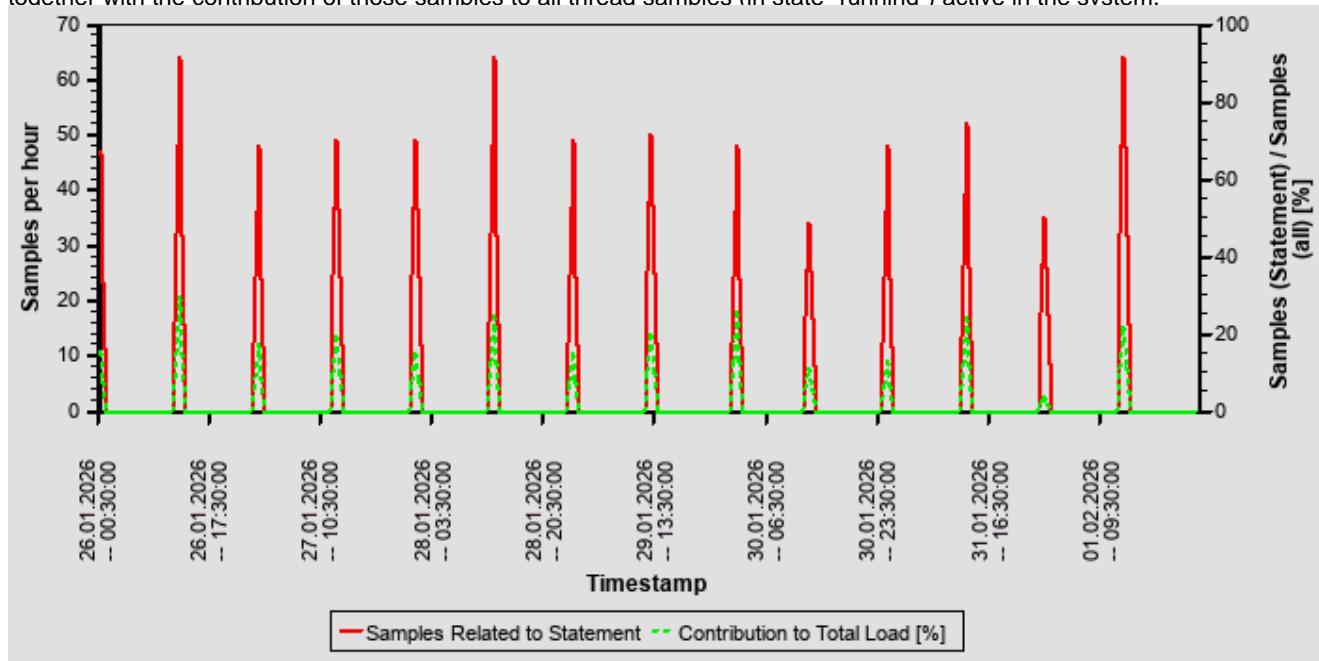
The following table gives an overview of the time consumption of the analyzed SQL statement.

Activity	Total Time [s]	Average Time [us]	Minimal Time [us]	Maximal Time [us]
TOTAL EXECUTION	2.198	156.980.674	148.781.211	163.064.831
PREPARATION	1	82.262		
LOCK DURATION	0	0		

17.9.5.3 Statement History (Thread Sample 'Running')



The following graph shows the number of observed thread samples (in state "running") related to this SQL statement together with the contribution of those samples to all thread samples (in state "running") active in the system.



17.9.5.4 Correlation with Index Server Resource Consumption

The distribution of thread samples with the status "Running" correlates with the overall CPU or memory consumption of the system. Such a correlation indicates that this statement might be responsible for peaks in the memory or CPU consumption.

Distribution	Correlation Coefficient	Comment
CPU consumption index server(s) - Threads (running) from this SQL statement	0,30	weak correlation
Memory consumption index server(s) - Threads (running) from this SQL Statement	0,16	weak correlation

17.9.5.5 Tables

The following lists the tables involved in the SQL statement (maximum of 5)

Table Name	Schema Name	Table Type	Partition Type	Number of Records	Host
ACDOCA	SAPABAP1	COLUMN	HASH	1.531.995.558	saphrphdb02
FINSC_LD_CMP	SAPABAP1	COLUMN	Table not partitioned	394	saphrphdb02
FINSC_001A	SAPABAP1	COLUMN	Table not partitioned	253	saphrphdb02
FINSC_LEDGER	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02
FINSC_ACTVE_APPL	SAPABAP1	COLUMN	Table not partitioned	3	saphrphdb02

17.9.5.6 Origin of SQL Statement

The following table shows details of the applications responsible for the statement. This information is based on the information provided by SAP HANA in the "application source" connected to the statement in the "thread samples" or the list of "prepared" or "active" statements, and is not necessarily complete.

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_02PJR0PETCJ 8UCN1KL0DZ6R60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting

SID	Transaction / Jobname	Report	Line	Last Changed on:	SAP Coding	Application Component	Description
ERP	BIREQU_2Z6X74TBFC66B2D9CJ10 XXH55	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3UBJNZIPHGX GCXZ60RV7VQB60	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_3YPSLHADJZR SBMZ3QA7YB2H3D	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_489KBC8KPT4 TWK5PY5RY7PO95	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_5007ZM0TD8D 8LIROK6RGFYGAW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_55RB1H8Z3NA65YNO1 SBDX7WND	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_6ZPMKSSGE5J18I4IZ5PT 5RWG9	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_8C45JUC7GCD 34ENOH7S9M7FUW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_9917SIASLVFJJ 7TDNCAY64RT	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting
ERP	BIREQU_ARZBF8H8822L7ZAIXG4B EK2YW	LFBIWU03	155	08.09.2011	✓	FI	Financial Accounting

18 SAP NetWeaver Gateway



The gateway configuration and administration of your SAP S/4HANA system ERP have been analyzed and areas that require your attention have been highlighted. To ensure system stability, you should implement the recommendations in the following section.

Rating	Check
✓	MetaData Cache Activation
✓	Logging Configuration
✓	Gateway Error Logs
⚠	Important Periodic Jobs

18.1 Gateway Configuration

18.1.1 MetaData Cache Activation

Cache	Activated
Metadata Cache	Yes

The metadata cache is activated in your system as recommended.

18.1.2 Logging Configuration

Logging Use Case	Log Level	Recommended Log Level
Regular processing	Error, Security, Warning	Error, Security, Warning

The gateway logging configuration is set correctly on your system.

18.2 Gateway Administration

18.2.1 Important Periodic Jobs

The jobs based on the reports listed in the table below are important for the smooth operation of your system.

Report Name	Scheduled Periodically?	Scheduled Frequency	Recommended Frequency	Rating	Further Information
/IWBEPR_CLEAN_UP_QRL	X	Daily	Daily	✓	LINK
/IWBEPSUTIL_CLEANUP	X	Daily	Daily	✓	LINK
/IWFNDR_METINGAGGREGATE	X	Daily	Daily	✓	LINK
/IWFNDR_METEERING_DELETE	X	Daily	Daily	✓	LINK
/IWFNDR_SM_CLEANUP	X	Daily	Daily	✓	LINK
/UI5UPDODATA_METADATA_CACHE		-	2 days*	⚠	LINK

*Schedule these jobs as indicated, or more often in periods of frequent imports, depending on your use case. Take observed job duration for your system into account when tuning the schedule.

For your S/4HANA release, a list of all jobs that are delivered as job definitions by the Technical Job Repository is provided in SAP Note [2849402](#).

Recommendation : See the recommended schedule for the important periodic jobs listed in the table above. One or more periodic jobs important for the smooth operation of your system are not scheduled to run regularly as recommended.

19 Cross Application Business Process Analysis

This section provides insights into cross-application data in the areas of jobs, interfaces, and data consistency.

The data is collected in the cross-application business process analysis (BPA) and the data collection findings are displayed in the EWA if it is configured to include BPA data. Further details can be found in the cross-application BPA.

With Business Process Monitoring in SAP Solution Manager, you can continuously analyze the key figures displayed below in addition to approximately 800 out-of-the-box key figures.

Disclaimer

Bear in mind that all assumptions and ratings in this presentation are based on our general experience with other customers and that the findings are not necessarily business-critical in your particular case.

Rating	Area	Key Figure	Finding
✓	Jobs	Canceled background jobs	49 of jobs have been canceled on the peak day of the analyzed week.
◆	Interfaces	IDoc throughput (Inbound)	47626 of all inbound IDocs have been successfully processed in the analyzed week.
✗	Interfaces	Erroneous IDocs (Inbound)	150 erroneous inbound IDocs were identified for the analyzed week.
✗	Interfaces	IDoc backlog (Inbound)	18890 backlog inbound IDocs have been identified in the analyzed week.
◆	Interfaces	IDoc throughput (Outbound)	39659 of all outbound IDocs have been successfully processed in the analyzed week.
✗	Interfaces	Erroneous IDocs (Outbound)	412 erroneous outbound IDocs were identified for the analyzed week.
✗	Interfaces	IDoc backlog (Outbound)	412 backlog outbound IDocs have been identified in the analyzed week.
✓	Interfaces	Erroneous qRFC (Inbound)	0 qRFC inbound errors occurred during the analyzed week.
✓	Interfaces	Backlog qRFC (Inbound)	0 inbound qRFC were in backlog in the analyzed week.
✓	Interfaces	Erroneous qRFC (Outbound)	0 qRFC outbound errors occurred during the analyzed week.
✓	Interfaces	Backlog qRFC (Outbound)	0 outbound qRFC were in backlog in the analyzed week.
⚠	Interfaces	Erroneous tRFC (Outbound)	6 tRFC errors occurred during the analyzed week.
⚠	Interfaces	Backlog tRFC (Outbound)	6 tRFC were in backlog in the analyzed week.
✗	Interfaces	Erroneous bgRFC (Inbound)	1182 bgRFC inbound errors occurred during the analyzed week.
✗	Interfaces	Backlog bgRFC (Inbound)	842 inbound bgRFC were in backlog in the analyzed week.
✓	Interfaces	Erroneous bgRFC (Outbound)	0 bgRFC outbound errors occurred during the analyzed week.
✓	Interfaces	Backlog bgRFC (Outbound)	0 outbound bgRFC were in backlog in the analyzed week.
✓	Interfaces	Workflows in error	0 errors in workflows have been identified in the analyzed week.
◆	Interfaces	Throughput batch input sessions	0 throughput batch input sessions have been identified in the analyzed week.
✗	Interfaces	Batch input sessions with errors	2622 erroneous batch input sessions have been identified in the analyzed week.
✗	Interfaces	Batch input sessions in backlog	322 batch input sessions in backlog have been identified in the analyzed week.
✗	Interfaces	Erroneous PI messages	36 erroneous PI messages have been identified in the analyzed week.

Rating	Area	Key Figure	Finding
☒	Interfaces	PI messages in backlog	1004 PI messages in backlog have been identified in the analyzed week.
✓	Interfaces	Canceled PI messages messages	0 canceled PI messages have been identified in the analyzed week.
✓	Data Consistency	Errors in update task	0 errors in update tasks occurred during the analyzed week.
⚠	Data Consistency	Consistency check scheduling verification	Not all variants for all recommended Data Consistency reports have been executed

The displayed measurements relate to the findings in the cross-application business process analysis (BPA). For more information, see the results of the BPA. For more information about the BPA, check the following link:

[SAP CQC BPI.pdf](#)

20 Trend Analysis

This section contains the trend analysis for key performance indicators (KPIs).

Diagrams are built weekly once the EarlyWatch Alert service is activated.

In this section, a "week" is from Monday to Sunday. The date displayed is the Sunday of the week.

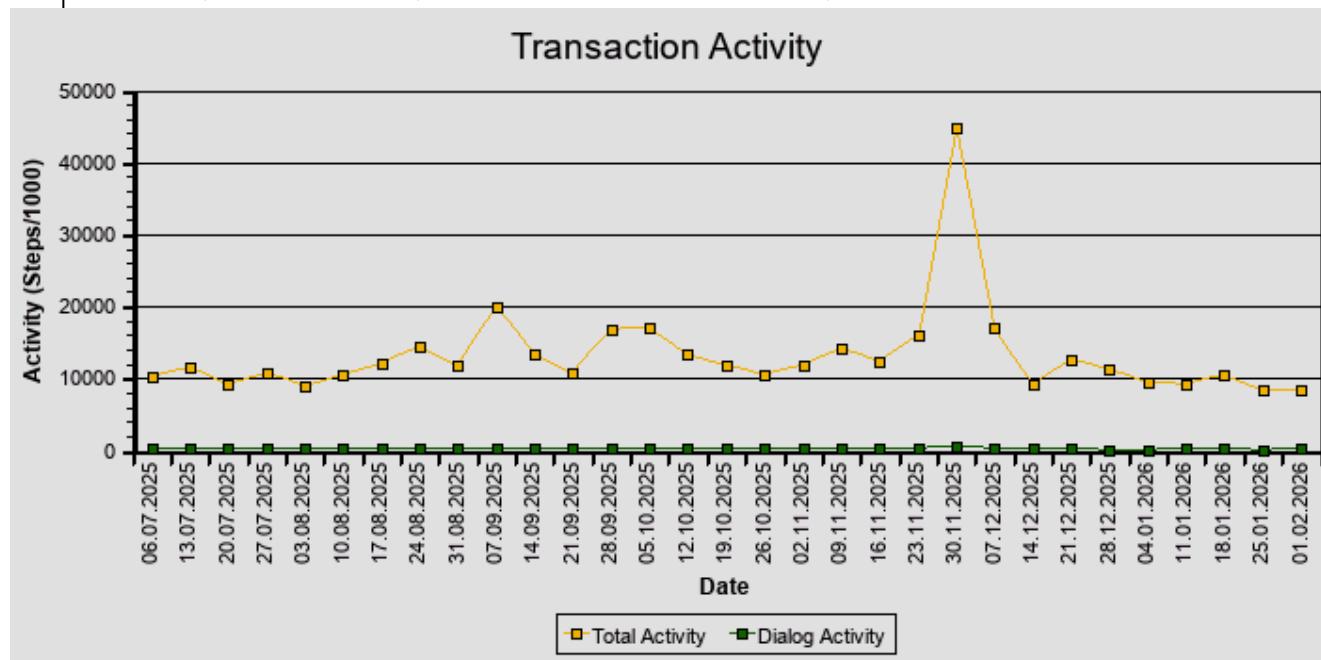
20.1 System Activity

The following diagrams show the system activity over time.

The "Transaction Activity" diagram below depicts transaction activity in the system over time.

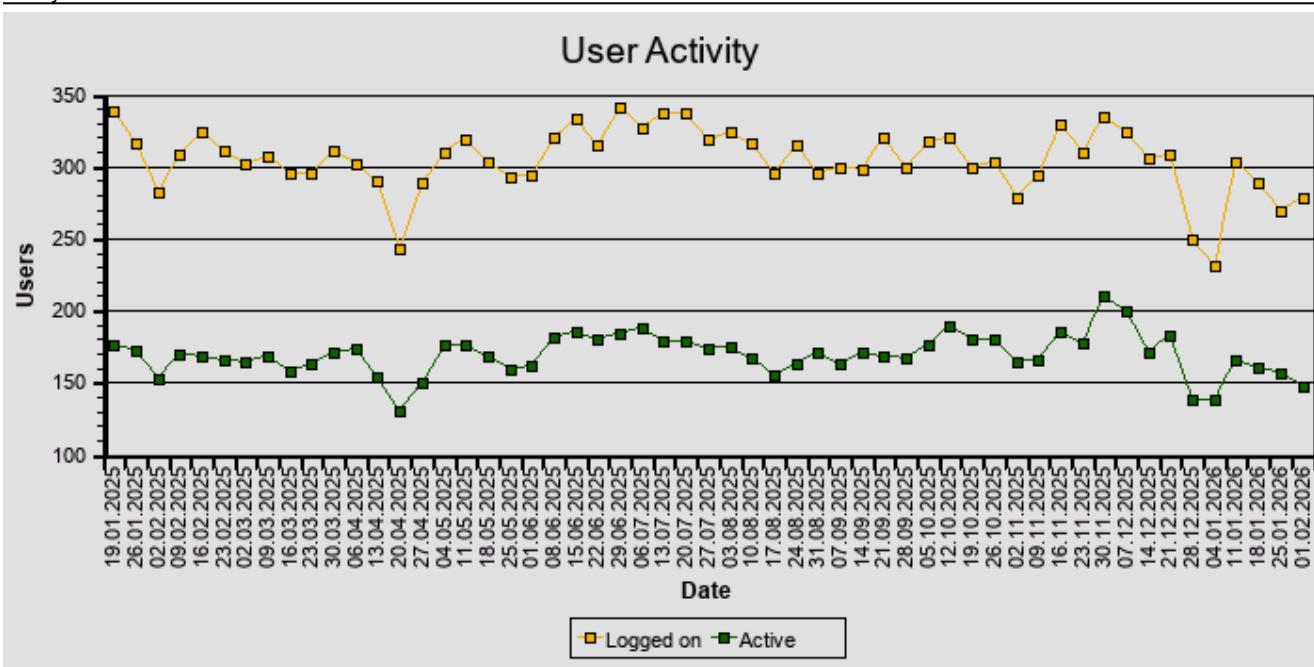
- **Total Activity:** Transaction steps performed each week (in thousands)
- Dialog Activity: Transaction steps performed in dialog task each week (in thousands)
- Peak Activity: Transaction steps (in thousands) during the peak hour; this peak hour is calculated as the hour with the maximum dialog activity in the ST03 time profile divided by 5 working days per week.

(Peak Activity is absent if "Activity Data" is taken from ST03 data directly).



The "User Activity" diagram below shows the user activity on the system over time.

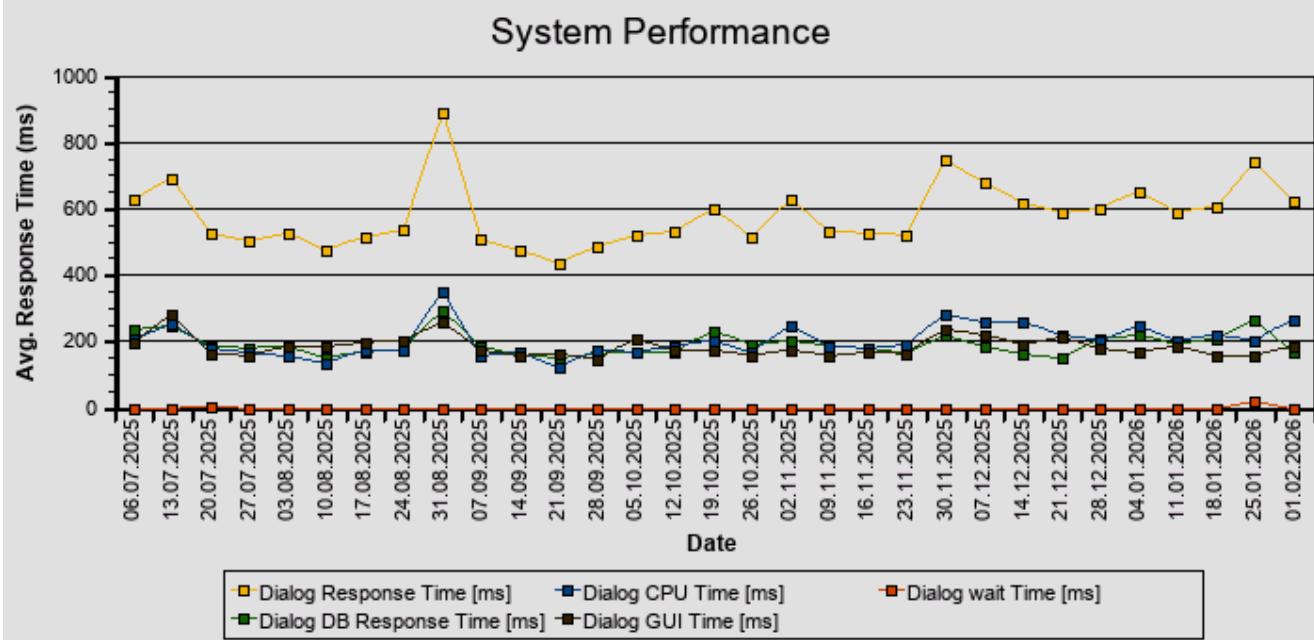
- **Total Users:** Total users that logged on in one week.
- Active Users: Users who performed more than 400 transaction steps in one week.



20.2 Response Times

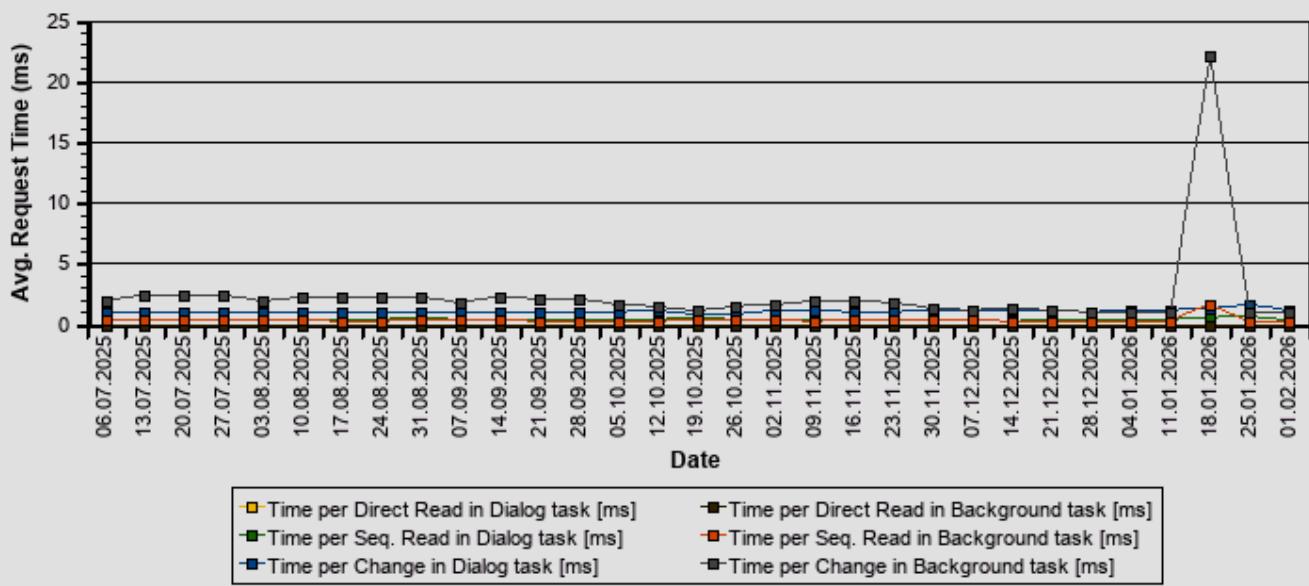
The following diagrams show how the response time varies over time.

The "System Performance" diagram below shows the average response time in dialog tasks for the previous week.

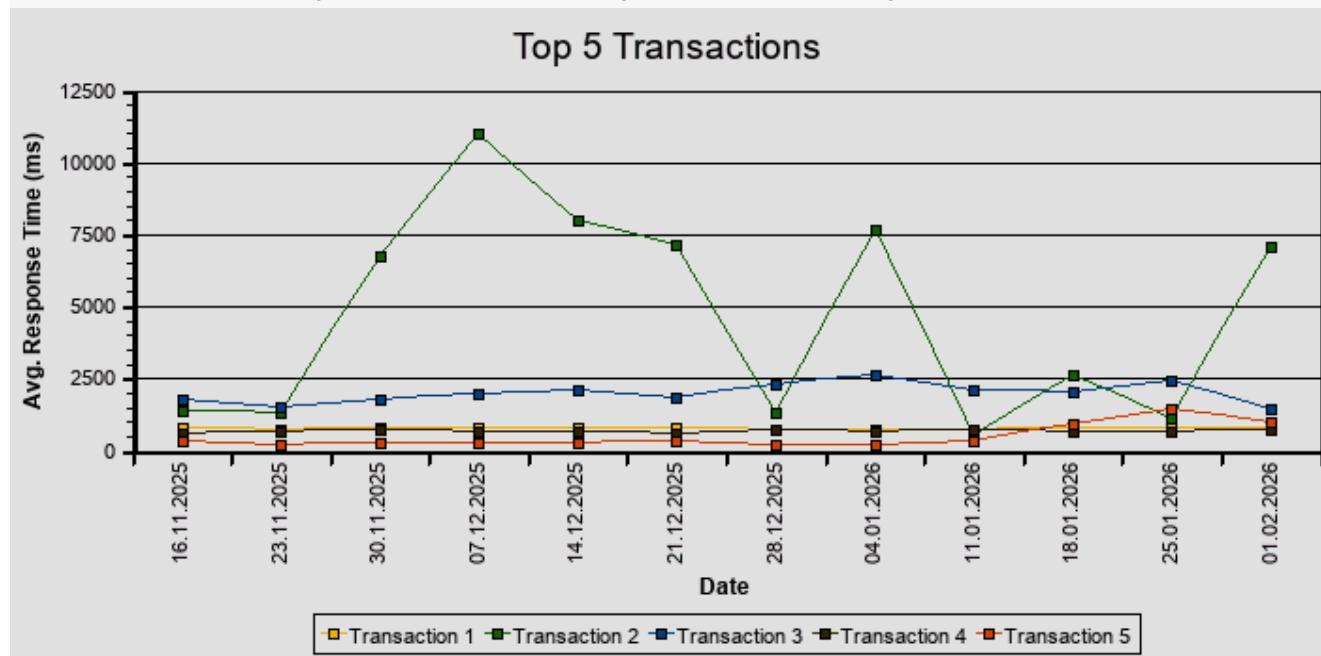


The "Database Performance" diagram below shows the average DB response time in dialog tasks.

Database Performance



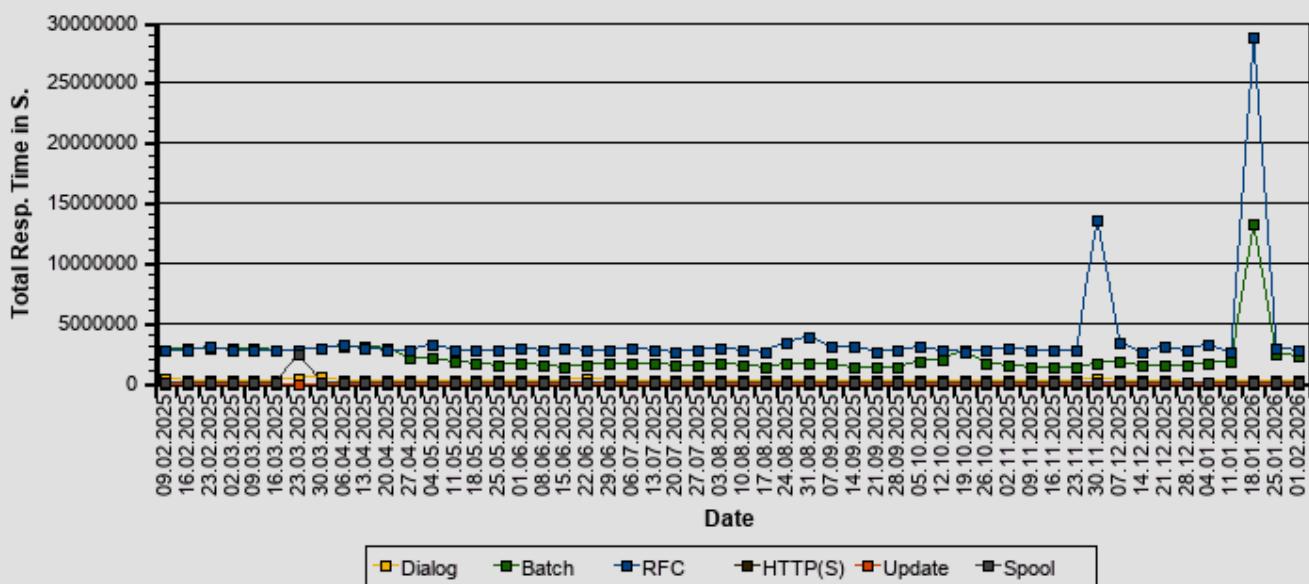
The "Top 5 transactions" diagram below shows the average response time in dialog tasks for the top 5 transactions.



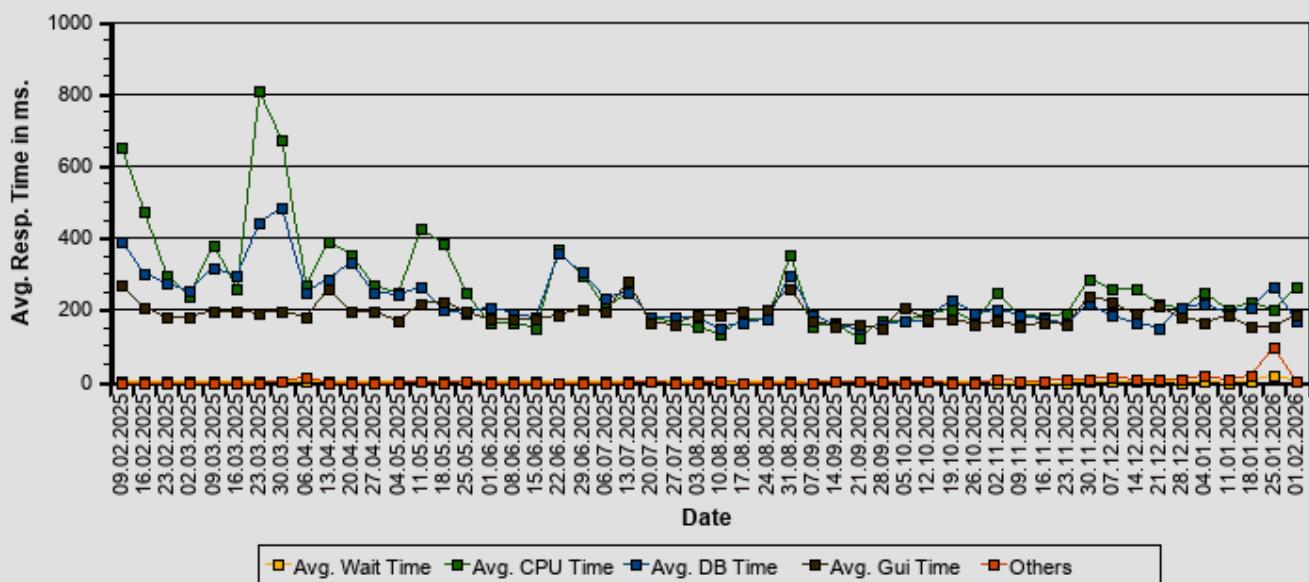
The "Transaction Code" table below shows the load percentage caused by the top 5 transactions.

No	Transaction Code	Load (%)
Transaction 1	YHUPAST	23,1
Transaction 2	SE16N	14,7
Transaction 3	SQ01	10,4
Transaction 4	LTRMS	6,8
Transaction 5	SESSION_MANAGER	4,4

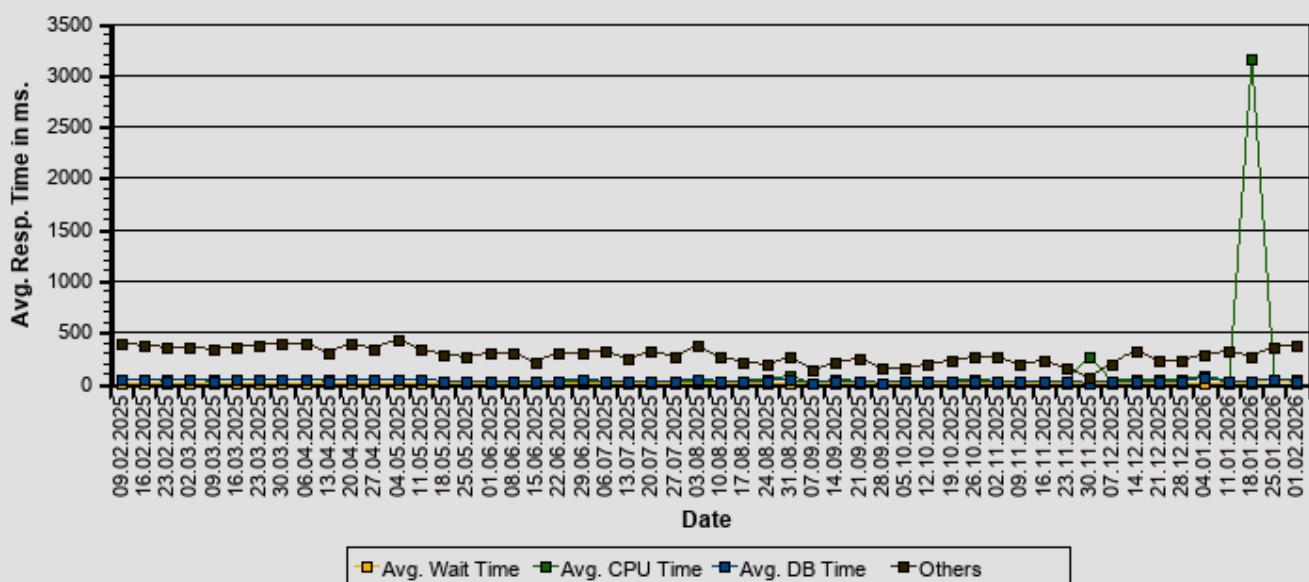
Workload Profile of all Task Types



Dialog

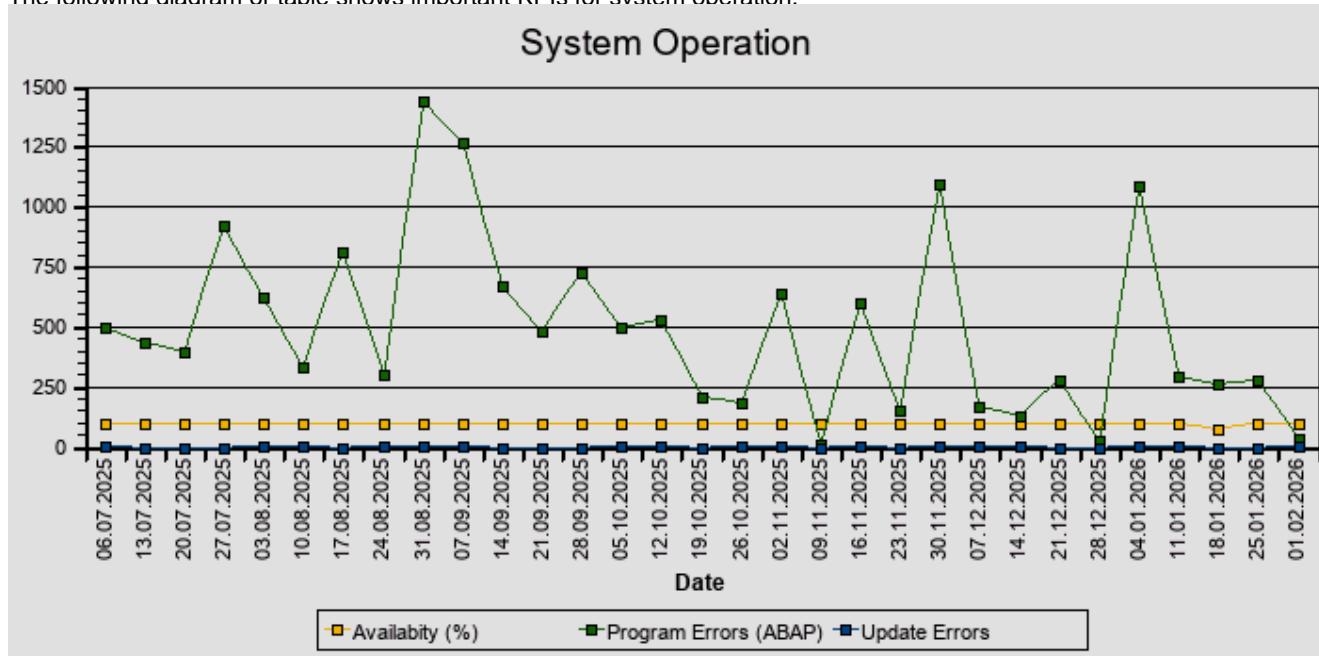


RFC



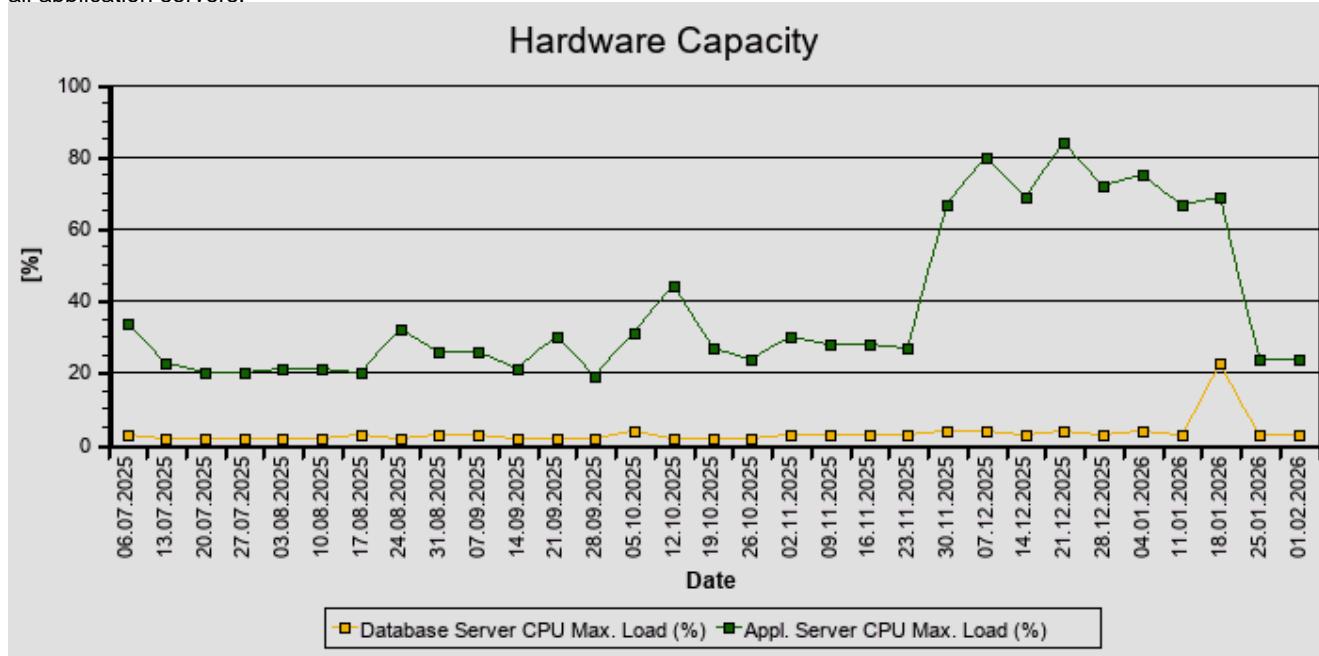
20.3 System Operation

The following diagram or table shows important KPIs for system operation.



20.4 Hardware Capacity

The following diagram or table shows the maximum CPU load from the database server and the highest CPU load among all application servers.



Report time frame: Service data was collected starting at 02.02.2026 04:34:19. This took 55 minutes.

You can see sample SAP EarlyWatch Alert reports on SAP Support Portal at [SAP EarlyWatch Alert](#) -> Sample Reports.

For general information about SAP EarlyWatch Alert, see [SAP Note 1257308](#).

About System And Solution Manager

System No. Of Target System	800556053
SAP Confidential	Trend Analysis

Solution Manager System	SMP
Solution Manager Version	SOLUTION MANAGER 7.2
Service Tool	720 SP16
Service Content Update On	14.01.2026