

Confidential

SAP System ID	CB2
Product	SAP ERP ENHANCE PACKAGE 6.07
Status	Productive
DB System	MaxDB 7.9.09

Processed on	SAP Solution Manager	SMA		
Release	SOLUTION MANAGER 7.2			
Service Tool	720 SP17			
Service Content	03.05.2021			
Analysis from	03.05.2021		Session No.	100000001669
Until	09.05.2021		Installation No.	0020152371

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# **1 Service Summary**



This EarlyWatch Alert session detected issues that could potentially affect your system. Take corrective action as soon as possible.

#### **Alert Overview**

- Based on the data size and growth rate, problems regarding Data Volume Management are expected.
- We found more than 30 ABAP dumps in your system.
- A high number of users has critical authorizations
- Protection of Passwords in Database Connections
- System-internal communication not protected.
- Based on response times in your ABAP system performance problems may occur.

**Note:** If you send SAP EarlyWatch Alert data to SAP, this report can also be viewed in the SAP ONE Support Launchpad in an interactive SAP Fiori application SAP Note 2520319. Here is the link to the latest reports for this system: SAP EarlyWatch Alert Workspace

Specific links to analytical detail pages in SAP EarlyWatch Alert Workspace are included in the respective sections or in this report.

Based on these findings, it is recommended that you perform the following Guided Self-Services.

Guided Self Service	FAQ SAP Note
Security Optimization Service	1484124
Data Volume Management	1904491

For more information about Guided Self-Services, see SAP Enterprise Support Academy . Academy - Check Overview

Topic Rating	Торіс	Subtopic Rating	Subtopic
	SAP System Configuration		
		×	Database - Maintenance Phases
		•	SAP Kernel Release
	Performance Overview		
			Performance Evaluation
	SAP System Operating		
		<b>v</b>	Availability based on Collector Protocols
			Program Errors (ABAP Dumps)
		✓	Update Errors
		<b>v</b>	Table Reorganization
✓	Hardware Capacity		
<b>E</b>	Database Administration		
		<b>v</b>	Database version
		<b>v</b>	Cache Hit Ratios
		<b>v</b>	Database Growth
			Top growing Tables
		3	Database and Log Backup Frequency
		•	DB error messages
	Security		



EarlyWatch Ale	EarlyWatch Alert		03.05.2021 - 09.05.2021
Topic Rating	Торіс	Subtopic Rating	Subtopic
		<b>v</b>	System Recommendations (ABAP)
		<b>&gt;</b>	Age of Support Packages
		✓	Default Passwords of Standard Users
		<b>~</b>	Control of the Automatic Login User SAP*
			Protection of Passwords in Database Connections
		<b>v</b>	ABAP Password Policy
		<b>&gt;</b>	RFC Gateway Security
		<b>~</b>	Message Server Security
			Users with Critical Authorizations
<b>v</b>	Software Change Management		
		✓	Number of Changes
		<b>v</b>	Emergency Changes
		✓	Failed Changes
Ŧ	Data Volume Management (DVM)		

**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 Solution Manager EarlyWatch Alert service, create a customer message under component SV-SMG-SER-EWA.

**Note:** If you require assistance to resolve concerns about the performance of the system, or if you require a technical analysis of other aspects of your system as highlighted in this report, please contact your customer representative (for example, TQM or ESA). To contact the SAP Enterprise Support advisory team or Customer Interaction Center, please refer to the local contact number specified in SAP Note 560499. For details of how to set the appropriate priority level, see SAP Note 67739.

## **1.1 Performance Indicators for CB2**

Area	Indicators	Value	Trend
System Performance	Active Users (>400 steps)	60	<b>→</b>
	Avg. Availability per Week	100 %	→
	Avg. Response Time in Dialog Task	1476 ms	→
	Max. Dialog Steps per Hour	2174	×
	Avg. Response Time at Peak Dialog Hour	839 ms	<b>1</b>
	Avg. Response Time in RFC Task	732 ms	+
	Max. Number of RFCs per Hour	3772	*
	Avg. RFC Response Time at Peak Hour	388 ms	¥
Hardware Capacity	Max. CPU Utilization on DB Server	75 %	*
	Max. CPU Utilization on Appl. Server	60 %	<b>1</b>
Database Performance	Avg. DB Request Time in Dialog Task	809 ms	×
	Avg. DB Request Time for RFC	95 ms	+
	Avg. DB Request Time in Update Task	81 ms	¥
Database Space Management	DB Size	2844 GB	<b>→</b>
	DB Growth Last Month	72 GB	¥

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



# 2 Landscape

# **2.1 Products and Components in current Landscape**

### Product

System	SAP Product	Product Version
CB2~ABAP	SAP ERP ENHANCE PACKAGE	6.07

#### Main Instances (ABAP or JAVA based)

Related System	Main Instance
CB2~ABAP	SAP ECC Server

### Databases

Related System	Database System	Database Version	DB ID
CB2~ABAP	MaxDB	7.9.09	CB2

## 2.2 Servers in current Landscape

### **SAP Application Servers**

System	Host	Instance Name	Logical Host	ABAP	JAVA
CB2~ABAP	eccprdb	eccprdb_CB2_00	eccprdb	$\checkmark$	
CB2~ABAP	eccprd1	eccprd1_CB2_00	eccprd1	$\checkmark$	
CB2~ABAP	eccprd2	eccprd2_CB2_00	eccprd2	$\checkmark$	

#### **DB Servers**

Related System	Host	Logical Host (SAPDBHOST)
CB2~ABAP	eccprdb	eccprdb

# 2.3 Hardware Configuration

#### **Host Overview**

	Hardware Manufact urer	Model	СРИ Туре	CPU MHz	Virtualiza tion	Operating System	CPUs		Memory in MB
eccprd1	IBM	8286-42A	POWER7	3530		Red Hat Enterprise Linux 6 on Power	4		60158
eccprd2	IBM	8286-42A	POWER7	3530		Red Hat Enterprise Linux 6 on Power	4		60158
eccprdb	IBM	8286-42A	POWER7	3530		Red Hat Enterprise Linux 6 on Power	4	1	60158



# **3 Service Data Quality and Service Readiness**

Some service data is missing for this report and not all checks could be performed. This does not impact the report rating.

The SAP ERP ENHANCE PACKAGE system CB2 is not fully prepared for delivery of future remote services .

Rating	Check Performed
<b>v</b>	Sending EarlyWatch Alert of CB2 to SAP Backbone
	Configuring CB2 for SAP Note Assistant
	Service Data Quality
<b>v</b>	Service Preparation of CB2

# 3.1 Sending EarlyWatch Alert of CB2 to SAP Backbone

System CB2 is prepared for SAP Support Backbone update
sending EWA data on HTTPS through Solution Manager 7.2 SMA

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 CB2:

### Latest Service Data for System CB2 Sent to SAP

Date (collect ed)	System	Sends EWA?	Kernel	Kernel	ST-PI	ST-PI	Destination	User		Date (last sent)	Dest. Functio nal?
10.05.2 021	Solution Manage r 7.2 SMA	yes	753_RE L 500	4	740 11	~	HTTPS -> SAP	S-user		03.05.2 021	8
14.05.2 021	EHP7 FOR SAP ERP 6.0 CB2	yes	753 602	~	740 14	~	SAP-S UPPOR T_POR TAL HTTPS -> SAP	S-user	>		

## 3.1.1 Configuring CB2 for SAP Note Assistant

#### Configuration and Usage of Digitally Signed SAP Notes

Туре	Finding	Further Information
		Guided Answer 'Options for Downloading Digitally Signed SAP Notes'

## **3.2 Service Data Quality**

For this service, only data of minor importance is missing. This section provides a comprehensive overview how the content of the report is affected.

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.

#### **Explanation for 'Priority' Column In Tables Below**

Prio.	Explanation: Impact of Missing or Erroneous Data
	Some important check could not be processed. The report can be rated green nevertheless.

## 3.2.1 Quality of Data in Service Data Control Center (SDCC)

#### Quality Of Service Data In ST-A/PI

Prio.	Report Area affected	Details and Related ST-A/PI Module	SAP Note
	Financial Data Quality of ABAP System CB2	was not executed completely.ST-A/PI function: FDQ_RECON_HDR in project FDQ used in section '	2755360
	Financial Data Quality of ABAP System CB2	Financial Data Quality Errors occurred during data collection. Please check the data in the SDCCN download and run the batch job from the note.ST-A/PI function: OLD_OPEN_ITEMS_CUST, OLD_OPEN_ITEMS_FIGL and QUICK_XOPVW2 in project FDQ used in section ' Financial Data Quality	2992444

## **3.3 Service Preparation of CB2**

Rating	Check Performed
<b>v</b>	Service Preparation Check (RTCCTOOL)
<b>v</b>	Service Data Control Center of CB2
<b>~</b>	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 1172939.



# **4 Software Configuration for CB2**

We have listed recommendations concerning the current software configuration on your system.

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
EHP7 FOR SAP ERP 6.0	31.12.2025	<b>V</b>
SAP NetWeaver Version	End of Mainstream Maintenance	Status
SAP NETWEAVER 7.4	31.12.2027	<b>v</b>

In February 2020, SAP announced a maintenance extension for SAP Business Suite 7 core application releases to 2027. If you are running a relevant release, see SAP Note 1648480 for more details and applicable restrictions.

# 4.2 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
ACLDL	700_700	0			
DMIS	2006_1_700	24	24	SAPK-61724INDMIS	DMIS 2006_1_700
EA-APPL	617	20	22	SAPK-61720INEAAPPL	SAP R/3 Enterprise Application Extension 617
EA-DFPS	617	20	22	SAPK-61720INEADFPS	EA-Defense Forces & Public Security 617
EA-FIN	617	20	22	SAPK-61720INEAFIN	Ea Fin 617
EA-FINSERV	617	20	22	SAPK-61720INEA FINSRV	SAP R/3 Enterprise Financial Services 617
EA-GLTRADE	600	32	33	SAPKGPGD32	SAP R/3 Enterprise Global Trade 6.00
EA-HR	607	113	115	SAPK-607B3INEAHR	SAP R/3 Enterprise Human Resource & Travel Extension 607
EA-IPPE	400	32	33	SAPKGPID32	SAP Integrated Product and Process Engineering 400



03.05.2021 - 09.05.2021

Software Component	Version	Patch Level	Latest Avail. Patch Level	Support Package	Component Description
EA-PS	617	20	22	SAPK-61720INEAPS	SAP R/3 Enterprise Public Services 617
EA-RETAIL	617	20	22	SAPK-61720INEA RETAIL	SAP R/3 Enterprise Retail 617
EAPSGLO	607	23	25	SAPK-60723INEA PSGLO	EA-PS-GLO 607
ECC-DIMP	617	18	22	SAPK-61718INEC CDIMP	ECC Discrete Industries Mill Products 617
ERECRUIT	600	32	33	SAPK-60032INER ECRUIT	ERECRUIT 600
FI-CA	617	20	22	SAPK-61720INFICA	FI-CA, Contract Accounts Receivable and Payable (virtuell) 617
FI-CAX	617	20	22	SAPK-61720INFICAX	FI-CAX: Extended FI-CA 617
FINBASIS	747	20	22	SAPK-74720INFINBASIS	FINBASIS 747
FSCM_CCD	617	20	22	SAPK-61720INFS CMCCD	Fscm Ccd 617
HR-CEE	110_604	161	163	SAPK-604H1INHRCEE	Human Resources (HR) Country version for CEE countries 110_604
INSURANCE	617	20	22	SAPK-61720ININ SURANC	INSURANCE 617
IS-CWM	600	32	33	SAPK-60032INISCWM	SAP CATCH WEIGHT MANAGEMENT 6.00 on SAP ERP 2005
IS-H	600	61	66	SAPK-60061INISH	IS-H 600
IS-M	617	20		SAPK-61720INISM	Media 617
IS-OIL	617	18	22	SAPK-61718INISOIL	SAP for Oil & Gas 617
IS-PRA	617	21	23	SAPK-61721INISPRA	IS-PRA 617
IS-PS-CA	617	20	22	SAPK-61720INISPSCA	IS-Public Sector Contract Accounting 617
IS-UT	617	20	22	SAPK-61720INISUT	IS-UT 617
LSOFE	600	32	33	SAPK-60032INLSOFE	Learning Solution - Frontend 600
MDG_APPL	617	20	22	SAPK-61720INMD GAPPL	MDG Applications 617
MDG_FND	747	20	22	SAPK-74720INMDGFND	MDG Foundation 747
NMI_CONT	2006_1_700	19	21	SAPK-61719INNM ICONT	NMI CONTENT 2006_1_700
PI_BASIS	740	23	25	SAPK-74023INPIBASIS	Basis Plug-In 7.40
SAP_ABA	740	23	25	SAPKA74023	SAP Anwendungsbasis 7.40
SAP_AP	700	38	39	SAPKNA7038	SAP Application Platform 7.00
SAP_APPL	617	20	22	SAPKH61720	SAP APPL 6.17



03.05.2021 - 09.05.2021

Earlywatch Alen			20132371-CB2		5.2021 - 09.05.2021
Software Component	Version	Patch Level	Latest Avail. Patch Level	Support Package	Component Description
SAP_BASIS	740	23	25	SAPKB74023	SAP Basis Component 7.40
SAP_BS_FND	747	20	22	SAPK-74720INSA PBSFND	SAP Business Suite Foundation 747
SAP_BW	740	23	25	SAPKW74023	SAP Business Warehouse 7.40
SAP_FIN	617	20	22	SAPK-61720INSAPFIN	Financials
SAP_GWFND	740	24	25	SAPK-74024INSA PGWFND	SAP NetWeaver Gateway Foundation 7.40
SAP_HR	604	162	164	SAPKE604G2	SAP ERP Human Capital Management 604
SAP_UI	750	18	19	SAPK-75018INSAPUI	User Interface Technology 7.50
SEM-BW	747	20	22	SAPK-74720INSEMBW	SAP SEM 747
SFIHCM01	600	20	20	SAPK-60020INSFI HCM01	HCM integration with SuccessFactors 600
SFIHCM02	600	15	15	SAPK-60015INSFI HCM02	Integration Success Factors 600
SFIHCM03	600	13	13	SAPK-60013INSFI HCM03	Sfihcm03 HCM integration with SuccessFactors 600
ST-A/PI	01U_731	1	1	SAPKITAB9Z	
ST-PI	740	14	14	SAPK-74014INSTPI	Solution Tools Plugin 740
UIEAAP01	100	5	15	SAPK-10005INUI EAAP01	UI for ERP central Applications 100
UIEAPS01	100	1	2	SAPK-10001INUI EAPS01	UI for Enterprise Applications Public Sector Applications 100
UIISPSCA	100	2	7	SAPK-10002INUII SPSCA	UI for ISPSCA 100
UITRV001	100	3	10	SAPK-10003INUIT RV001	UI for Travel 100
UIX01EAP	100	5	14	SAPK-10005INUI X01EAP	UI for ERP Central Applications 1.0
UIX01HCM	100	5	7	SAPK-10005INUI X01HCM	UI for HCM Application 1.0
WEBCUIF	747	20	22	SAPK-74720INWE BCUIF	SAP Web UIF 747

# 4.3 Database - Maintenance Phases

Database Version	End of Standard Vendor Support*	Comment	Status	SAP Note
SAP MaxDB 7.9		Not Yet Defined by Vendor	<b>v</b>	1178367

\* 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.



# 4.4 Operating System(s) - Maintenance Phases

Host	- I - J - J - J - J	End of Standard Vendor Support*		Comment	Status	SAP Note
3 Hosts	Red Hat Enterprise Linux 6	30.11.2020	30.06.2024	Limited (ELS)		936887
	on Power					

\* 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.

As an optional fee-based add-on subscription to a regular Red Hat Enterprise Linux subscription, Red Hat offers "Extended Life-cycle Support" (ELS). ELS provides critical impact security fixes and selected urgent priority defect fixes that are available and qualified for a subset of the packages in a specific major release of Red Hat Enterprise Linux beyond the end of the Maintenance Support 2 phase. While the Maintenance Support 2 phase ended/will end on 30.11.2020, "Extended Life-cycle Support" for Red Hat Enterprise Linux 6 will end on 30.06.2024. For details on the scope of support and restrictions during Extended Life-Cycle Support, see https://access.redhat.com/solutions/690063.

## 4.5 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
3 instances	753	602	11	Linux on Power (big endian)

## 4.5.1 Kernel out of date

Your current SAP kernel release is probably not up to date.

**Recommendation:** Make sure that you are using the recommended SAP kernel together with the latest Support Package stack for your product.

## 4.5.2 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://launchpad.support.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 KRNL753PL602 in the SAP Note search. For detailed information, see SAP Note 1802333 - Finding information about regressions in the SAP kernel.

# 4.6 ERP Applications

#### Scenario Overview

Scenario	Used	Details
Module SD is used but one time accounts (CDP-customer) at most occassionally		The number of one time addresses present in the system is in the range of 0-999
Module Materials Management (MM)	$\checkmark$	According to the workload monitor module MM is in use.



# **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 CB2

**General** This analysis focuses on the workload during the peak working hours **(9-11, 13)** and is based on the hourly averages collected by SAPOSCOL. 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
eccprdb	75	07.05.2021	K	60.158	0		>	03.05.2021	09.05.2021
eccprd2	60	08.05.2021	<	60.158	0		>	03.05.2021	09.05.2021
eccprd1	60	08.05.2021	>	60.158	0		>	03.05.2021	09.05.2021

**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. <u>SAP Business Process Analysis, Stabilization and Improvement offerings</u> 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. <u>SAP tools and methods</u> 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?".

Ra	ating	Step	Description			
	٩	CONFIGURATION IN SAP EWA MANAGEMENT	SYSTEM IS ACTIVE FOR SPECIAL CONTENT.			
	**	DATA COLLECTION IN MANAGED SYSTEM	NO DATA HAS BEEN TRANSFERED FROM MANAGED			
			SYSTEM.			
	*	KEY FIGURES SHOWN IN SESSION	NO KEY FIGURE WAS YET PROCESSED.			

## 6.1 SAP Business Process Analytics

With SAP Business Process Analytics in SAP Solution Manager, you can continuously analyze the above key figures and more than <u>750 additional out-of-the-box key figures</u> 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 Overview CB2

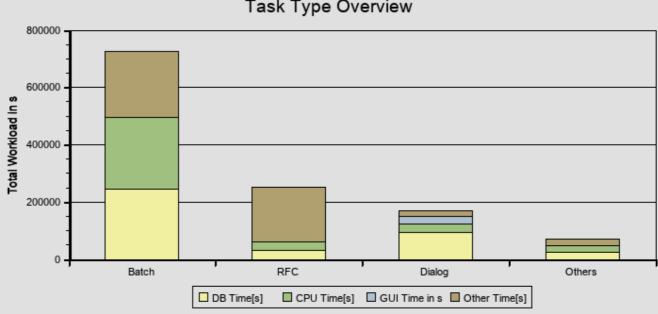
# 7.1 Workload By Users

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	96	46	14	156

# 7.2 Workload By Task Types

This chart displays the main task types and indicates how their workload is distributed in the system.

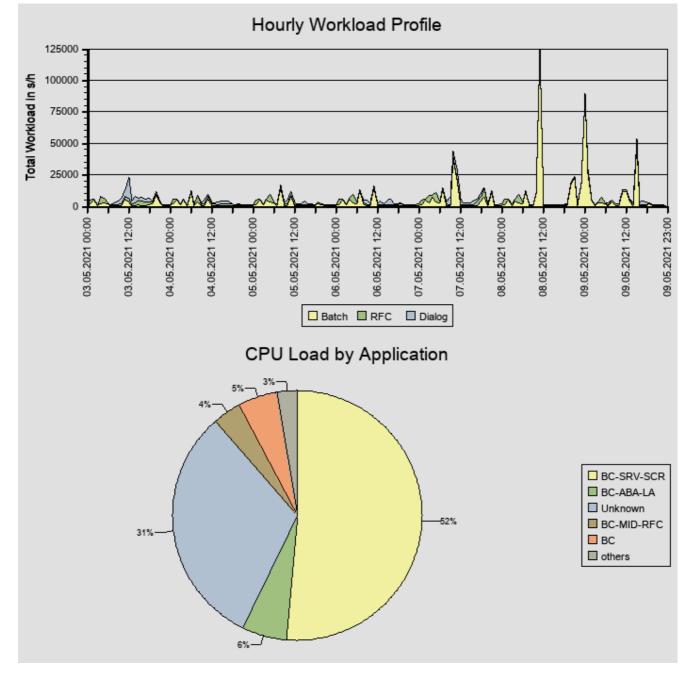


## Task Type Overview

Task Type	Response Time[s]	DB Time[s]	CPU Time[s]	GUI Time ins
Batch	724938	246244	250008	0
RFC	251542	32519	29213	218
Dialog	169856	94120	28109	29117
Others	67535	23886	23886	74

The chart below lists the top task types in terms of total response time in s.





# 7.3 Top Applications

This table lists the top applications of the Dialog task type. The unit of measure is milliseconds [ms] for average time and seconds [s] for total time.

### **Transaction Profile**

Transacti on	Total Respons e Time[s]	% of Total Load	Dialog Steps	Avg. Resp. Time[ms]	Avg. Proc. Time[ms]	Avg. CPU Time[ms]	Avg. DB Time[ms]	Avg. Roll Wait Time[ms]	Avg. GUI Time[ms]
ZPT03	19874	1.6	1027	19352	8	2841	11161	365	365
FAGLL03	13716	1.1	202	67903	1	619	66744	306	334
RSTXPDF T5	13289	1.1	51	260570	75	38043	179596	5452	33214
ZRP01	13039	1.1	33	395114	377	224501	17363	569	1215
ZCO204	11958	1.0	1000	11958	0	442	10773	699	725
FBL3N	9112	0.8	3718	2451	1	1000	927	323	418
ZCO206	6135	0.5	181	33897	1	465	32434	259	264



EarlyWatch Alert				2015237	71 - CB2		(	03.05.2021 - 09.05.2021		
Transacti on	Total Respons e Time[s]	% of Total Load	Dialog Steps	Avg. Resp. Time[ms]	Avg. Proc. Time[ms]	Avg. CPU Time[ms]	Avg. DB Time[ms]	Avg. Roll Wait Time[ms]	Avg. GUI Time[ms]	
ZMM080	5460	0.4	742	7358	1	649	4764	1661	1708	
FAGLB03	4881	0.4	274	17813	2	1099	15788	258	273	
ZMM040	4401	0.4	197	22339	0	189	21665	340	350	

This table lists the top applications of the RFC task type. The unit of measure is milliseconds [ms] for average time and seconds [s] for total time.

### **RFC Profile**

Initial System	Initial Action	Total Response Time[s]	% of Total Load	Steps	Avg. Resp. Time[ms]	Avg. Proc. Time[ms]	Avg. CPU Time[ms]	Avg. DB Time[ms]
CB2/eccprd b_CB2_00	SAPMSSY1	42932	3.5	4949	8675	4562	621	101
CB2/eccprd 1_CB2_00	SAP_COL LECTOR_ PERFMON _SWNCCO LL	23930	2.0	3995	5990	1289	895	4693
SMA/solma n_SMA_00	EFWK RESOURC E MANAGER	23667	1.9	114224	207	112	64	57
CB2/eccprd 2_CB2_00	SBWP	16027	1.3	885	18110	9117	8463	61
CB2/eccprd 2_CB2_00	/BDL/T ASK_PR OCESSOR	15588	1.3	604	25808	1560	576	6168
CB2/eccprd b_CB2_00	BI_WRIT E_PROT_ TO_APPL LOG	10658	0.9	1339	7960	6005	10	1954
CB2/eccprd 1_CB2_00	SBWP	7905	0.7	552	14321	7175	6765	87
CB2/eccprd b_CB2_00	CARGA INTERFAC ES TIENDA	7142	0.6	22590	316	315	3	1
CB2/eccprd 1_CB2_00	SAP_COL LECTOR_ PERFMON _RSDOOS _MSC	4895	0.4	537	9115	4351	550	1622
CB2/eccprd 1_CB2_00	BI_WRIT E_PROT_ TO_APPL LOG	3700	0.3	474	7806	6009	10	1793

This table lists the top applications of the Batch task type. The unit of measure is milliseconds [ms] for average time and seconds [s] for total time.

### Jobs Profile

Report	Response Time[s]	% of Total Load	Steps	CPU Time[s]	DB Time[s]
RSTXPDF5	322266	26.5	25	169612	10975
ZCCBSD_IFACCONT	75923	6.3	15	36141	22230
RFUMSV00	59559	4.9	5	10190	48211
ZCCBSD026P	53421	4.4	7	125	52948
/QTQVC/READ_DATA	32788	2.7	258	13140	14905
ZEXTR_PEDI	32700	2.7	7	675	32364
RSDBAJOB	28111	2.3	5	0	2331



EarlyWatch Alert		20152371 - CB2 03.05.2021 - 09			
Report	Response Time[s]	% of Total Load	Steps	CPU Time[s]	DB Time[s]
RSAU_SELECT_EVENTS	14702	1.2	28	7503	1075
ZCCBFI_INTCLIENTES	14284	1.2	17	5176	6545
SWNC_TCOLL_STARTER	12544	1.0	3014	726	6060

# 7.4 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.

#### Load Overview

Initial System	Load [s]	Load %
Local system CB2	129.103	84,97
Sum of external systems	22.832	15,03
RFC load (sum of above)	151.935	100,00
RFC load in Performance Overview	251.707	165,67
Load of all task types in Performance Overview	1.213.873	798,94

### 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
SMA	EFWK RESOURCE MANAGER	22.491	14,80	209,7	64,0	57,6	0,1
SMA	SM:SELFDIA GNOSIS	169	0,11	4.014,9	1.348,1	2.630,3	0,1
SMA	DIAGLS_CO MPUTE_STA TUS	97	0,06	535,3	313,2	212,6	0,0
SMA	SM:SCMON_ CONTROL	56	0,04	997,3	296,1	284,6	0,0
SMA	SM:USR_ST ATUS_UPDA TE	11	0,01	23,3	4,3	6,3	0,0
SMA	SM:AGSSIS E_USER_CL EANUP	5	0,00	55,4	4,1	10,7	0,0
SMA	SM:SYSTEM RECOMMEN DATIONS	2	0,00	2.085,0	160,0	1.403,0	0,0
SMA	SM:EXEC_S ESS_1_100 0000001663	1	0,00	565,5	20,0	53,5	0,0

### 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
CB2	SAPMSSY1	37.825	24,90	8.463,9	605,2	100,8	0,0
CB2	SBWP	23.632	15,55	16.964,5	7.991,7	89,9	0,1



EarlyWatch	Alert		2015237		03.05.2021 - 09.05.2021		
Initial System	Initial Action	Total Resp. Time ins	% of RFC Load	Avg. Response Time	Avg. CPU Time	Avg. DB Time	Avg. Roll Wait Time
CB2	SAP_COLL ECTOR_PE RFMON_SW NCCOLL	21.708	14,29	5.746,0	895,7	4.440,0	0,1
CB2	BI_WRITE_ PROT_TO_A PPLLOG	16.348	10,76	8.109,2	10,1	2.097,2	0,1
CB2	/BDL/TAS K_PROCES SOR	10.498	6,91	25.604,9	618,7	6.121,4	0,1
CB2	CARGA INTERFACE S TIENDA	7.023	4,62	316,7	2,6	1,1	0,0
CB2	SAP_COLL ECTOR_PE RFMON_RS DOOS_MSC	4.637	3,05	9.199,9	554,5	1.632,6	0,1
CB2	MIRO	1.463	0,96	38.510,3	17.192,6	26,9	0,4
CB2	RSAU_SELE CT_EVENTS	1.337	0,88	14.857,7	8.019,6	79,1	0,1
CB2	CARGA INTERFACE S TOTAL	1.015	0,67	388,3	2,7	0,8	0,0
CB2	SAPMHTTP	553	0,36	504,8	88,6	204,2	0,1
CB2	SAP_CCMS_ MONI_BATC H_DP	325	0,21	164,4	29,6	21,9	0,1
CB2	ZCCBSD_IF ACCONT	303	0,20	296,9	2,7	0,7	0,0
CB2	SAP_COLL ECTOR_PE RFMON_RS AMON40	257	0,17	509,3	2,7	6,2	0,1
CB2	CARGA INTERFACE S RUE	220	0,14	342,0	2,9	0,5	0,1
CB2	ME51N	207	0,14	859,5	60,4	120,9	0,1
CB2	STMS	184	0,12	1.686,9	76,8	63,3	0,1
CB2	RSCVR_TRI GGER_COLL ECT	134	0,09	33,1	3,2	6,0	0,1
CB2	ME53N	105	0,07	604,0	39,4	31,2	0,0
CB2	SAP_COLL ECTOR_PE RFMON_RS DOTM_SYN	92	0,06	1.308,3	135,7	35,5	0,0



# 8 Performance Overview CB2

The performance of your system was analyzed with respect to average response time and total workload. Some problems that may impair system performance were detected. To ensure adequate performance in your core business transactions, you should take corrective action as soon as possible. For more information, contact SAP Support.

Rating	Check
	Performance Evaluation

## 8.1 Performance Evaluation

The following table shows the average response times of task types running in dialog work processes. Data is from Solution Manager BW.

**Dialog WP related task types** 

Task Type	Steps	Avg. Resp. Time[ms]	Avg. CPU Time[ms]		Avg. DB Time[ms]	Avg. GUI Time[ms]
RFC	343595	732	85	0	95	1
Dialog	102932	1650	273	0	914	283
HTTP(S)	336538	5	2	0	0	0

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

- If the task type is not listed in the "Task Type Overview" table in the "Workload Overview CB2" section, the task type is not included in the evaluation.

- DIALOG, RFC, and HTTP(S) are considered to be related to the end user's dialog activity.

The table below indicates that performance problems are anticipated for tasks rated YELLOW or RED.

#### Ratings

Task	Steps	Application Server Performance	Database Server Performance
Dialog	102932		✓
RFC	343595	>	<b>v</b>

#### **Time Profile Rating**

Rating	Task	Time	Steps	Avg. Response Time[ms]	Avg. CPU Time[ms]	Avg. Database Time[ms]
	Dialog	04-05	20	1.720	57	378
	Dialog	05-06	19	2.400	32	1.772
1	Dialog	06-07	139	2.409	878	381
	Dialog	07-08	799	2.353	139	1.900
	Dialog	08-09	5.725	1.226	204	614
	Dialog	09-10	7.916	1.955	182	1.367
1	Dialog	10-11	10.004	1.547	358	779
	Dialog	11-12	11.111	1.780	405	875
	Dialog	12-13	7.827	3.371	424	2.076
	Dialog	13-14	4.268	2.253	588	870
	Dialog	14-15	9.138	1.297	208	598
	Dialog	16-17	11.503	1.451	187	923
	Dialog	17-18	8.016	1.371	229	803
	Dialog	18-19	5.622	1.642	180	941
	Dialog	20-21	1.740	2.316	286	1.285
	Dialog	21-22	862	2.479	638	916
	0	Confider	ntial	Performance Over	view CB2	18/40

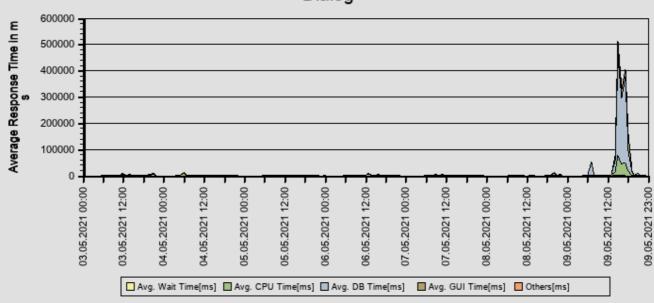


EarlyW	/Watch Alert 20152371 - CB2 03.0				03.05.2021 - 09.05.2021	
Rating	Task	Time	Steps	Avg. Response Time[ms]	Avg. CPU Time[ms]	Avg. Database Time[ms]
	Dialog	23-24	63	2.499	80	2.305

### **Reference Times**

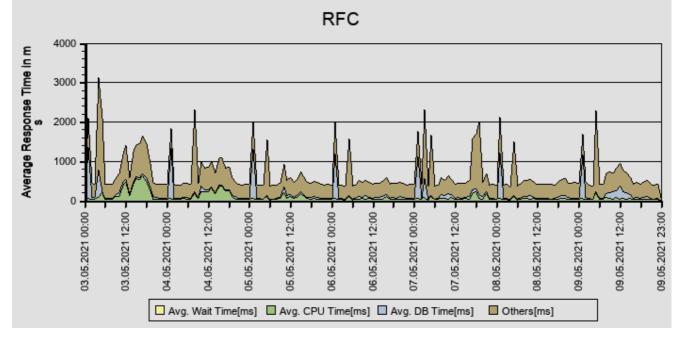
Task	Ref. for Avg. Response Time[ms] - Yellow Rating	Ref. for Avg. Response Time[ms] - Red Rating	Ref. for Avg. DB time[ms] - Yellow Rating	Ref. for Avg. DB time[ms] - Red Rating
Dialog	1.200	3.600	600	1.800
RFC	2.400	3.600	1.200	1.800

The chart below displays the time profile for the Dialog task type.



## Dialog

The chart below displays the time profile for the RFC task type.



# 9 Trend Analysis for CB2

The performance of your system was analyzed with respect to the trend of response times per system and per application. We found no major problems that could affect system performance.

#### Rating table

Rating	Check	Description
<b>~</b>	History of response time of CB2	The long-term or short-term analysis of the response time does not show a
		critical trend
<b>v</b>	Application profile of CB2	The long-term analysis of applications does not show a critical trend

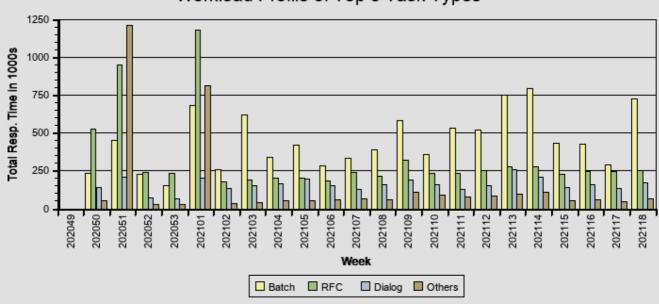
In the following, we analyzed the trend within the following time frames:

Short term: From calendar week 15/2021 to 18/2021

Long term: From calendar week 49/2020 to 18/2021

## 9.1 History of Response Time of CB2

We analyzed the growth of the average response time within this system. The long-term is %/year and short-term is %/year. This is not critical and no action is required.

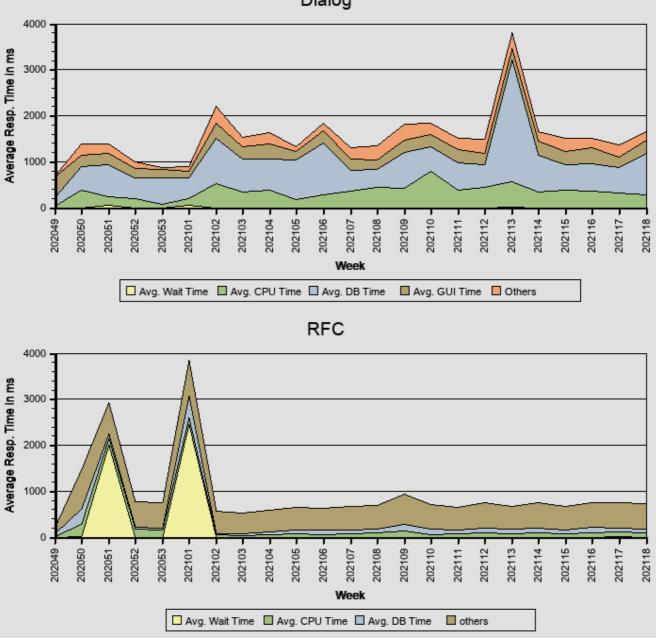


# Workload Profile of Top 3 Task Types

The graphs below show the time profiles of the following task types: Dialog, RFC.







In the following, we analyzed the trend within the following time frames:

Short term: From calendar week 15/2021 to 18/2021

Long term: From calendar week 49/2020 to 18/2021

The table below shows the long-term and short-term growth in average response time extrapolated to a year.

### Growth Extrapolated To A Year

Task Type	Long Term Growth (%/year)	Trend	Rating	Short Term Growth (%/year)	Trend	Rating
ALL	-59,0	t	1	510,3	Ť	E
Dialog	36,7	1	1	87,1	Ť	E
RFC	-62,9	t	1	103,9	1	i

The table below shows the long-term and short-term weekly average growth in the average response time.

#### Average Growth

Task Type	Long Term Growth (%/week)	Trend	Rating	Short Term Growth (%/week)	Trend	Rating
ALL	-1,1	+	i	9,8	×	i
Dialog	0,7	+	>	1,7	+	<b>&gt;</b>
RFC	-1,2	+	<b>&gt;</b>	2,0	→	<b>~</b>



#### **Rating Legend**

i	The trend is only for information
<b>V</b>	The trend is not critical
	The trend is critical
3	The trend is very critical

# 9.2 Application profile

In the following, we analyzed the trend within the following time frames:

Short term: From calendar week 15/2021 to 18/2021

Long term: From calendar week 49/2020 to 18/2021

The table below shows the time profile of the top applications by total workload during the analyzed period.

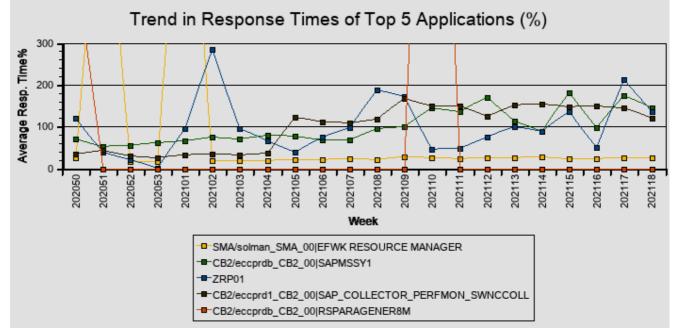
#### Top Applications by Response Time

Task Type	Application	Total Resp. Time ins	% of Total Load	Avg. Resp. Time in ms	Long Term Growth (%/year)	Short Term Growth (%/year)	Avg. DB Time in ms	Avg. CPU Time in ms
RFC	SMA/solma n_SMA_00  EFWK RESOURC E MANAGER	1819422	22	786	-226,8	177,1	105	54
RFC	CB2/eccp rdb_CB2_ 00 SAPMS SY1	756374	9	5386	82,2	-95,6	101	449
Dialog	ZRP01	505194	6	244409	38,1	589,6	8400	128686
RFC	CB2/eccp rd1_CB2_ 00 SAP_C OLLECTOR _PERFMON _SWNCCOL L	374078	4	4824	114,7	-267,2	3515	936
RFC	CB2/eccprd b_CB2_00 R SPARA GENER8M	319993	4	60547	0,0	0,0	20342	12864
RFC	CB2/eccpr d2_CB2_00  SBWP	302840	4	19018	-2,1	971,2	977	8640
Dialog	ZCO204	270323	3	14335	13,0	321,4	12497	793
Dialog	FBL3N	244238	3	2917	94,5	-803,2	1109	1087
RFC	CB2/eccpr d1_CB2_00  SBWP	235162	3	17319	1,8	1.086,0	52	8271
Dialog	ZFI049	213953	3	2411	158,8	-913,0	1790	349
RFC	CB2/eccp rd2_CB2_ 00 /BDL/ TASK_PRO CESSOR	196798	2	31442	-29,4		9099	800
Dialog	ZMM040	179478	2	23873	-17,8	31,5	22152	621
Dialog	FBL5N	126827	2	2447	-169,4	-803,5	2244	54



EarlyWatch	Alert		2	0152371 - CB	2		03.05.2021	- 09.05.2021
Task Type	Application	Total Resp. Time ins	% of Total Load	Avg. Resp. Time in ms	Long Term Growth (%/year)	Short Term Growth (%/year)	Avg. DB Time in ms	Avg. CPU Time in ms
RFC	CB2/eccpr db_CB2_00  CARGA INTERFAC ES TIENDA	119224	1	322	30,0	-45,2	2	3
RFC	CB2/ecc prdb_CB 2_00 BI _WRITE_ PROT_TO _APPLLOG	116289	1	7446	5,2	46,3	1435	11
RFC	CB2/ecc prd1_CB 2_00 BI _WRITE_ PROT_TO _APPLLOG	110524	1	7229	26,9	109,7	1216	11
Dialog	SESSION_ MANAGER	102418	1	856	-12,2	-147,8	216	40
Dialog	FAGLL03	94078	1	40744	304,6	-1.115,7	39335	1002
RFC	CB2/ecc prd2_CB 2_00 BI _WRITE_ PROT_TO _APPLLOG	90588	1	7336	30,0	209,0	1315	11
RFC	CB2/eccp rd1_CB2_ 00 SAP_C OLLECTOR _PERFMON _RSDOOS_ MSC	85830	1	8201	36,6	-13,3	1435	464

The graph below shows how the average response time of the top five applications varies over time. Data is normalized to 100% equaling the average value.

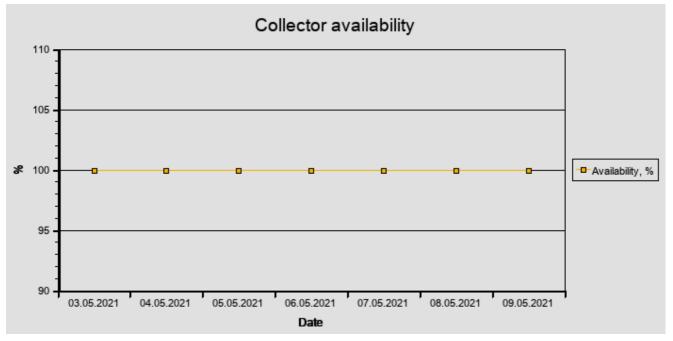


# **10 SAP System Operating CB2**

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

Rating	Check
<b>~</b>	Availability based on Collector Protocols
	Program Errors (ABAP Dumps)
<b>~</b>	Update Errors
<b>v</b>	Table Reorganization

## **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.

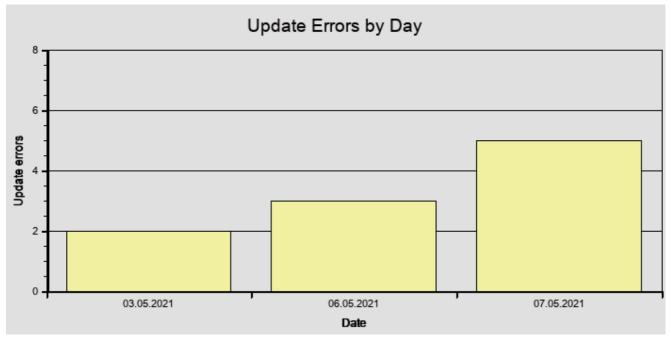
As of SAP Basis 6.40, system availability information is available in the CCMS (Computing Center Management System) of an SAP System, in Service Level Reporting of SAP Solution Manager.

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**

The largest tables and/or rapidly growing tables of system CB2 were checked. No standard SAP recommendations for the applicable data volume management were found.

# 10.4 Program Errors (ABAP Dumps)

38 ABAP dumps have been recorded in your system in the period 03.05.2021 to 09.05.2021. 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
03.05.2021	2
04.05.2021	0
05.05.2021	0
06.05.2021	14
07.05.2021	6
08.05.2021	15
09.05.2021	1

Name of Runtime Error	Dumps	Server (e.g.)	Date (e.g.)	Time (e.g.)
COMPUTE_BCD_OVERFLOW	9	eccprd1_CB2_00	06.05.2021	15:17:41
TIME_OUT	1	eccprdb_CB2_00	06.05.2021	16:20:55
DATA_LENGTH_0	1	eccprd1_CB2_00	06.05.2021	19:11:09
TSV_TNEW_PAGE_ALLOC_FAILED	1	eccprdb_CB2_00	07.05.2021	11:40:29
DBSQL_SQL_ERROR	4	eccprd1_CB2_00	08.05.2021	11:17:48
RAISE_EXCEPTION	19	eccprdb_CB2_00	08.05.2021	11:18:52
COMPUTE_INT_PLUS_OVERFLOW	1	eccprd2_CB2_00	08.05.2021	23:24:34
CONVT_DATA_LOSS	2	eccprdb_CB2_00	09.05.2021	19:26:06

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, send a customer message to SAP to request support.

## **10.5 Critical Number Ranges**

We have checked the usage of ABAP number ranges and found some objects that have already been used more highly. The following ABAP number ranges have already used 75% or more:

Rating	Client	% Used	% Warnin g	Object	Short text	Subobj ect	Interval	Length	To Numbe r	No. Level		Rolling (Yes/N o)
	400	100,00	95,00	RK_BE LEG	CO Docum ent	ССВ	02	1.000.0 00	2.999.9 99	2.999.9 99		No
	400	100,00	95,00	RK_BE LEG	CO Docum ent	ССВ	04	1.000.0 00	10.999. 999	10.999. 999		No
1	400	100,00	95,00	AUFTR AG	Order		25	4	7.800.0 03	7.800.0 03		Yes
	400	90,05	99,00	RE_BE LEG	Update docum ent		01	99.899	5.105.6 99.999	5.105.6 90.060	9.999	Yes

**Recommendation:** Check number ranges and make sure that enough numbers are available. If the range is exhausted, terminations may happen. If a non-rolling number range is exhausted, then no new numbers can be drawn from it and the business process will stop. A rolling number range will begin again at the "from" number without further notice. If old objects, like spool requests, still exist, then there might also be interruptions, or old objects may be overwritten.

See SAP Note 2292041 and SAP Help Portal Number range objects

You can check for further details in report RSNUMHOT using "Display from %" = '75.00' and by unchecking 'Do not display rolling intervals'.

The column "length" indicates the total number of numbers in the number range. The column "% warning" is a predefined threshold for the used percentage of a given number range object. If this limit is reached, the business user receives a warning.

If one of the above-mentioned number range objects is a test object or it is not relevant for the check, change its business year to a previous year. It is then removed from this check.

A number range object that does not change after three weeks will be removed from the display.



# **11 Security**

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

Rating	Check
<b>&gt;</b>	System Recommendations (ABAP)
<b>~</b>	Age of Support Packages
<b>V</b>	Default Passwords of Standard Users
<b>~</b>	Control of the Automatic Login User SAP*
	Protection of Passwords in Database Connections
<b>V</b>	ABAP Password Policy
<b>V</b>	RFC Gateway Security
<b>~</b>	Message Server Security
	Users with Critical Authorizations

# 11.1 ABAP Stack of CB2

### **11.1.1 Protection of Passwords in Database Connections**

Database user passwords of connected systems can be found in table DBCON.

**Recommendation:** Execute the valid manual postprocessing step described in SAP Security Note 1823566. Note: This Note is valid for all ABAP installations that use database connections, including when the text focuses on SAP Solution Manager. The Note refers to SAP Solution Manager because typically, many DB connections are maintained.

If this recommendation is displayed, there are DB connections with passwords on the analyzed system. Although transaction DBCO (which you use to maintain such DB connections) does not show the passwords, you can find the obfuscated passwords using transaction SE16 for table DBCON with the field value PASSWORD <> space.

## 11.1.2 ABAP Password Policy

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

## **11.1.3 Secure System Internal Communication**

#### Parameter: system/secure\_communication

Rating	Instance	Current Value	Recommended Value
	All instances	OFF	ON

Profile parameter system/secure\_communication is not set to ON. System-internal communication is not protected and may allow intruders to access your system.

**Recommendation:** Activate authentication and encryption of system internal communication by setting profile parameter system/secure\_communication to ON.

SAP recommends activating secure system internal communication on pure ABAP-based systems. For more information, see SAP Notes 2040644, 2362078, 2624688, and 2778519.

## **11.1.4 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.

### **11.1.4.1 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	3	11	
001	2	3	
400	3	216	

Authorization profile: SAP\_ALL



# 12 Software Change and Transport Management of CB2

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



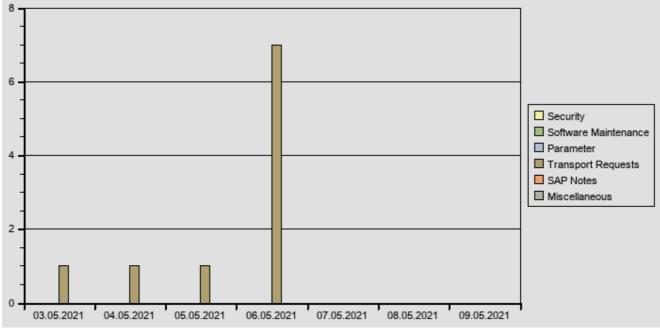
# 12.1 SAP Netweaver Application Server ABAP of CB2

Rating	Check Performed
<b>v</b>	Number of Changes
<b>~</b>	Emergency Changes
<b>~</b>	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).

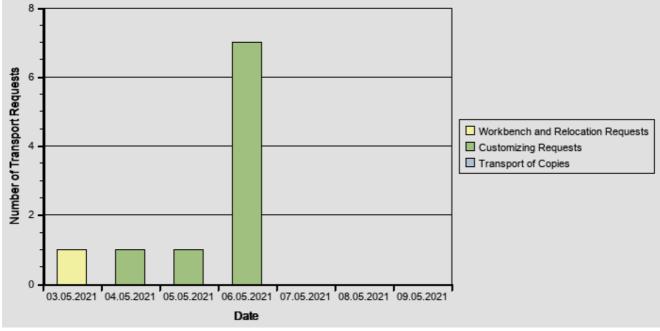


Date	Security	Software Maintenance	Parameter	Transport Requests	SAP Notes	Miscellaneous
03.05.2021	0	0	0	1	0	0
04.05.2021	0	0	0	1	0	0
05.05.2021	0	0	0	1	0	0
06.05.2021	0	0	0	7	0	0



## **12.1.2 Number of Transport Requests**

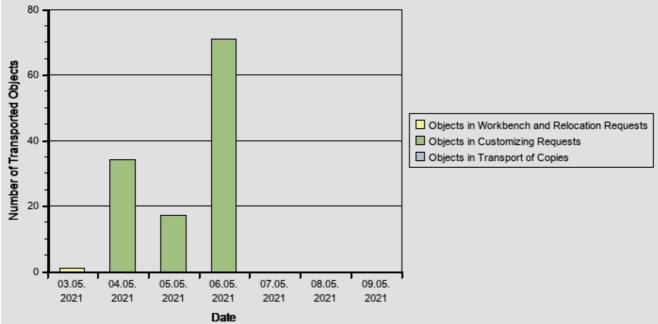
The following diagram contains information about the number of transport requests per day that were imported into the SAP system in the last week.



Date	Workbench and Relocation Requests	Customizing Requests	Transport of Copies
03.05.2021	1	0	0
04.05.2021	0	1	0
05.05.2021	0	1	0
06.05.2021	0	7	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
03.05.2021	1	0	0
04.05.2021	0	34	0
05.05.2021	0	17	0
06.05.2021	0	71	0

## 12.1.4 Emergency Changes

We analyzed the number of emergency changes in system CB2 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	5	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	10	Total number of transport requests in production.

## 12.1.5 Failed Changes

In this check, we analyzed the number of failed changes in system CB2 during the last week.

Rating	Item	Value	Explanation
<b>v</b>	Transport requests with import errors	0	Number of transport requests with import errors that were not resolved within one hour.
4	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.
۵	Total number of transport requests	10	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, issues were identified that require your attention.

However, the FIN\_CORR\_RECONCILE program has not yet been executed OR your system was not fully scanned. Refer to the 'Reconciliation Run Results' for more information if your system was not fully scanned.

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 below it: "Financial Data Integrity", "Financial Data Management", and "Reconciliation Run Results". 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 check run.

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 FIN\_CORR\_RECONCILE transaction is a reconciliation check and it is the main source of data for our financial data quality analysis. In order to achieve full transparency on the consistency level of your financial data, it is essential to install SAP Note

https://launchpad.support.sap.com/#/notes/2755360 [2755360] and run this reconciliation check on your system.

The Financial Data Quality topic is crucial for various daily business operations, as well as in terms of SAP S/4HANA and other conversion projects, as resolving data consistency issues will help you accelerate the conversion process and avoid unexpected showstoppers. We strongly advise you to study the information displayed in this chapter and take appropriate action.

# **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**

This chapter contains issues that might have a negative impact on data volume and total cost of ownership.

### 13.2.1 Vendors with Open Items older than 10 Years old

Issue Description: There is a high number of open items within vendors accounts that are more than 10 years old.

#### Impact on Business:

Documents that contain open items that are never cleared can never be archived. Documents that cannot be archived increase the data volume and the Total

Costs of Ownership.

Examples of identified vendor accounts in the old fiscal years:

Company Code	Vendors	Year	Number of Entries
ССВ	0010001261	2006	1
ССВ	0010009793	2007	1
ССВ	0010009794	2007	1
ССВ	0010000590	2010	1
ССВ	0010000729	2011	10



EarlyWatch Alert	201523	371 - CB2	03.05.2021 - 09.05.2021
Company Code	Vendors	Year	Number of Entries
ССВ	0020001421	2011	1
ССВ	0020001754	2011	1

Recommendation: Clear as many open items as possible.

# 13.3 Reconciliation prior to S/4HANA Conversion

The data displayed in this chapter is a result of execution of the FIN\_CORR\_RECONCILE transaction. This reconciliation check is the main source of the financial data quality analysis. It contains various consistency checks of the General Ledger application. Identified inconsistencies might have a negative impact on your daily business and digital transformation projects. It is especially crucial to analyze and resolve listed issues in detail prior to SAP S/4HANA conversion. Please note that, when estimating the resolution effort of the identified inconsistencies, you should refer to the number of different error types, but not the total number of errors.

In your case, this transaction had not been executed. Please install and execute the FIN\_CORR\_RECONCILE transaction, in order to fully scan your system for possible inconsistencies in your financial data. For more information, refer to SAP Note https://launchpad.support.sap.com/#/notes/2755360 [2755360].



# 14 Data Volume Management (DVM)

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Based on the data size and growth rate, problems regarding data volume management are expected.

This report does not have a Data Volume Management (DVM) section focusing on **Deletion and Data Archiving** because the collection of DVM-relevant data has not been activated for your system CB2. See SAP Note 2036442 for more information about how to activate the DVM content for service reports. Once the DVM content has been activated, information about the current state of your system CB2 regarding Data Volume Management is provided, along with proposals about how to reduce the database size of this system.

As a workaround, the database size and growth per year for your system CB2 were checked. Here, we found a database size of 2.844,00 GB and a database growth of 22,33% per year.

The database growth per year was calculated/extrapolated by comparing the current database size 2.844,00 GB with database size 2209 GB from 27.04.2020.

Based on these findings, a Guided Self-Service for Data Volume Management is recommended to identify appropriate measures to reduce the data volume in your system CB2. For further details about the Guided Self-Service for DVM, see SAP Note 1904491.



# **15 Database Administration**

Severe problems regarding administration of your SAP DB database were found. Check section 'Database Administration' ASAP.

Rating	Check
<b>v</b>	Database version
<b>v</b>	Cache Hit Ratios
<b>v</b>	Database Growth
	Top growing Tables
3	Database and Log Backup Frequency
	DB error messages

## **15.1 Database Version**

We have not detected any severe problems during the SAP DB / MaxDB version check.

Obtain the latest available build for your database version from the SAP Marketplace Download Center at www.service.sap.com/swdc

Downloads --> Support Packages and Patches --> Entry by Application Group --> Additional Components --> SAP DB / MAXDB, and so on.

#### Introduction:

Using a recent kernel version helps to ensure that the database management system functions properly. In addition, most new releases have been optimized with respect to performance.

We have determined that you are using the following SAPDB / MaxDB:

release: 7.9.09 build 010-123-262-707.

## **15.2 Cache Hit Ratios**

#### **Cache Hit Ratios**

Catalog Cache	Data Cache
96	99

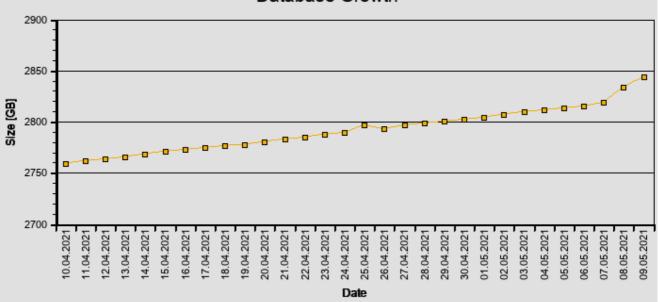
According to our check, the sizes of the data cache, the catalog cache, and the converter cache are set correctly.

## 15.3 Database Growth

No problems with database free space have been found.



### Database Growth



# **15.4 Top growing Tables**

This check could not be performed because of missing data in the download. Please follow the instructions in SAP Notes 352081 and 362542.

## **15.5 Database and Log Backup Frequency**

According to our check, your data backup strategy is not in line with SAP recommendations. Database backups or log backups have not been performed often enough or have finished with errors.

The backup cycle defines the period for which backup media is stored before reusing it. SAP recommends a backup cycle of 28 days. This is a compromise between the amount of backup media required and the ability to successfully respond to possible error situations.

A sufficient backup strategy will ensure that the database can be restored in due time after a database crash. The time needed to recover the database depends on how often backups are performed.

**Recommendation** : SAP recommends the following backup strategy:

At least one complete and one incremental data backup should be performed per week.

At least one log backup every day should be performed or the autolog option should be enabled.

All backup operations should be monitored regularly and backup errors (return code <> 0) should be analyzed.

The usability of the backup tapes should be tested once in each backup cycle (by restoring them to a test system, for example).

## **15.6 DB error messages**

Error message(s) newer than 30 days were found in the knldiag.err file during the download for this session.

The table below shows the latest messages.

You may display the content of the knldiag.err file with DBMGUI or with transaction DBACOCKPIT (DB50) -> Diagnostics -> Messages -> Kernel Messages -> go to "Error Messages" tab (or on older versions: Problem Analysis-> Messages-> Kernel-> Error).

Review the file and check the severity of all messages.

Date	Time	TID	Тур	MsgID	Label	Msg Text
2021-05-08	11:18:03	0x64AA	ERR	2	Transact	vkb51+noPIC.cpp:1532
2021-05-08	11:18:03	0x64AA	ERR	2	Transact	No more SQL locks can be created
2021-05-08	11:18:29	0x64A9	ERR	2	Transact	vkb51+noPIC.cpp:1532
2021-05-08	11:18:29	0x64A9	ERR	2	Transact	No more SQL locks can be created



EarlyWatch	Alert				20	0152371 - CB2 03.05.2021 - 09.05.2021
Date	Time	TID	Тур	MsgID	Label	Msg Text
2021-05-08	11:18:29	0x64A9	ERR	5	Catalog	Catalog_AuthorizationObject+noPIC.cpp:646
2021-05-08	11:18:29	0x64A9	ERR	5	Catalog	Catalog update failed,D ESCRIPTI ON=UNDEF INED,IFR _ERROR=- 1000
2021-05-08	11:18:30	0x64A9	ERR	2	Transact	vkb51+noPIC.cpp:1532
2021-05-08	11:18:30	0x64A9	ERR	2	Transact	No more SQL locks can be created
2021-05-08	11:18:30	0x64A9	ERR	2	Transact	vkb51+noPIC.cpp:1532
2021-05-08	11:18:30	0x64A9	ERR	2	Transact	No more SQL locks can be created



# **16 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.

# 16.1 System Activity

The following diagrams show the system activity over time.

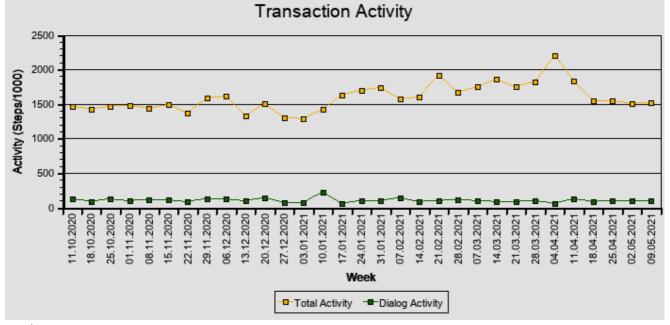
The "Transaction Activity" diagram below depicts transaction activity in the system over time.

- 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.



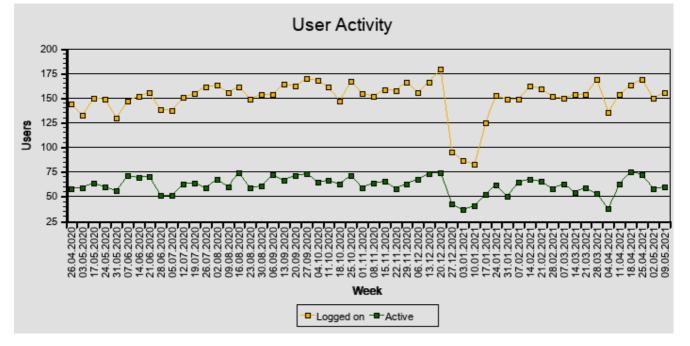


The "User Activity" diagram below shows the user activity on the system over time.

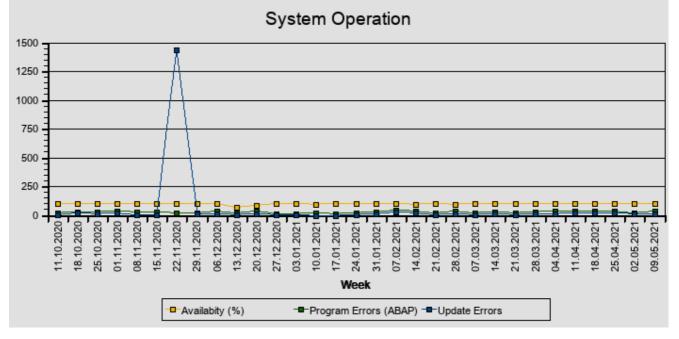
- Total Users: Total users that logged on in one week.

- Active Users: Users who performed more than 400 transaction steps in one week.





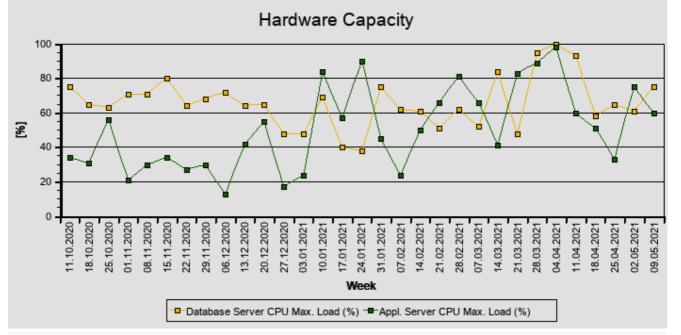
# **16.2 System Operation**



The following diagram or table shows important KPIs for system operation.

## **16.3 Hardware Capacity**





**Report** time frame: Service data was collected starting at 10.05.2021 04:00:24. This took 23 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	311268240
Solution Manager System	SMA
Solution Manager Version	SOLUTION MANAGER 7.2
Service Tool	720 SP17
Service Content Update On	03.05.2021

