EarlyWatch Alert - PP7

1 Service Summary

We did not detect any critical problems during the EarlyWatch Alert service.

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.

Check Overview

Topic Rating	Topic	Subtopic Rating	Subtopic
	SAP System Configuration		
			SAP Kernel Release for JAVA Stack
	Hardware Capacity		
	Database Oracle		
			Database Support Tools
			Database Parameters
			Database Performance Indicators

Check Overview

Topic Rating	Topic	Subtopic Rating	Subtopic
	Security		
			System Recommendations (JAVA)
			Invoker Servlet
	Software Change Management		
	Java System Data		
			Java VM Memory Performance
			Java Workload Overview
			Java Application Performance
			Enterprise Portal Activity Reporting

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.

2 Landscape

2.1 Products and Components in current Landscape

Product

System	SAP Product	Product Version
PP7~JAVA	SAP ERP ENHANCE PACKAGE	6.05

Main Instances (ABAP or JAVA based)

Related System	Main Instance
PP7~JAVA	Enterprise Portal
PP7~JAVA	SAP NW - Application Server Java

Main Instances (ABAP or JAVA based)

Related System	Main Instance
PP7~JAVA	SAP NW - BI Java
PP7~JAVA	Add-on: SLC Server - 6.05

Databases

Related System	Database System	Database Version	DB ID
PP7~JAVA	ORACLE	12.1.0.2	PP7

2.2 Servers in current Landscape

SAP Application Servers

System	Host	Instance Name	Logical Host	ABAP	JAVA
PP7~JAVA	aocpbs06a	aocpbs06app_PP7_02	aocpbs06app		

DB Servers

Related System	Host	Logical Host (SAPDBHOST)
PP7~JAVA	aocpbs06a	aocpbs06app

Components

Related System	Component	Host	Instance Name	Logical Host
PP7~JAVA	Java SCS	aocpbs06a	aocpbs06app_PP7_03	aocpbs06app

2.3 Hardware Configuration

Host Overview

Host	Hardware Manufacturer	Model	CPU Type	CPU MHz	Virtualization	Operating System	CPUs	Memory in MB
aocpbs06a	VMware, Inc.	VMware Virtual Platform	Xeon E5-2690	2900	VMWARE	Red Hat Enterprise Linux 6 (x86_64)	4	64427

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 system PP7 is not fully prepared for delivery of future remote services.

Rating	Check Performed
	Service Data Quality
	Service Preparation of PP7

3.1 Service Data Quality

For this service, only data of minor importance is missing.
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).
This section comprehensively shows issues with the data quality and provides hints on how to resolve them.

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.

3.1.1 Quality of Service Data in Configuration And Change Database

Prio.	Report Area affected	Details and Related CCDB Store	SAP Note
	Security of Java System PP7	The data in the store is outdated. CCDB Store: servlet_jsp used in section 'Security'	1777751

3.2 Service Preparation of PP7

Rating	Check Performed
	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 PP7

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
EHP5 FOR SAP ERP 6.0	31.12.2025	

In October 2014, SAP announced a maintenance extension for SAP Business Suite 7 core application releases to 2025. If you are running a relevant release, see SAP Note 1648480 for more details and applicable restrictions.

4.2 Support Package Maintenance - JAVA

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

Support packages

Component	Version	SP	Latest Available SP
ADSSAP	7.50	16	16
AJAX-RUNTIME	7.50	16	16

Support packages

Component	Version	SP	Latest Available SP
BI-BASE-E	7.50	16	16
BI-BASE-B	7.50	16	16
BI-BASE-S	7.50	16	16
BI-IBC	7.50	16	16
BI-REPPLAN	7.50	16	16
BI_UDI	7.50	16	16
BIWEBAPP	7.50	16	16
BI-WDALV	7.50	16	16
COMP_BUILDT	7.50	16	16
CU-BASE-JAVA	7.50	16	16
CU-BASE-WD	7.50	16	16
DATA-MAPPING	7.50	16	16
SAP_BUILDT	7.50	16	16
DI_CLIENTS	7.50	16	16
ECM-ADMIN	7.50	16	16
ECM-APPS	7.50	16	16
ECM-CORE	7.50	16	16
ECM-JEE-COMP	7.50	16	16
ECM-STORE	7.50	16	16
ENGINEAPI	7.50	16	16
EP-ADMIN	7.50	16	16
EP-APPS-EXT	7.50	16	16
EP_BUILDT	7.50	16	16
EP-CONNECTIVITY	7.50	16	16
EP-CONNECTIVITY-EXT	7.50	16	16
EP-RUNTIME	7.50	16	16
EP-WPC	7.50	16	16
ESREG-BASIC	7.50	16	16
ESREG-SERVICES	7.50	16	16
UDDI	7.50	16	16
ESCONF_BUILDT	7.50	16	16
ESP_FRAMEWORK	7.50	16	16
WSRM	7.50	16	16
ESI-UI	7.50	16	16
ESMP_BUILDT	7.50	16	16
EP-FLP	7.50	16	16
FRAMEWORK-EXT	7.50	16	16
GROUPWARE	7.50	16	16
J2EE-APPS	7.50	16	16
BASETABLES	7.50	16	16
CORE-TOOLS	7.50	16	16
ENGFACADE	7.50	16	16
J2EE-FRMW	7.50	16	16

Support packages

Component	Version	SP	Latest Available SP
LM-CORE	7.50	16	16
SERVERCORE	7.50	16	16
FRAMEWORK	7.50	16	16
JSPM	7.50	16	16
JWF	7.50	16	16
KMC-BC	7.50	16	16
KMC-COLL	7.50	16	16
KMC-CM	7.50	16	16
KMC-WPC	7.50	16	16
LM-PORTAL	7.50	16	16
LM-TOOLS	7.50	16	16
LMCFG	7.50	16	16
LMCTC	7.50	16	16
LM-CTS	7.50	16	16
LM-CTS-UI	7.50	16	16
LM-MODEL-BASE	7.50	16	16
LM-MODEL-NW	7.50	16	16
LMNWABASICAPPS	7.50	16	16
LMNWABASICMBEAN	7.50	16	16
LMNWACDP	7.50	16	16
LMNWATOOLS	7.50	16	16
LMNWAUIFRMRK	7.50	16	16
LM-SLD	7.50	16	16
LMNWABASICCOMP	7.50	16	16
MESSAGING	7.50	16	16
MMR_SERVER	7.50	16	16
MOIN_BUILDT	7.50	16	16
NWTEC	7.50	16	16
EP-BASIS	7.50	16	16
EP-BASIS-API	7.50	16	16
ODATA-CXF-EXT	7.50	16	16
SUPPORTTOOLS	7.50	16	16
KM-KW_JIKS	7.50	16	16
UISAPUI5_JAVA	7.50	16	16
SECURITY-EXT	7.50	16	16
SERVICE-COMP	7.50	16	16
SOAMONBASIC	7.50	16	16
SWLIFECYCL	7.50	16	16
SR-UI	7.50	16	16
UKMS_JAVA	7.50	16	16
UMEADMIN	7.50	16	16
UWLJWF	7.50	16	16
VC70RUNTIME	7.50	16	16

Support packages

Component	Version	SP	Latest Available SP
WD-ADOBE	7.50	16	16
WD-APPS	7.50	16	16
WD-RUNTIME	7.50	16	16
WD-RUNTIME-EXT	7.50	16	16
SAP-XI3RDPARTY	7.50	6	16
CFG_ZA	7.50	16	16
CFG_ZA_CE	7.50	16	16

JDK Version

Hostname	Instance	VM Vendor	VM Version
aocpbs06app	aocpbs06app_PP7_02	SAP AG	8.1.059 10.0.2+000

4.3 Database - Maintenance Phases

Database Version	End of Standard Vendor Support*	End of Extended Vendor Support*	Status	SAP Note
Oracle Database 12g Release 1	31.07.2019	31.07.2021		[1174136](1174136)

* 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.

> **Recommendation:** Standard vendor support for your database version has already ended / will end in the near future. Consider ordering extended vendor support from your database vendor or upgrading to a higher database version.

4.4 Operating System(s) - Maintenance Phases

Host	Operating System	End of Standard Vendor Support*	End of Extended Vendor Support*	Comment	Status	SAP Note
aocpbs06a	Red Hat Enterprise Linux 6 (x86_64)	30.11.2020	30.06.2024	Limited (ELS)		[936887](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.

4.5 SAP Kernel Release for JAVA Stack

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

Installation Name	SAP Kernel Release
PP7	745

4.5.1 Downward Compatible Kernel

SAP Note Number	What to Do	Description
1969546	Information	Release Roadmap for Kernel 74x and 75x
2350788	Information	Using kernel 7.49 instead of kernel 7.40, 7.41, 7.42 or 7.45
2556153	Information	Using kernel 7.53 instead of kernel 7.40, 7.41, 7.42, 7.45, or 7.49

This kernel version was replaced by the downward-compatible kernel. You can continue to use your current kernel version, but if an issue occurs with your current kernel, a fix will be provided for SAP kernel 749 or 753 only.

Recommendation: To avoid the potential risks associated with running an outdated SAP kernel version, replace this version with downward-compatible SAP kernel 749 or 753. The downward-compatible kernel is a special validated SAP kernel that improves the stability of your system.

5 Hardware Capacity

We have checked your system for potential CPU or memory bottlenecks and found that the hardware 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 PP7

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
aocpbs06a	3	03.01.2020		64.427	0			30.12.2019	05.01.2020

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 Security

No critical security issues were found in your system.

Rating	Check
	System Recommendations (JAVA)

Rating	Check
	Invoker Servlet

6.0.1 Invoker Servlet

The invoker servlet is intended to be used for rapid prototyping only and allows HTTP clients to invoke servlets that have not been declared in the application's /WEB-INF/web.xml file.
A specially crafted URL using the invoker servlet feature can allow unauthenticated access to arbitrary servlets. In addition, no authentication is needed to invoke these servlets.
SAP Note 1445998 provides further information.

Parameter : EnableInvokerServletGlobally

Rating	Current Value	Recommended Value
	false	false

7 Software Change and Transport Management of PP7

**Software change management issues were found in your system.
See the information in the following sections.**

7.1 SAP Netweaver Application Server JAVA of PP7

Rating	Check Performed
	Number of Changes
	Enhanced Change and Transport System (CTS+)

7.1.1 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.
Problems have been detected regarding the daily collection of data into the configuration and change database (CCDB). This may lead to inaccurate or incomplete results of the service sessions.
Check the CCDB extractors using the extractor framework administration: 'Root Cause Analysis' work center -> Common Tasks -> 'Extractor FWK Administration'. On the 'Managed System' tab page, select the managed system and filter by the extractor name "CONFIGURATION*" to check the status of the CCDB extractors.
Check the status of the single stores using the application log of the Solution Manager: Transaction SLG1, object = 'CCDB', subobject = '<SID>*', and date from = '<yesterday>'. Here you will find detailed error information about the config stores.

7.1.2 Enhanced Change and Transport System (CTS+)

The enhanced Change and Transport System (CTS+) enables you to transport Java objects and SAP-related non-ABAP applications in your system landscape along with ABAP objects. The tracking and logging features of the ABAP Change and Transport System are also available for non-ABAP applications in a central user interface. This provides maximum transparency for all changes in the complete landscape, including ABAP and non-ABAP systems. CTS+ is SAP's recommended tool for distributing changes across the transport landscape.
We could not determine whether CTS+ is used. Either it is not used or information about its usage is not available in SAP Solution Manager.
If CTS+ is not configured, you should set it up as described in the online help
http://help.sap.com/nwcts --> Application Help.

If CTS+ is configured but this information is not available in SAP Solution Manager, repeat the managed system configuration for this system in transaction SOLMAN_SETUP of your SAP Solution Manager. In step "Enter System Parameters", section "CTS+ Reporting", select CTS+ as active and enter the communication system. Also run the managed system configuration for the CTS+ communication system.

8 Database

In the checks performed, no problems regarding the administration of your database were found.

Rating	Check
	Database Support Tools
	Database Parameters
	Database Performance Indicators

8.1 Database Support Tools

8.2 Database Parameters

8.2.0.1 Database Parameters

The current database parameter settings are up to date with the latest recommendations. See the relevant SAP Note for all the latest Oracle parameter recommendations.

8.3 Database Performance Indicator

Performance Indicator

The following table lists important KPIs. No critical problems were found.

Performance Indicator	Description	Observed Value
avg. value of "db file sequential read" (ms)	Indicates the average time in ms a session is waiting for a read request from disk to complete.	1
avg. value of "log file sync" (ms)	Indicates the average time in ms a session is waiting for a Commit (or a Rollback).	2
Data Buffer Quality (%)	Indicates how often the database was able to access data in memory, thus avoiding costly i/o accesses.	99.7
Reads / User calls	Indicates the database weight of the application. A low number is normally a sign of a well-tuned system.	4.7

Performance Indicator	Description	Observed Value
User / Recursive calls	Indicates the quality of shared pool caching.	2.5

9 Java System Data for PP7

We did not detect any major problems that may affect your system performance, stability, or administration.

Rating	Check
	Java VM Memory Performance
	Java Workload Overview
	Java Application Performance
	Enterprise Portal Activity Reporting

9.1 Java VM Heap Size

The maximum heap size of the server nodes are listed in the following table. The maximum heap size of the dispatchers are also listed for NetWeaver version 6.4 and 7.0.

Host	Instance	Node	Maximum Heap Size (M)
aocpbs06app	aocpbs06app_PP7_02	server0	4096
aocpbs06app	aocpbs06app_PP7_02	server1	4096

Host	Instance	Node	Maximum Heap Size (M)
aocpbs06app	aocpbs06app_PP7_02	server2	4096

9.2 Java VM Memory Performance

9.2.1 Garbage Collection Time hourly data

The time spent on garbage collection (GC) in the interval reported is not critical.

The graphic below provides hourly profile data for garbage collection (GC) time for each instance. Garbage collections have a direct impact on system performance. The situation may be critical if Java server nodes spend a lot of time on the garbage collections, especially at peak period.

9.3 Java Workload Overview

9.3.1 HTTP Sessions

The diagram displays a 24-hour profile for the average and maximum number of HTTP sessions.

9.3.2 User Logins

The diagram displays a 24-hour profile for the average and maximum number of user logins. This user login data refers not only to the dialog user, but to all of the users that log on to the J2EE engine.

9.3.3 HTTP Requests

The distribution of HTTP requests to server nodes is even.

The table below provides the weekly average and maximum number of HTTP requests for each Java server node.
Note: If the system has more than 20 server nodes, only the data for the 10 server nodes with the highest values and the 10 server nodes with the lowest values is listed.

Host name	Instance name	Node name	Average	Max
aocpbs06app	aocpbs06app_PP7_02	SERVER1	191,18	3.162,00
aocpbs06app	aocpbs06app_PP7_02	SERVER2	167,08	1.434,00
aocpbs06app	aocpbs06app_PP7_02	SERVER0	155,37	1.064,00

9.3.4 Active Application Threads

The number of active application threads is not critical.

The table below provides the weekly average and maximum number of active application threads for each Java server node.
Note: If the system has more than 20 server nodes, only the data for the 10 server nodes with the highest values and the 10 server nodes with the lowest values is listed.

Host name	Instance name	Node name	Average	Max	Configured
aocpbs06app	aocpbs06app_PP7_02	SERVER0	6,14	7	300
aocpbs06app	aocpbs06app_PP7_02	SERVER1	6,13	7	300
aocpbs06app	aocpbs06app_PP7_02	SERVER2	6,12	7	300

9.4 Java Application Performance

Application performance can be assessed based on the average response time or on the accumulated response time of the applications. The accumulated response time takes the average response time as well as the number of calls to an application into account.
The following sections list different types of Java application components sorted by their accumulated response time. This makes it possible to determine which Java application components cause the highest overall workload of the system.

9.4.1 Top WebDynpro Java Applications

Rank	Name	Acc. Resp. Time [s]	Execus.	Ave. Resp. Time [ms]
1	SAP.COM/PB/PAGEBUILDER	74	586	126
2	SAP.COM/ESS~WIW/WHOISWHOAPPLICATION	46	341	136

Rank	Name	Acc. Resp. Time [s]	Execus.	Ave. Resp. Time [ms]
3	SAP.COM/ESS~ORG/ORGCHART	18	244	72

Recommendations:
The table above lists the top Web Dynpro Java applications sorted by their accumulated response time. The average response time and execution times are also listed. This information is very useful if you have performance problems relating to Web Dynpro applications in the system. It can help to identify the applications with the highest workload in the system and determine the possible root cause of the performance problem.

9.4.2 Top Servlets

Rank	Name	Acc. Resp. Time [s]	Execs.	Ave. Resp. Time [ms]
1	COM.SAP.PORTAL.PRT.DISPATCHER.DISPATCHERSERVLET	7970	236806	34
2	COM.SAP.ADS.GRMG.ADSGRMGAPPLICATION	2822	2008	1406
3	COM.SAP.ENGINE.SERVICES.WEBSERVICES.TOOLS.WSIL.WSILSERVLET	2114	8032	263
4	COM.SAP.PORTAL.NAVIGATION.GATEWAY	1381	15870	87
5	COM.SAP.ENGINE.SERVICES.WEBSERVICES.SERVLET.SOAPSERVLET	1222	30703	40
6	COM.SAP.LCR.SAGENT.DATASUPPLIERSERVLET	286	266	1074
7	COM.SAPPORTALS.WCM.PROTOCOL.WEBDAV.SERVER.WDSERVLET	271	35219	8
8	COM.SAP.PORTAL.NAVIGATION.SERVLET.NAVIGATIONSERVLE T	210	12124	17
9	COM.SAP.TC.WEBDYNPRO.SERVERIMPL.WDC.DISPATCHERSERVLET	121	747	162
10	COM.SAP.SECURELOGIN.CONNECTION.HTTP.SECURELOGIN30SERVLET	113	5723	20

Recommendation:
The above table lists the top servlets sorted by their accumulated response time. The average response time and execution times are also listed. This information is very useful if you have performance problems relating to servlets in the system. It can help to identify

the servlets with the highest workload in the system and determine the possible root cause of the performance problem.

9.4.3 Top JCO Calls

Rank	Name	Acc. Resp. Time [s]	Execs.	Ave. Resp. Time [ms]
1	JCO-BWP-100@AOCAPW06B|BICS_PROV_GET_RESULT_SET	2884	418	6900
2	JCO-BWP-100@AOCAPW06B|BICS_PROV_GET_RESULTSET_DETAIL	1369	131	10448
3	JCO-BWP-100@AOCAPW06B|BICS_PROV_GET_MEMBERS	139	780	179
4	JCO-BWP-100@AOCAPW06B|BICS_PROV_OPEN	31	659	47
5	JCO-BWP-100@AOCAPW06B|BICS_PROV_GET_INITIAL_STATE	27	562	48
6	JCO-BWP-100@AOCAPW06B|BICS_PROV_SUBMIT_VARIABLES	22	126	177
7	JCO-P01-100@AOCR3S06C|HRXSS_WIW_GET_RESULT_LIST	21	24	894
8	JCO-BWP-100@AOCAPW06B|RSBOLAP_BICS_STATISTIC_INFO	19	1651	12
9	JCO-BWP-100@AOCAPW06B|BICS_PROV_VAR_GET_VARIABLES	17	149	112
10	JCO-BWP-100@AOCAPW06B|BICS_CONS_SET_GET_SESSION_PROP	11	389	30

Recommendation:
The above table lists the top JCo calls sorted by their accumulated response time. The average response time and execution times are also listed. This information is very useful if you have performance problems relating to JCo calls in the system. It can help to identify the JCo calls with the highest workload in the system and determine the possible root cause of the performance problem.

9.4.4 Top SQL Statements

Rank	Name	Acc. Resp. Time [s]	Execs.	Ave. Resp. Time [ms]
1	SELECT "FBLOB" FROM "J2EE_CONFIGENTRY" WHERE "CID" = ? AND "NAMEHASH" = ? AND "NAME" = ? AND "ISFILE" = ?	0	1678	0
2	INSERT INTO "BC_SLD_CHANGELOG" ("APPL", "NA_KEY", "TSTAMP", "COUNTER", "ENTRY_TYPE", "CLASS_HASH", "CLASS_HANDLE", "OBJNAME", "OBJTYPE", "OP...	0	321	1
3	SELECT "KEY_FIELD", "ARCH_START_TIME", "ARCH_NEXT_SESSION", "ARCH_UPDATE", "ARCH_INTERVAL", "ARCH_INTERVAL_TYPE", "ARCH_PARAL_SESSION", "ARC...	0	921	0
4	SELECT MAX ("POS") FROM "BC_JOB_LOG" WHERE "JOBID" = ?	0	262	1
5	SELECT "INST_HASH", "INST_HANDLE", "INSTNAME_BYTES" FROM "BC_SLD_INST" WHERE "APPL" = ? AND "NA_KEY" = ? AND "CLASS_HASH" = ? AND "CLASS_HAN...	0	187	1
6	SELECT "BC_JOB_DEF_ARGS"."ARG_NAME", "BC_JOB_DEF_ARGS"."ARG_TYPE", "BC_JOB_DEF_ARGS"."ARG_DIRECTION", "BC_JOB_DEF_ARGS"."ARG_DEFAULT", "BC_J...	0	258	1
7	SELECT "JPL_APP_ACTN"."JPL_ID", "JPL_APP_PC"."JPL_NAME", "JPL_APP_ACTN"."JPL_NAME", "JPL_APP_ACTN"."JPL_DESC", "JPL_APP_ACTN"."JPL_RUN_AS" F...	0	2803	0
8	SELECT SYS_CONTEXT (?, ?), SYS_CONTEXT (?, ?) FROM DUAL	0	1981	0
9	SELECT * FROM "XI_AF_PROF_RUNTIME" WHERE "PROFILE_HASH" = ? AND "NODE" = ? AND "PROC_TIMESTAMP" < ? AND "PROC_STATUS" = ? FOR UPDATE	0	700	0
10	SELECT "TIMESTAMPHOUR", "USERTYPE", "LOGONID", "IMPRESSIONS" FROM "WCR_USERNODELOGON" WHERE "USERTYPE" < > ? ORDER BY ?, ?	0	191	1

Recommendation:

The above table lists the top SQL statements sorted by their accumulated response time. The average response time and execution times are also listed. This information is very useful if you have performance problems relating to SQL statements in the system. It can help to identify the SQL statements with the highest workload in the system and determine the possible root cause of the performance problem.

9.5 Enterprise Portal Activity Reporting

The data displayed in this section allows you to obtain an overview of the content usage of your Enterprise Portal. More detailed information is available in the Solution Manager diagnostics under Reporting -> Usage Statistics -> Portal Activity Reporting.

9.5.1 Top Iviews

The following table lists the top iViews sorted by the accumulated response time. Note that the average was calculated across all application nodes of the SAP AS Java cluster.

Rank	Name	Acc. Resp. Time [s]	Execs.	Ave. Resp. Time [ms]
1	COM.SAP.IP.BI.WEB.PORTAL.INTEGRATION.LAUNCHER|DOCONTENT	9393	2380	3947
2	COM.SAP.KM.DOCS|DOCONTENT	698	70438	10
3	COM.SAP.PORTAL.NAVIGATION.PORTALLAUNCHER.DEFAULT|DOCONTENT	613	31726	19
4	COM.SAP.PORTAL.FLPRESOURCES|DOCONTENT	419	31598	13
5	COM.SAP.PORTAL.AFPRESOURCES|DOCONTENT	386	31726	12
6	COM.SAP.IP.BI.WEB.PORTAL.INTEGRATION.MIMEREPOSITORY|DOCONTENT	49	586	84
7	GOV.CA.JUD.IV_PORTAL_FAVORITES|DOCONTENT	24	36	656
8	GOV.CA.JUD.IV_P01_SECURE|DOCONTENT	6	6152	1
9	COM.SAP.PORTAL.DSM.TERMINATOR|DOCONTENT	4	13950	0
10	COM.SAP.IP.BI.BEX|DOCONTENT	3	20	154

Recommendation:
The above table lists the top iViews sorted by their accumulated response time. The average response time and execution times are also listed. This information is very useful if you have performance problems relating to iViews on the portal. It can help to identify the iViews with the highest workload in the system and determine the possible root cause of the performance problem.

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

Solution Manager System	SMP
Solution Manager Version	SOLUTION MANAGER 7.2
Service Tool	720 SP16