



SERVICE REPORT

EarlyWatch®Alert

Confidential

QPT

SAP ERP 6.0

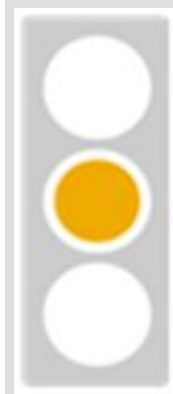
Status Not Productive

DB System DB2 UDB for UNIX and Windows 10.1

Processed on SAP Solution Manager SI7
Release SOLUTION MANAGER 7.1
Service Tool 701_2010_1 SP22

Analysis from 23.03.2015 Session No. 2000000235537
Until 29.03.2015 Installation No. 0000000000

1 Service Summary



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

ALERT OVERVIEW

	Noticeable potential for reduction of data volume was identified.
	Some tables are reaching their size limits.
	We found more than 30 ABAP dumps in your system.
	Standard users have default password.
	Secure password policy is not sufficiently enforced.
	A high number of users has critical authorizations
	Gateway Access Control List (reg_info/sec_info) contains trivial entries
	Protection of Passwords in Database Connections
	Based on response times in your ABAP system performance problems may occur.

Perform the following Guided Self Services.

Guided Self Service	FAQ SAP Note
Security Optimization Service	696478
Data Volume Management	1904491

For more information about Guided Self-Services, see [SAP Enterprise Support Academy](#). Register for an Expert-Guided Implementation Session for the Guided Self-Service at [SAP Enterprise Support Academy - Learning Studio - Calendar](#).

CHECK OVERVIEW

Topic Rating	Topic	Subtopic Rating	Subtopic
	SAP System Configuration		
			Database - Maintenance Phases
			Operating System(s) - Maintenance Phases
			SAP Kernel Release
	Performance Overview		
			Performance Evaluation
	SAP System Operating		
			Availability based on Collector Protocols
			Program Errors (ABAP Dumps)
			Update Errors
			Table Reorganization
	Hardware Capacity		

Topic Rating	Topic	Subtopic Rating	Subtopic
✓	DB Performance		
		✓	Database Version
		✓	Locking
		✓	Average Read and Write Times
!	DB Administration		
		✓	Database Storage
		✓	10 Largest and Fastest Growing Tables
		✓	Tablespaces with a critical size
		!	Tables with a critical size
		✓	Table Virtualization
		!	Enhanced Monitoring
		✓	Log File Management
		✓	Logfiles Recommendations
		✓	Database Backup History
✓	Database Server Load From Expensive SQL Statements		
			Expensive SQL Statements
			Database Server Load
!	Security		
		!	System Recommendations (ABAP)
		!	Default Passwords of Standard Users
		✓	Control of the Automatic Login User SAP*
		!	Protection of Passwords in Database Connections
		!	ABAP Password Policy
		!	Gateway and Message Server Security
		!	Users with Critical Authorizations
!	Software Change Management		
		✓	Number of Changes
		!	Failed Changes
!	Data Volume Management (DVM)		

Note: All recommendations provided in this report are based on our general experience. We advise that you test our recommendations 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 on component SV-SMG-SER-EWA.

Note: If you require assistance in resolving any 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, create a customer message on component SV-BO. For details of how to set the appropriate priority level, see [SAP Note 67739](#).

.....
 <Placeholder for other EWA chapters>

2 Data Volume Management (DVM)



We found significant potential for data volume reduction on your system QPT.

The following section highlights database objects that show potential for data reduction by data archiving or deletion of data, for example. These database objects can be used as a starting point on the way to establishing a well-defined Data Volume Management (DVM) process.

Alerts are created based on estimations of saving potential, starting with "easy-to-implement" objects that can be implemented by the IT department instead of focusing on application data that will require intensive discussions with the business owners before performing actions such as moving the data from the database to an archive store. It is often possible to reduce the entire system size considerably without touching upon business-data-related archiving concepts.

Keeping data volumes at the required minimum helps reduce the TCO, reduces maintenance efforts, and prevents drops in system performance.

For more information about Data Volume Management, see sap.service.com/dvm or join the collaboration platform for DVM: "Enterprise Support Value Map". Either register using the following menu path: SAP Service Market Place SAP Support Portal -> alias ESACADEMY support.sap.com/esacademy -> Value Maps -> Join Now (register for DVM) or contact your local SAP Enterprise Support Advisory Center.

The ES Academy also offers Expert-Guided Implementation (EGI) training on DVM, which is helpful when using the DVM Workcenter and Guided Self-Service in SAP Solution Manager.

2.1 Summary

In this section, information and data regarding DVM is displayed. The data was collected on 16.04.2015 for client 004 of your system QPT.

Five objects (tables/indexes) were analyzed regarding potential for data reduction. These objects are displayed in the table below together with their potential for data reduction.

Rating	Object	Appl. Area	Document Type	Doc. Type Size [GB]	Saving Pot. [%]	Saving Pot. [GB]
⚠	ARFCSDATA	BC	RFC	364,51	93,38	340,38
⚠	EDIDS	BC	ALE Integration Technology	260,84	99,75	260,18
⚠	EDI40	BC	ALE Integration Technology	260,84	99,75	260,18
✓	DBTABLOG	BC	DB-Independent Database Interface	63,89	99,53	63,59
⚠	ARFCSSTATE	BC	RFC	364,51	93,38	340,38

Note:

The saving potential [%] is determined based on the header table of the document type. The header table is not necessarily the one listed in the "Object" column.

Here, the following rules apply:

- For Basis and Cross-Application, all tables/indexes older than 6 months are considered to have saving potential.
- For application data, all tables/indexes older than 24 months are considered to have saving potential.

The rating for each table/index is calculated as follows:

- A YELLOW rating indicates a saving potential of more than 1GB for an object representing at least 0,1% of the total database size.
- A GREEN rating indicates a saving potential which is less than 1GB or representing less than 0,1% of the total database size for an object.
- An UNDEFINED rating indicates that the saving potential could not be calculated for the object in question.

Recommendation: You can find information about which actions to take to reduce the data volume either in the Data Management Guide or in SAP Note [706478](#): Preventing Basis tables from increasing considerably.

You can access the Data Management Guide in your SAP Solution Manager system:
 Transaction SOLMAN_WORKCENTER
 Data Volume Management
 SAP links to best-practice documents
 Data Management Guide 6.6

Execute a DVM Guided Self Service report that includes each of the objects listed above to get details of the applicable DVM methodology per object.
 You can do this from SAP Solution Manager 7.1 via the Data Volume Management Workcenter by calling the Service Documents application. Alternatively, you can create the self-service session via the SAP Engagement and Service Delivery Workcenter in your SAP Solution Manager 7.1. Before executing the self-service, you can check whether SAP has released any DVM information regarding the listed objects by using the content browser in the Data Volume Management Workcenter.

2.2 Date of Analysis

The following table shows the date of the current analysis and the date of the previous analysis for your system QPT. You can also see which client of your system QPT was analyzed.

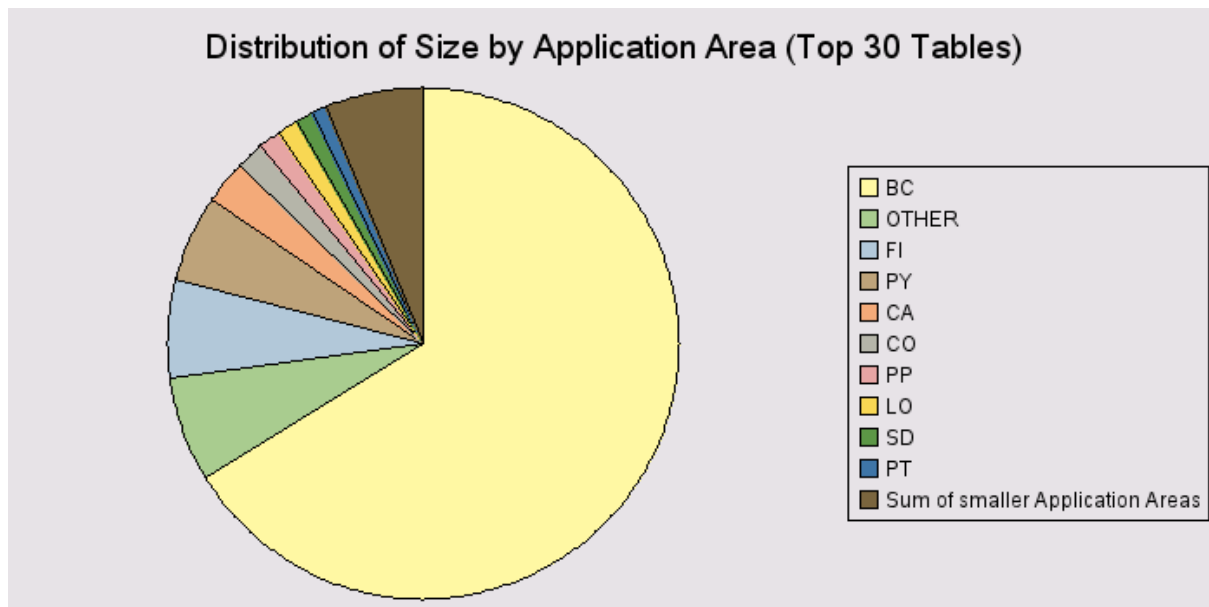
Analysis	Analysis Date	Analyzed Client
Current Analysis	16.04.2015	004
Previous Analysis	09.04.2015	004

2.3 Distribution of Size by Application Area

The following pie chart shows how data from the top 30 tables is distributed across the top 10 application areas. From here, you can easily identify the applications that cause the largest volume of data in your system. You can focus your attention on dealing with the largest application(s).

Note:

Smaller application areas other than the top 10 application areas are summed up and displayed as one single section of the pie chart.



Application Area	Size [GB]	Portion [%]
BC	1.196,58	66,21
OTHER	118,30	6,55
FI	115,04	6,37
PY	97,23	5,38

Application Area	Size [GB]	Portion [%]
CA	50,27	2,78
CO	31,68	1,75
PP	25,04	1,39
LO	23,27	1,29
SD	19,44	1,08
PT	16,76	0,93
Sum of smaller Application Areas	113,66	6,29
Total Size of all Application Areas	1.807,28	100,00

2.4 Top 30 Tables (including Indexes) and Document Type Assignment

The following table lists the top 30 tables in your system QPT. The "Size" column indicates the total size of a table and its associated indexes. The "Trend" column specifies the trend of the table size compared with the last month, if available. If technically possible, the corresponding document type and application area are also shown. You can use this information to determine the application areas responsible for the growth rate in your system.

Note:

The "Document Type" is used by SAP during the DVM Strategy session to perform a detailed analysis of the tables. This provides a deeper level of granularity than the analysis by application area. The table description is collected by our tools (that is, transaction ST14) depending on the logon language (default is English). 'N/A' could indicate that the description is not available in the relevant language.

Based on SAP experience, the "Complexity" indicates how much effort might be needed to reduce the data volume for a particular object. Low complexity indicates a comparatively low effort for data volume reduction. In contrast, high complexity indicates that a higher effort is required to reduce the data volume.

Table Name	Size [GB]	Complexity	Appl. Area	Document Type	Trend*
ARFCSDATA	314,07	Low	BC	RFC	➔
EDIDS	106,05	Low	BC	ALE Integration Technology	➔
EDI40	84,25	Low	BC	ALE Integration Technology	➔
DBTABLOG	63,88	Low	BC	DB-Independent Database Interface	➔
ZZOM1A	56,39	Medium	OTHER	OTHERS	➔
ARFCSSTATE	46,42	Low	BC	RFC	➔
DYNPSOURCE	42,93	Medium	BC	Client/Server Technology	➔
USRBF2	42,89	Medium	BC	User and Authorization Management	➔
PCL2	39,51	High	PY	Payroll: General Parts	➔
EDIDC	35,28	Low	BC	ALE Integration Technology	➔
GLFUNCA	34,72	Medium	FI	Basic Functions	➔
BALDAT	32,09	Low	BC	Basis Application Log	➔
REPOLOAD	30,21	High	BC	Client/Server Technology	➔
IDOCREL	27,60	Low	BC	ALE Integration Technology	➔
SRRELROLES	26,09	Low	BC	General Object Relations	➔
DMS_CONT1_CD1	22,55	Medium	CA	Document Management System	➔
SOC3	19,75	Medium	BC	Use BC-SRV-COM	➔
ZZBSEG_XRP	18,72	Medium	OTHER	OTHERS	➔
D010TAB	14,85	Medium	BC	Activation Program, Conversion Program, DB Utility, MC, SPDD	➔
E071K	14,83	Low	BC	Transport Organizer	➔
REPOSRC	13,48	High	BC	Client/Server Technology	➔
PPOIX	12,51	Medium	PY	Data Transfer	➔

Table Name	Size [GB]	Complexity	Appl. Area	Document Type	Trend*
PCL4	12,06	High	PY	Payroll: General Parts	↗
FAGLFLEXA	11,45	High	FI	General Ledger Accounting	↗
PTDW_PWS_DB	10,97	Medium	PT	Personnel Time Management	↗
Z5XMTSWNEX_LOG	10,57	Medium	OTHER	OTHERS	↗
/SDF/BPM_TSTAD	10,01	Medium	SV	Service Data Download	↗
SMTC_HIST	7,93	Medium	BC	Workbench Utilities	↗
AGR_HIERT	7,44	Medium	BC	Authorization and Role Management	↗
WBCROSSGT	7,04	Medium	BC	Repository Infosystem	↗
Top30 tables are 65.13 % of total database size (1807.28 GB)	1.177,00				

* In general, trend evaluation is performed by comparing table size on a monthly basis. Since scheduling of the jobs creating ST14 datasets is not set up for your system QPT at a monthly interval, extrapolation was required here for trend calculation.

Note:

The direction of the trend arrow reflects the growth/reduction of the table in relation to the previous month's measurement. Therefore, an arrow pointing vertically upward indicates a high growth rate and an arrow pointing vertically downward reflects a reduction in growth (in both cases, the deviation exceeds 10% of the total size of the table).

An arrow that is at an angle to the top or bottom is related to a moderate growth/reduction rate (lower than 10% but higher than 3% of the total size of the table).

A horizontal arrow indicates no change or only a slight change in size (less than 3% of the total size of the table). A GRAY icon indicates that trend calculation was not possible.

2.5 Proposed Objects

The table below shows the objects for which data reduction efforts will show the most benefit.

Table Name	Rank	Size [GB]	Complexity	Appl. Area	Document Type	Trend
ARFCSDATA	1	314,07	Low	BC	RFC	↗
EDIDS	2	106,05	Low	BC	ALE Integration Technology	↗
EDI40	3	84,25	Low	BC	ALE Integration Technology	↗
DBTABLOG	4	63,88	Low	BC	DB-Independent Database Interface	↗
ARFCSSTATE	6	46,42	Low	BC	RFC	↗

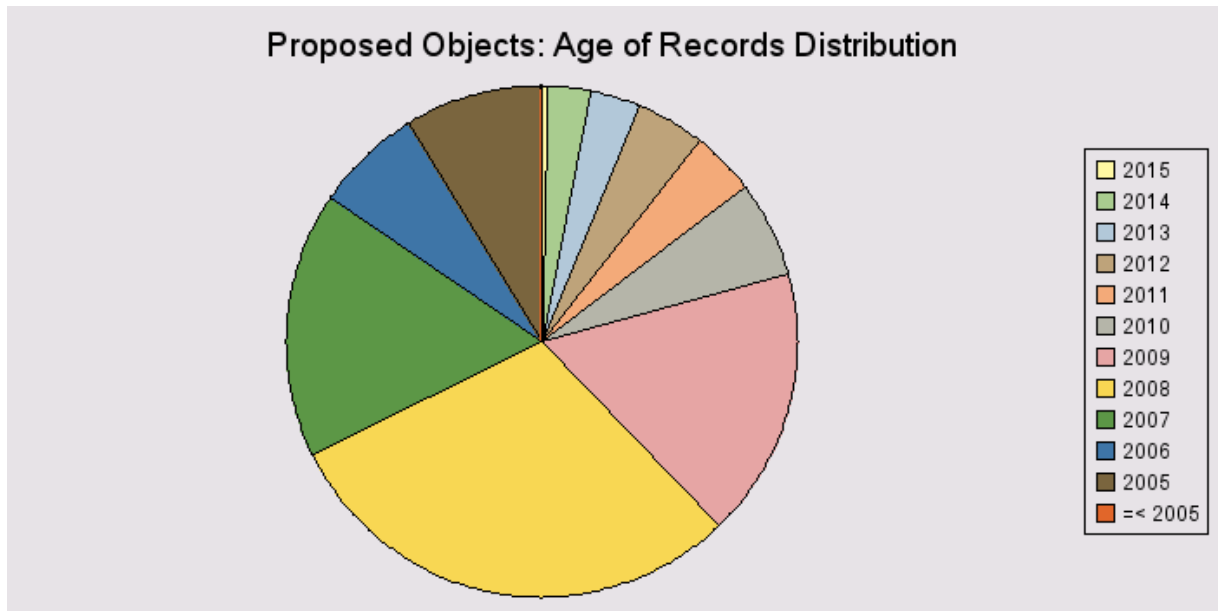
* Since scheduling of the jobs creating ST14 datasets is not set up for your system QPT at a monthly interval, extrapolation was again required for trend calculation.

Note:

The display of the trend icons follows the explanation in the "Top 30 Tables (including Indexes) and Document Type Assignment" section.

2.5.1 Proposed Objects: Age of Records Distribution

The following chart shows the yearly distribution of data for the abovementioned "Proposed Objects" in your system QPT.



2.5.2 Proposed Objects: Saving Potential

In the table below, the saving potential for the "Proposed Objects" is displayed based on the age of records.

Rating	Object	Document Type	2015	2014	2013	=< 2012	Saving Pot. [%]	Saving Pot. [GB]
⚠	ARFCSDATA	RFC	83.906	834.262	199.009	2.250.179	93,38	340,38
⚠	EDIDS	ALE Integration Technology	741	4.138	11.424	565.480	99,75	260,18
⚠	EDI40	ALE Integration Technology	741	4.138	11.424	565.480	99,75	260,18
✓	DBTABLOG	DB-Independent Database Interface	125.192	929.559	1.767.648	57.047.745	99,53	63,59
⚠	ARFCSSTATE	RFC	83.906	834.262	199.009	2.250.179	93,38	340,38

Note:

The records in the individual year columns and the saving potential [%] are determined based on the header table of the document type. The header table is not necessarily the one listed in the "Object" column. Consequently, the figures do not necessarily reflect the number of entries in the table listed in the "Object" column.

The saving potential [GB] is calculated by applying the percentage savings to all the tables of the document type.

For more details about rating the saving potential, see the "Summary" section.

2.6 Additional Information

2.6.1 Archiving Statistic Information

The following table shows the overall archiving situation in client 004 of your system QPT. It lists all archiving objects that have been executed with additional information about the number of archived and deleted objects and the size of the archive files by status ('Archived and Deleted' or 'Archived only').

You can use this information to determine whether the overall archiving strategy is working as intended or whether additional measures are required. You can also determine the size of the archive files waiting to be deleted. The related archive files may have already been moved to the content server or file system.

Archiving Object	Compl. Arch. Runs	First Run	Last Run	No. of Arch. and Del. Objects	Size of Arch. and Del. File [MB]	Arch. Objects awaiting Deletion	Size of Arch. File awaiting Deletion [MB]
AINEPC_ARC	1	15.12.2006	15.12.2006	1210	0.37	0	0.00
BC_DBLOGS	3	09.11.2009	14.01.2011	361	76.14	0	0.00
BC_SBOOK	2	14.06.2005	31.10.2014	3184	1.00	0	0.00

Archiving Object	Compl. Arch. Runs	First Run	Last Run	No. of Arch. and Del. Objects	Size of Arch. and Del. File [MB]	Arch. Objects awaiting Deletion	Size of Arch. File awaiting Deletion [MB]
CV_DVS	14	17.02.2006	21.10.2010	2890	29.48	0	0.00
FI_ELBANK	1	28.01.2010	28.01.2010	18	0.02	0	0.00
MM_MATBEL	10	10.01.2008	28.11.2014	325	0.23	0	0.00
SD_VBAK	14	12.11.2007	22.08.2014	192	1.13	106	0.59
ZAR_LOG	15	15.11.2010	28.04.2011	200	0.06	400	0.11
Z_HRDOCMNT	83	21.08.2007	30.08.2007	34	0.53	49	0.61

Note:






If there are archiving objects awaiting deletion, check whether this works as designed and whether the deletion is expected to take place within the next few days. Archive files for which the delete jobs have not yet been scheduled may cause data to be archived redundantly.

If there are archiving objects for which the most recent archiving run is older than one year, check whether this works as designed or whether archiving has been discontinued unintentionally.

2.6.2 Overview of available DVM Service Documents

In the table below, you can find a list of available DVM service documents for your system QPT.

These documents relate to Guided Self Services (GSS) performed on system QPT. The documents can be accessed via the link in the table below or through the DVM Workcenter using the "Service Documents" application.

Session Rating	Service Document Creation Date	Link to Service Document	Service Type	Service Session Number
	16.04.2015	Link to Service Document	DVM - Best Practice Session	2000000240458
	09.04.2015	Link to Service Document	DVM - Best Practice Session	2000000239023
	02.04.2015	Link to Service Document	DVM - Best Practice Session	2000000237296
	26.03.2015	Link to Service Document	DVM - Best Practice Session	2000000235278
	19.03.2015	Link to Service Document	DVM - Best Practice Session	2000000233661

Note:

A RED or YELLOW icon for the session rating indicates that DVM recommendations are provided in this document and action is required.

A GREEN icon indicates that no immediate action is required.

A GRAY icon indicates that no session rating was determined.