

SAP EarlyWatch Alert

SAP HANA Deployment Best Practices
Active Global Support, SAP AG – 2015



Learning Objectives of this Presentation



After completing this presentation, you will be able to:

- Understand the different landscape scenarios
- Set-up SAP EarlyWatch Alert
- Understand the content of SAP EarlyWatch Alert

Content Overview

- Unit 1: SAP EarlyWatch Alert (EWA) Setup for SAP HANA
- Unit 2: SAP HANA Content in EWA



SAP EarlyWatch Alert Setup for SAP HANA



How to set-up EWA

The following Knowledge Base Article describes in detail, how the EWA is setup in general:

[1907383 - How to setup and troubleshoot EarlyWatch Alert reports in SAP Solution Manager 7.1](#)

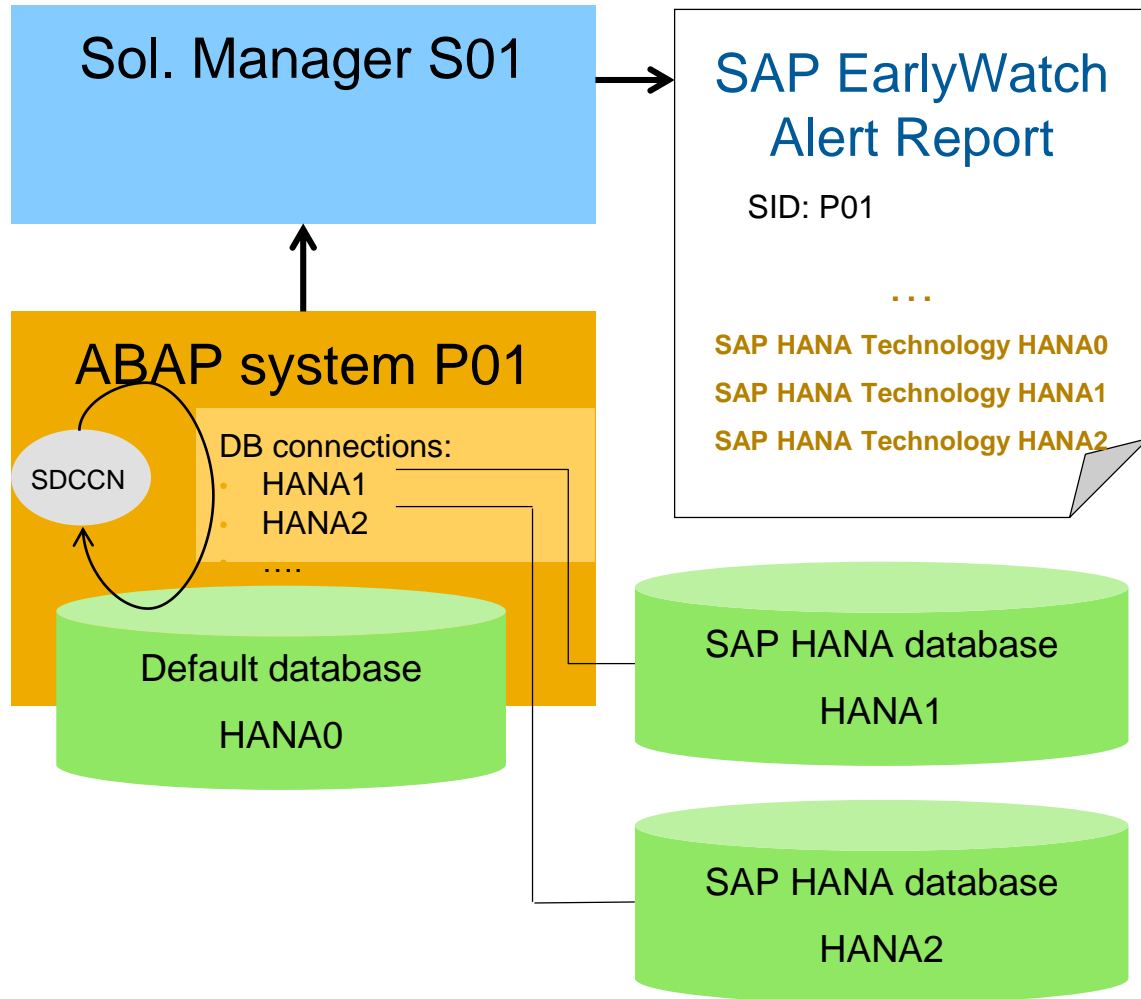
The HANA specifics for EWA are covered by

[1958910 - EarlyWatch Alert For HANA Database](#)

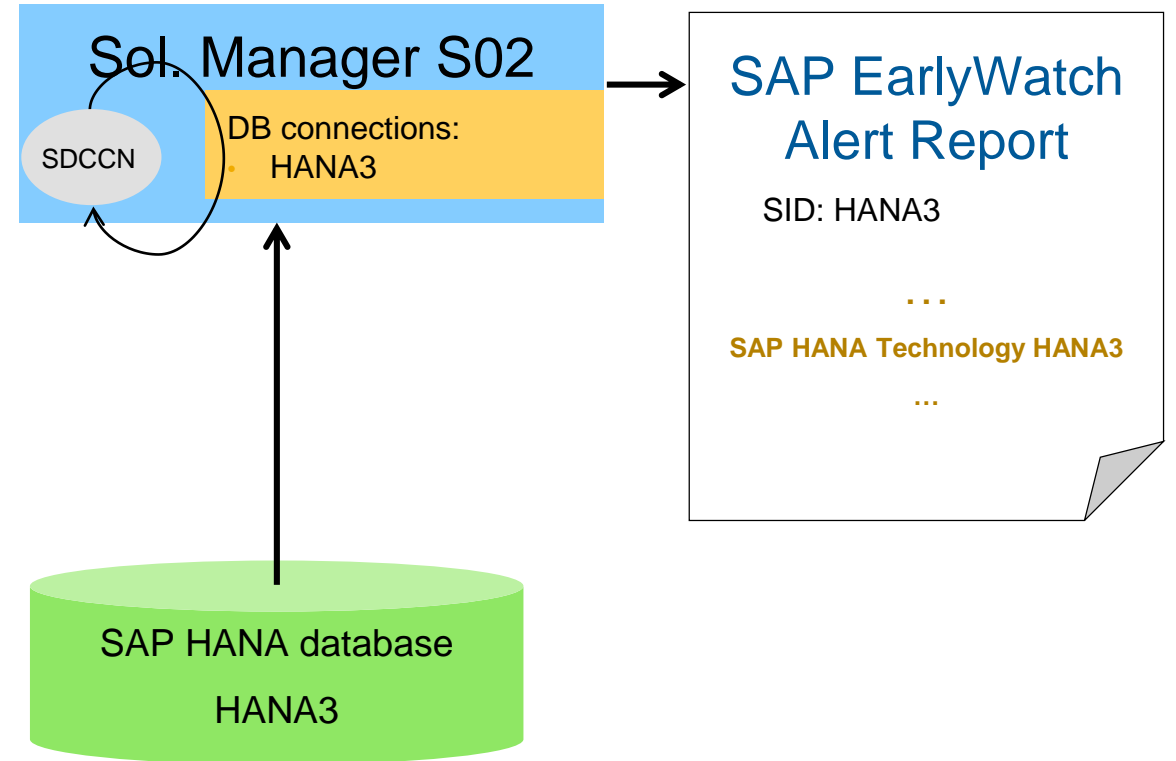
The two scenarios described in this note are visualized on the next slide.

Two scenarios for setting up EWA for HANA

Scenario I



Scenario II



See SAP Note [1958910](#)

Prerequisites

- On SAP Solution Manager
 - ST-SER (SAP Solution Manager service tools) automated service content update activated as per SAP Note [1143775](#)

Prerequisites for Scenario I:

- On the ABAP system:
 - ST-PI 2008_1_7xx SP **10** or ST-PI 740 has to be implemented
 - SAP Note [1985402](#) has to be implemented (includes newest corrections to ST-PI SAP HANA Download Module)

Prerequisites for Scenario II:

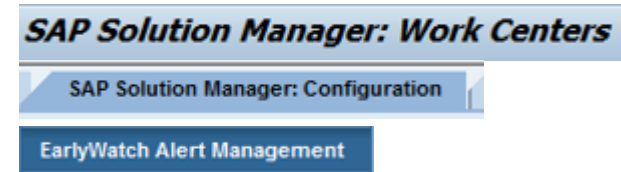
- One or several SAP HANA databases are connected via DB connections to Solution Manager.
- On SAP Solution Manager:
 - ST-PI 2008_1_7xx SP **10** or ST-PI 740 has to be implemented
 - SAP Note [1985402](#) has to be implemented (includes newest corrections to ST-PI SAP HANA Download Module)

EarlyWatch Management in Solution Manager

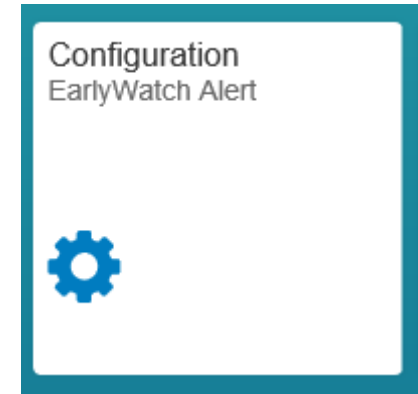
EarlyWatch Alert Management can be used to:

- review the EWA activation per managed system
- check the prerequisites for a complete EWA report
- define email recipients of the weekly EWA report
- configure optional content like Business Key Figures or Data Volume Recommendations

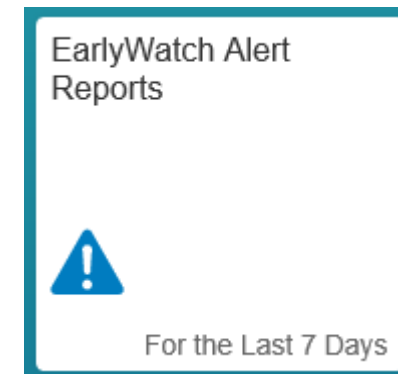
7.1



7.2



Solution Manager 7.2 Launchpad offers a tile to view the results:





SAP HANA Content in EWA

Chapter “SAP HANA Technology” In EWA Report

1 SAP HANA - Technology for SDH

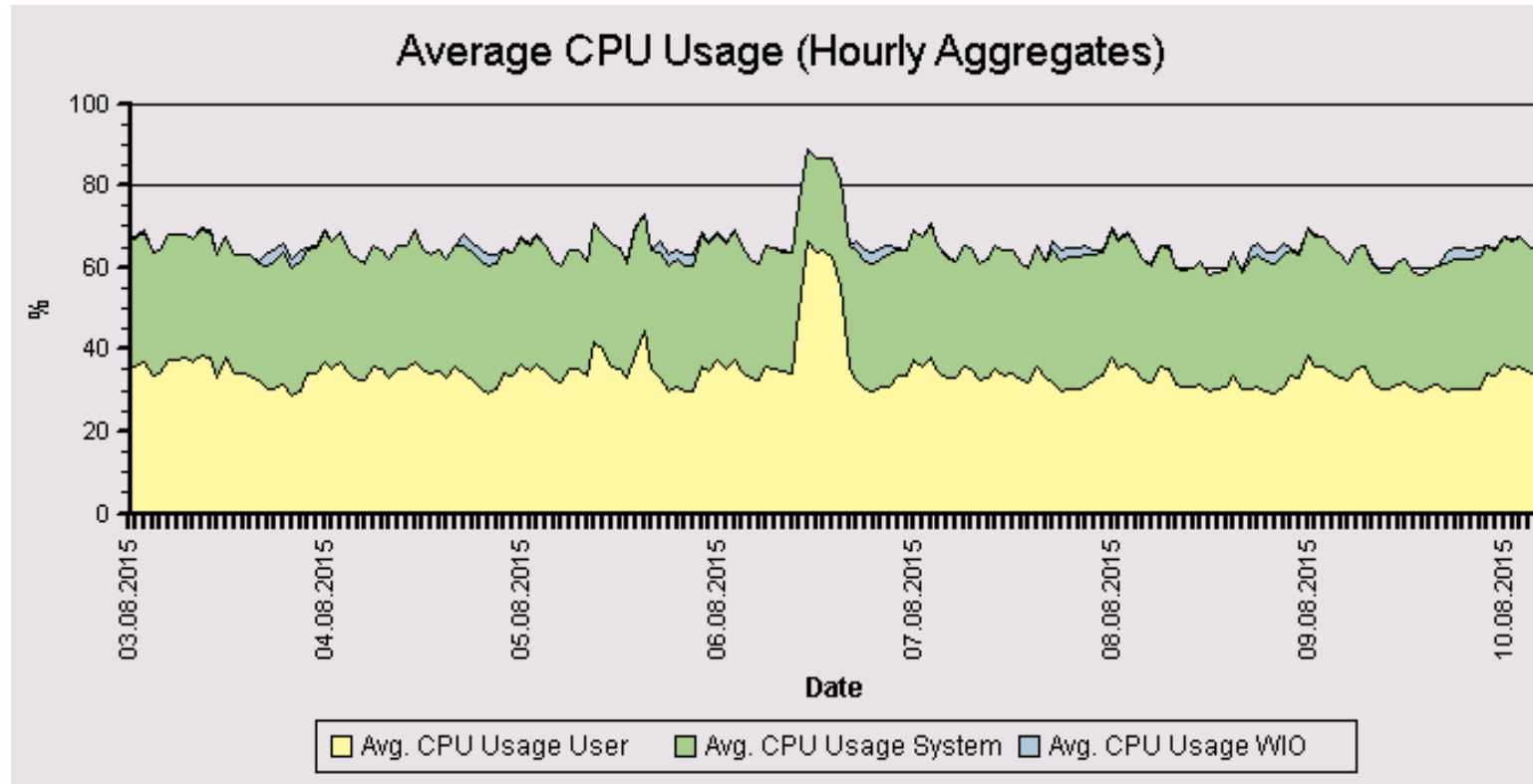


We have checked your SAP HANA environment and found some issues that might have a negative impact on your overall system stability and performance. Review the report carefully and implement our recommendations.

Rating	Check
✓	HANA Download Function Module Problem
✓	Overview
!	SAP HANA Stability and Alerts
!	SAP HANA Database Configuration
✓	SAP HANA Resource Consumption
!	SAP HANA Workload and Performance
✓	Size and Growth
!	Administration
!	Important SAP Notes

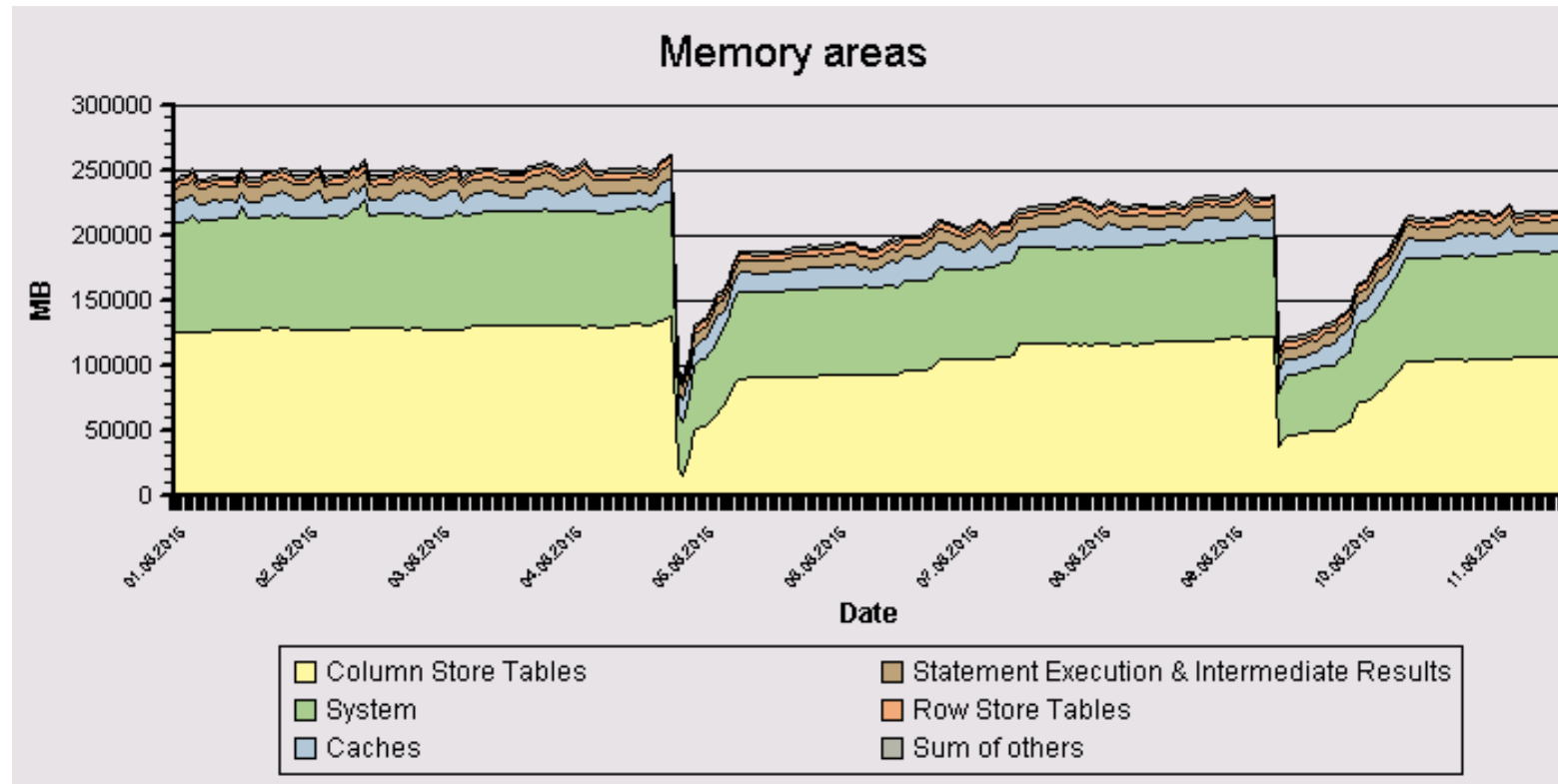
The chapter starts with a rating table giving an overview on all topics checked. A complete sample report is available in the documents section.

Resource Consumption: CPU Consumption



The EWA report provides the CPU consumption for each DB host over the analyzed week. See SAP Note [2100040 - FAQ: SAP HANA CPU](#).

Resource Consumption: HANA Memory Allocation



This chart gives an overview on how much memory is used by which content and the development in time shows when the host has been restarted or when an out-of-memory dump occurred. See SAP Note [1999997 - FAQ: SAP HANA Memory](#).

Performance: Memory Consumption

When you are manually checking the system:

- Are there out-of memory dumps? (oom – diagnosis files: Operations took too much memory)
- Are there table unloads? (unloads – diagnosis files: Column based tables were unloaded)

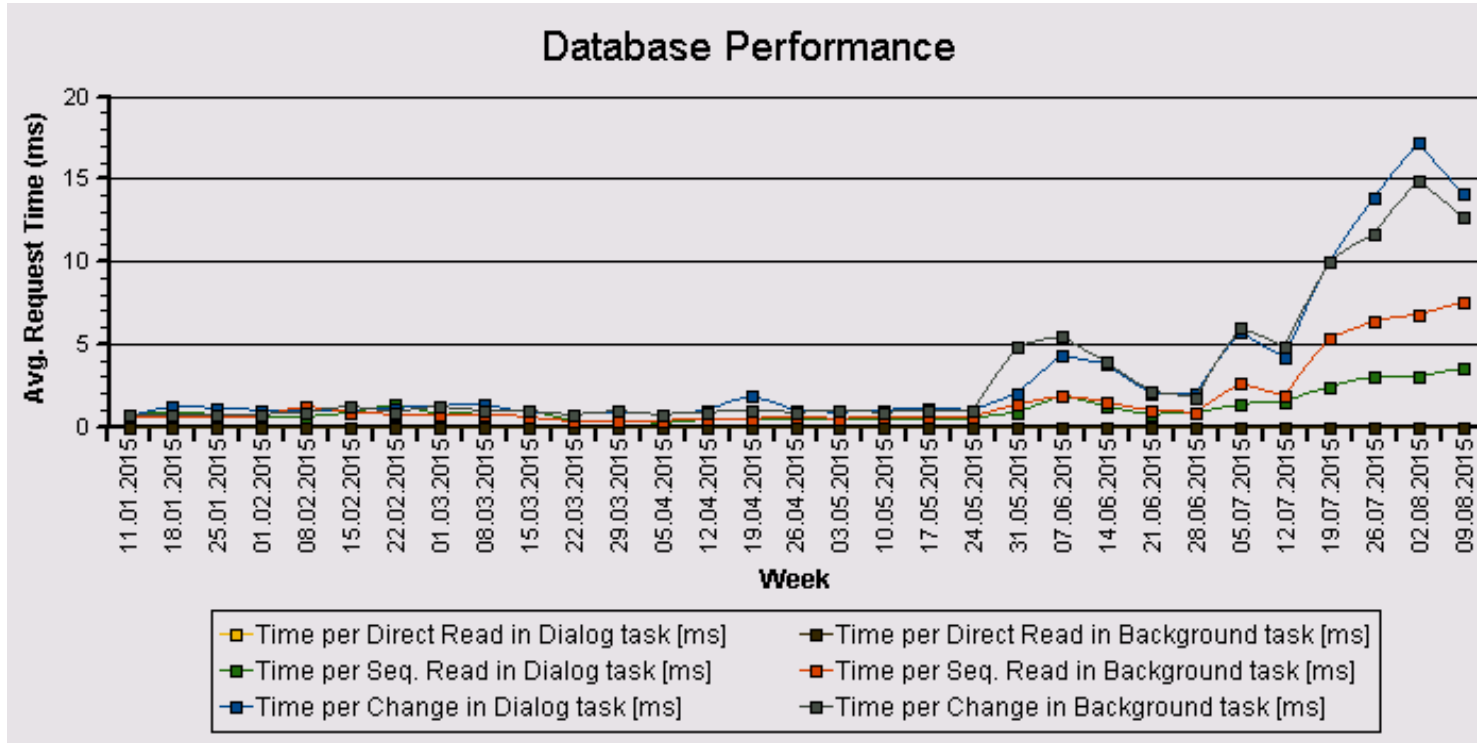
HBW (SYSTEM) HBW dewdfglp00161 10

Overview Landscape Alerts Performance Volumes Configuration System Information **Diagnosis Files** Trace Configuration

Filter: Merge Diagnosis Files... Delete Trace Files...

Host	Name	Type	Size [Byte]	Modified
dewdfglp00161	shutdown.sap		14	14.09.12 12:50
dewdfglp00161	stderr2		473	14.09.12 12:50
dewdfglp00161	stdout2		0	14.09.12 12:50
dewdfglp00161	dev_webdisp.old		5.270	14.09.12 12:26
dewdfglp00161	sapstartsrv.old		860	14.09.12 12:26
dewdfglp00161	indexserver_dewdfglp00161.31003.072.trc	Trace	10.003.438	13.09.12 19:47
dewdfglp00161	xsengine_dewdfglp00161.31007.006.trc	Trace	10.000.012	13.09.12 18:36
dewdfglp00161	indexserver_dewdfglp00161.31003.071.trc	Trace	10.000.676	13.09.12 18:11
dewdfglp00161	preprocessor_dewdfglp00161.31002.rtedump.20120913-163613.08450.oom.trc	Trace	41.650	13.09.12 16:36
dewdfglp00161	nameserver_dewdfglp00161.31001.rtedump.20120913-163412.08740.oom.trc	Trace	1.288.148	13.09.12 16:34
dewdfglp00161	xsengine_dewdfglp00161.31007.rtedump.20120913-161116.08596.oom.trc	Trace	67.645	13.09.12 16:11
dewdfglp00161	indexserver_dewdfglp00161.31003.rtedump.20120913-153114.08935.oom.trc	Trace	10.304.420	13.09.12 15:31
dewdfglp00161	statisticsserver_dewdfglp00161.31005.rtedump.20120913-152913.10843.oom.trc	Trace	67.340	13.09.12 15:29
dewdfglp00161	indexserver_dewdfglp00161.31003.unloads.002.trc	Trace	615.194	13.09.12 14:28
dewdfglp00161	indexserver_dewdfglp00161.31003.070.trc	Trace	10.004.122	13.09.12 04:51
dewdfglp00161	statisticsserver_dewdfglp00161.31005.090.trc	Trace	10.000.665	13.09.12 04:46
dewdfglp00161	statisticsserver_dewdfglp00161.31003.unloads.000.trc	Trace	7.173	13.09.12 02:00
dewdfglp00161	indexserver_dewdfglp00161.31003.unloads.stat		8	12.09.12 11:45
dewdfglp00161	statisticsserver_dewdfglp00161.31005.089.trc	Trace	10.008.495	11.09.12 01:36
dewdfglp00161	indexserver_dewdfglp00161.31003.069.trc	Trace	10.003.684	10.09.12 14:42

Trend Analysis – Database Performance

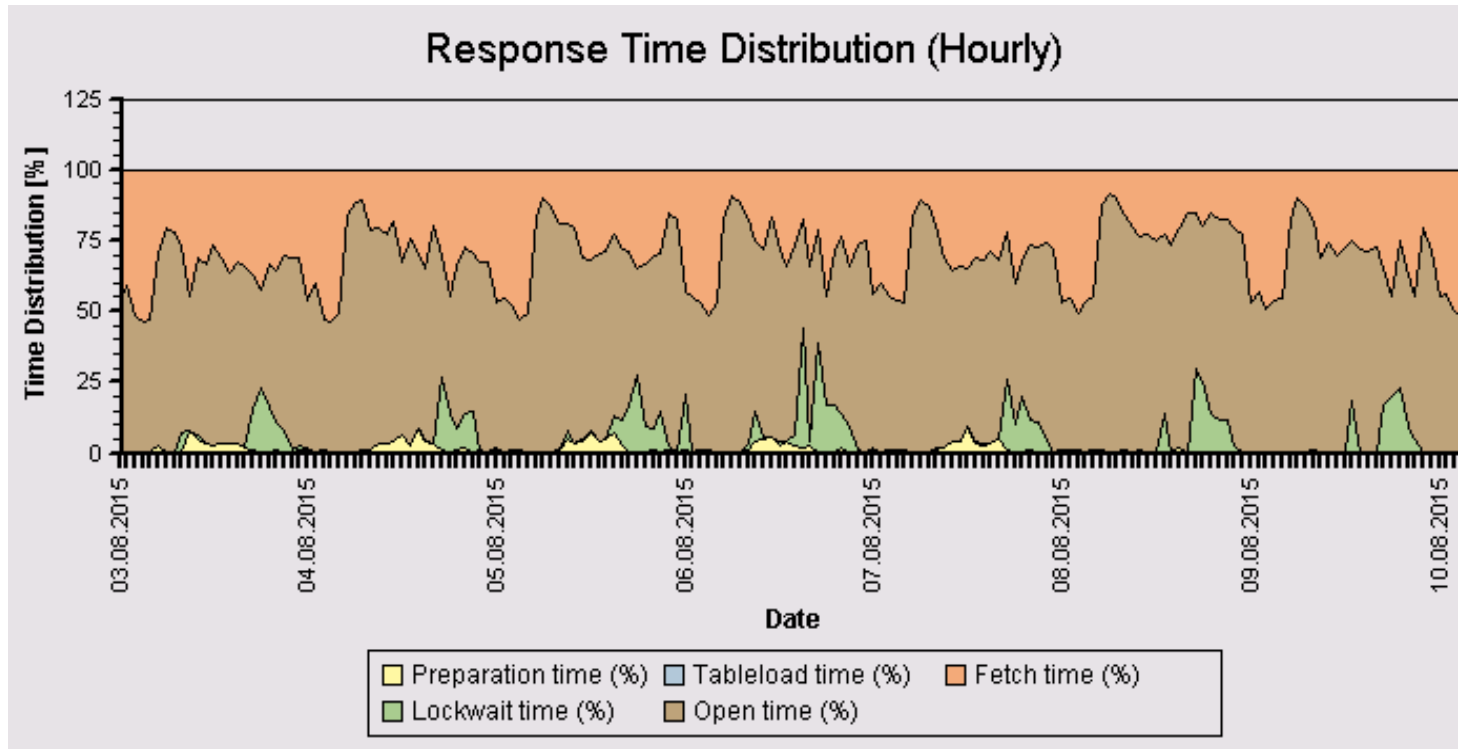


The graph 'Database Performance' in chapter **Trend Analysis** at the end of the report shows the long-term development in database response time for

- direct reads,
- sequential reads and
- changes

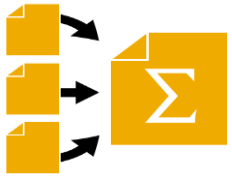
in dialog task and background task.

SAP HANA Workload and Performance



This chart displays the percentages of the different categories of DB response time. High percentage of lockwait time ([1999998 - FAQ: SAP HANA Lock Analysis](#)) or tableload time ([2127458 - FAQ: SAP HANA Loads and Unloads](#)) or preparation time ([2124112 - FAQ: SAP HANA Parsing](#)) may indicate a performance problem.

Summary of the EarlyWatch Alert for SAP HANA



You should now be able to

- Understand two different set-up scenarios
- Find a guideline to set-up SAP EarlyWatch Alert
- Understand which performance relevant information is provided in an EWA report

© 2015 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. Please see <http://global12.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.

Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors.

National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP SE or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP SE or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.