CONTINUOUS QUALITY CHECK
TECHNICAL PERFORMANCE OPTIMIZATION
INFORMATION SHEET FOR SERVICE DELIVERY

Your solution landscape is the basis for the operation of the core business processes. The efficiency of the setup and management of the landscape has a direct impact on your business. Only a suitable management and technical setup enables you to run your solution smoothly with an optimal throughput. The continuous quality check technical performance optimization service focuses on the optimization of the throughput on the database.

AT A GLANCE

Key Features and Benefits
The continuous quality check technical performance optimization service improves your SAP solution by helping you to configure your system optimally. The identification and elimination of costly performance bottlenecks optimizes the response times and throughput of your SAP solution.

Your company can take the following advantages from the continuous quality check technical performance optimization service:
- Processing of increased business volumes with existing hardware and without further investment
- Increased productivity and stability
- Higher acceptance by end users
- Optimized use of your hardware resources to make the most out of your investment
- Reduced risk of costly system downtime
- Knowledge transfer from SAP to your technical experts
- Detect critical situations early and trigger proactive error handling and problem solving
- Avoid unplanned downtime

The underlying concept of the continuous quality check technical performance optimization service is to ensure that your SAP solution works to its optimum potential by taking efficient improvement measures to solve technical issues.

When to Use
If one or more of the issues below apply to you, then the continuous quality check technical performance optimization can assist you:
- You want to safeguard your solution from potential technical issues, such as performance bottlenecks or stability problems
- You need to identify and address existing technical issues that are already disturbing your system operation
- Your database response times in the system are unreasonably high
- Your programs do not meet your runtime requirements or are causing unacceptably high database load
- You want to proactively address upcoming changes, for example: go-live of performance critical projects, new database functionality, increased volume or hardware changes

The continuous quality check technical performance optimization service targets productive systems as well as pre-productive systems. A key factor for successful delivery for you and SAP is that requirements or limitations, objectives, schedule, and scope are communicated prior to the delivery, in as much detail as possible. For clarification purposes, you can book one remote day to discuss and agree on the next steps based on this analysis. This is especially useful if it is unclear which area the optimization service should focus on.
DELIVERY IN DETAIL

The continuous quality check technical performance optimization service is usually delivered remotely by an SAP support consultant. The SAP Solution Manager is used as a delivery tool. If the analyzed system does not have an ABAP stack, we require another system to be set up for remote monitoring of the other system from the DBACockpit (ST04). This requires a system with SAP basis release of 700 or higher, preferably with support package 18 or higher. Depending on the setup, there might be limitations to the result compared to the analysis of an ABAP stack system.

The continuous quality check technical performance optimization service focuses on issues that have a large impact on your system performance and stability. The delivery may either cover general technical issues or, if a specific area of concern has been identified prior to delivery, one of the following:
- Database performance
- Analysis of specific program with focus on database time

Preparation
You are contacted by an SAP support consultant to gather data about your SAP solution and discuss your expectations. The preparation is either used to clarify the scope of the delivery or to prepare the delivery in general. This will be done remotely and may include an initial system analysis.

NOTE:
It could be possible that we detect during the initial analysis that the focus is not set correctly and that a different or an additional specialist is required to achieve the best result and to meet your expectations. If this is the case, you will be contacted to clarify the next steps.

When it is confirmed that the focus is set correctly, the delivery is scheduled.

Delivery
On the first day of the delivery of the continuous quality check technical performance optimization service, the SAP support consultant is going to discuss the results of the preliminary analysis with your technical experts. This initial meeting is used to finally agree on the focus of the delivery and set up the schedule for the following days.

To achieve the best throughput of your database, the service covers the following areas:
- Check for major misconfiguration and hardware bottlenecks
- Parameter settings
- Database management
  - CBO statistics
  - Index and table storage management
  - Online log configuration
- Configuration of undo and temporary table space
- Typical wait situations
- Expensive SQL statements
- Load profile from SAP R/3
  - Identification of programs causing the highest database load
  - Identification of the times with the highest load

Based on the information obtained during the delivery, the SAP support consultant provides recommendations for optimizing the performance and throughput of your database and SAP system.

The SAP support consultant consolidates the results of the analysis in a final report. The final report summarizes the topics analyzed, lists the issues, and provides recommendations. Implementing the recommendations increases the system performance, throughput, and stability in your solution landscape.
DURATION

The duration may vary depending on the complexity of your SAP solution. The duration and the content of the service can be customized based on your needs and requests prior to the delivery. Refer to the table for the recommended duration of the continuous quality check technical performance optimization service.

Recommended Duration

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Total Number of Days</th>
<th>Preparation</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>General performance optimization</td>
<td>1 day</td>
<td>1 day</td>
<td>-</td>
</tr>
<tr>
<td>(clarification of focus area)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Database</td>
<td>3-5 days</td>
<td>-</td>
<td>3-5 days</td>
</tr>
</tbody>
</table>

PREREQUISITES

General

The involvement of members from your organization during the preparation and delivery of the service is crucial in providing the correct understanding of your technical landscape and business operation to the service consultant. Note that the service cannot be delivered with the expected outcome, or even not at all, if the required information is not provided from your team members.

- Access to all relevant customer systems (all analyzed systems, solution manager or system used for remote monitoring).
- Access to SAP Solution Manager.
- In case of none ABAP stack systems:
  - DBACockpit (ST04) of a SAP basis release system of 700 or higher, preferably with support package 18 or higher,
  - Remote access being setup from this system to the analyzed system,
  - Working tools must be verified before delivery.

To benefit fully from the service, you need to install the SAP Solution Manager and activate SAP EarlyWatch Alert. On the SAP Solution Manager system, the latest add-on versions and support packages should be installed. For more information, see [http://service.sap.com/solutionmanager](http://service.sap.com/solutionmanager).

During the delivery, the involvement of your staff and any affected external partners is essential. They enable SAP to understand your core business processes, understand the setup of your system landscape, recognize critical issues, and provide an opportunity to share knowledge.

We require the active part time participation of the following people:

- Project lead (part-time) or process responsible from application site
  This contact will mainly be needed to clarify handling issues or requirements if specific programs should be analyzed.
- Database administrator, SAP basis administrator, system administrator
  These contacts will be needed to discuss the current setup and handling procedures. In case of interest we may also agree on a quick implementation strategy of recommendations to facilitate a validation of the success.

Your project team needs to be able to provide all the necessary information and documents relevant to the system landscape and if relevant for special program analysis also for the related core business process.
Used Tools
To analyze and optimize the performance of transactions and programs, it is necessary, that the following tools can be executed from the SAP service engineer within your SAP system environment:

- Database monitor (transaction ST04)
- Database performance: tables and indexes (transaction DB02)
- Dictionary table display (SE11)
- Program display and execution (SE38)
- SQL trace (transaction ST05)
- ABAP trace (transactions SE30 and ST12)
- Application monitor (transaction ST14)
- ABAP editor (SE38)
- Function builder (SE37)
- Memory configuration monitor (transaction ST02)
- Microsoft SQL Profiler
- Workload monitor (transaction ST03N)
- Operating system monitor (transaction ST06/ST06N)
- Global work process overview (transaction SM66)
- Background job overview (transaction SM37)
- Background job overview (transaction SDCCN)

For more information, refer to the SAP Service Marketplace at http://www.service.sap.com/enterprisesupport