



**Reduce the cost and increase the performance
of your SAP systems**

SAS® Solutions for SAP





Complete resource management for SAP installations

Over the last 10 – 15 years IT managers have been challenged with building IT infrastructures to support the day-to-day operational needs of their companies. After long and resource-intensive cycles, one or more ERP systems (such as SAP) were put in place to provide such infrastructure. Today these systems are commodities that provide the processes to ensure the smooth running of the business and reliable capture of day-to-day business information.

“Data” are an organization’s most competitive weapons. The SAP system’s management tool, Computing Center Management System (CCMS), produces a wealth of invaluable data, data that describe the lifetime of SAP Dialog, Batch, Spool and Networking workload processes. Unfortunately, IT managers are now faced with the problem of deciphering the wealth of data captured by CCMS. With fewer and fewer resources, IT managers must find a way to get to this precious workload data in a timely and cost-efficient manner. In order for IT managers to make decisions based on real facts, the workload data need to be offered to the IT management systems that surface the business and analytical intelligence capabilities within an organization.

Today’s ERP systems are not able to provide such capabilities out-of-the-box, often requiring time-consuming and expensive custom coding. This situation is exacerbated by the fact that skilled SAP resources with the relevant expertise to locate and extract the data and to build the IT management applications that provide the business intelligence and analytic intelligence required for IT managers, in order to make decisions based on real facts, are often very expensive.

The SAS® IT Management Solution for SAP

Help is at hand with the new SAS IT Management Solution targeted specifically at the Extraction, Transformation and Loading (ETL) of SAP workload data. In combination with the SAS solution components, we will provide answers to the burning business questions that cannot easily be answered — if at all. The guaranteed outcomes are reduced costs and improved system performance.

SAS is the world’s leading solution for information delivery: the complete end-to-end process of gathering, managing and analyzing data from any source, including multiple instances of SAP. With this SAS IT Management Solution you will also be able to leverage our extensive practical experience of SAP implementations through SAS consultancy skills and our awareness of the particular issues that impact your industry.

Solution components

The SAS IT Management Solution for SAP offering consists of two components that represent a complete feature-set that offers “data extraction” through to “intelligent analytics”: SAS® IT Management Adapter for SAP and SAS® IT Resource Management.

The SAS IT Management Adapter for SAP is designed to automatically “Extract”, “Transform” and “Load” (ETL) SAP R/3 and SAP Business Warehouse (BW) workload/performance measurements from the “real-time” data that CCMS collects and stores in the SAP R/3 “statistics” file and Business Warehouse Cubes. The collected data is then integrated into SAS IT Resource Management by dynamically building and/or populating its Performance Data Bases (PDBs) with the collected SAP data.

The SAS IT Management Solution for SAP can be distinguished by six functional parts:

- Data Extraction
- Data Transformation
- Data Loading
- Intelligent Storage
- Business Intelligence
- Analytical Intelligence



Data Extraction

Typically the SAP and SAS servers are two physically different machines, therefore they will need to communicate with each other in order to initiate scheduled data collection runs and transfer SAP-collected data. The connection is performed through the Remote Function Call (RFC) facility of SAP. The SAS IT Management Adapter for SAP is installed on the SAS server where communications can be initiated. A SAS-developed Advanced Business Application Program (ABAP) extracts the required data and transfers it back to the SAS server.

Data Transformation

Once the data has been passed back to the SAS server it is "validated and cleaned". The Adapter integrates the transformed tables into the SAS IT Resource Management PDB.

Data Loading

The loading process of SAS IT Resource Management is now involved to read the prepared tables from the SAS IT Management Adapter for SAP. The tables are processed and the foundation of the intelligent storage in the PDB is maintained by keeping the data in its own user-customized pre-summarized form.

Intelligent Storage

This dynamic "build foundation" of the PDB puts the intelligence into the warehouse and enables logical analysis of your SAP workload/performance data. You can keep your

focus on the short-term issues of your SAP environment by analyzing events from previous hours/days or from the exceptions, or focus on the long-term system issues of workload and performance planning, as well as trend and future development analysis. It also allows forecasting and planning your environment more efficiently in order to prevent bottlenecks and performance problems.

Business Intelligence

The basic SAP R/3 and BW workload statistics extracted by the SAS IT Management Adapter for SAP fall into four different categories:

- Workload (On-line Dialog and Batch)
- Printing (Spool)
- Data Communications (between SAP servers and clients)
- System

On their own, these data metrics provide the analyst with little information other than numbers, dates and character strings that may resemble some reflection of the business and IT environment. An example of the Business Intelligence reporting that is provided with the SAS IT Management Solution for SAP provides the analyst with the following knowledge:

- The business impact of poorly performing SAP transactions
- Profile of SAP systems (performance, availability, impact on the business)

- Costs associated with operational running of the SAP systems
- Impact of external IT forces (i.e. network bandwidth, database design, application server memory leakage, etc.)

Analytical Intelligence

The "true" power of the SAS System is in providing analysts with the means to correlate, predict, forecast and "data-mine" any gathered data. This is no different for the SAS IT Management Solutions for SAP. By using the power of SAS analytics, the SAP analyst or administrator is able to:

- Correlate events across IT to Business, or IT to IT (for example, to analyze the probability of poor response time versus database fragmentation)
- Forecast capacity planning purposes (for example, evaluate the projected processing power required for the next year to run the SAP environment)
- Analyze regression for proactive computer performance management (for example, correlating database activities)

A much better return on your SAP investment

... will be the outcome of this SAS IT Management Solution for SAP. It will deliver the key systems performance and workload information you need to manage SAP systems effectively. It will help you to identify and resolve performance bottlenecks, take you straight to the source of problems with exceptional reporting, and head off potential problems before they occur. You will be able to identify where your IT resources are being wasted, allocate costs equitably and plan for the future – all ensuring that you get a much better return on your investment in SAP.

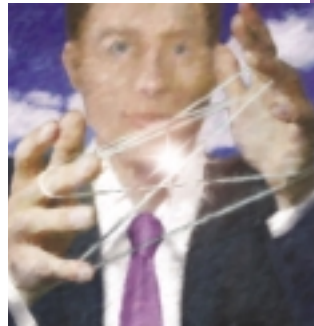
Bottom-line benefits include:

- Increase your company's competitive presence in the market
- Provide the CIO and CFO with the ability to accurately plan for the next year's IT budget
- Improve database design, resulting in optimized business processes, thus ensuring the company's high status in the market
- Out-of-box rapid identification and extraction of performance data from SAP

About SAS

SAS is the market leader in providing a new generation of business intelligence software and services that create true enterprise intelligence. SAS solutions are used at more than 39,000 sites – including 98 of the top 100 businesses on the Fortune 500 – to develop more profitable relationships with customers and suppliers; to enable better, more accurate and informed decisions; and to drive organizations forward.

SAS is the only vendor that completely integrates leading data warehousing, analytics and traditional BI applications to create intelligence from massive amounts of data. For more than 25 years, SAS has been giving customers around the world *The Power to Know*®. Visit us at www.sas.com.



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