

Deloitte.



#DeloitteInnovation: In-Time

Uncover the Potential of SAP HANA®

In-Time Deloitte™

Deloitte In-Time in a Nutshell

In-Time is the first and only SAP HANA optimization add-on that can analyze the effectiveness of SAP HANA usage and help optimize it. The optimization occurs according to business needs for **data freshness**.

As In-Time finds the right balance between consumption of computing resources and data freshness, **the need for further investments into scale-up or scale-out decreases or disappears at all** and the customer stays satisfied with the processing and response times.



Process complexity



Parallel user requests



Big Data

Client Benefits



Enhanced insights into SAP HANA usage



TCO reduction of SAP HANA over the application lifecycle

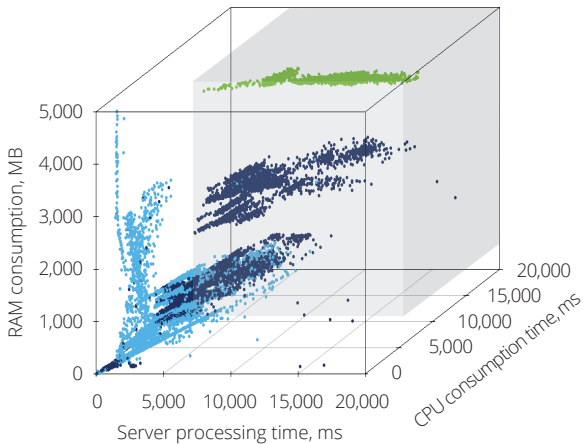


Fast response times of optimized SAP HANA applications

Use Cases for Deloitte In-Time

The In-Time add-on is beneficial to SAP HANA applications referred to high-load analytics. These are the cases where reporting is based on very **complex calculations** and is **frequently queried**. Thus, data processing requires **significant hardware resources**, especially if the results have to be there as quickly as possible.

Owing to high-load analytics applications, the users start to be unsatisfied with SAP HANA performance and response times.



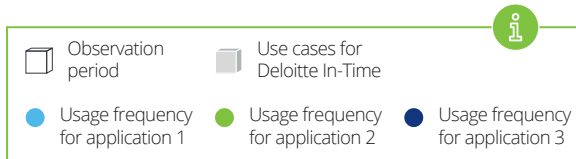
Advanced Diagnostics of SAP HANA

To visualize and monitor the SAP HANA usage, the In-Time comes with the Advanced Diagnostics feature. This feature allows you not only understand what is going on inside SAP HANA, but also identify those applications which can be optimized with the In-Time methodology.

The SAP HANA Advanced Diagnostics traces the following parameters for each applications:

- RAM consumption
- Server processing time
- CPU utilization
- Frequency of querying

The performance of those application which sporadically or constantly cause high loads in the system can be sustainably optimized by Deloitte In-Time.



Our Solution: Deloitte In-Time

In-Time methodology

The solution is based on parallel pre-calculation and update so that the data age does not exceed the defined value. The semantic partitions for pre-calculation and update are chosen dynamically in accordance to the optimal usage of existing system resources. In this way, In-Time ensures a **stable and reliable SAP HANA performance level** and simultaneously optimizes high-load analytic applications through a **reduction of processor and memory resource consumption**.

With In-Time, Deloitte offers a cost-saving alternative to system scale-out or scale-up for high-load analytic applications

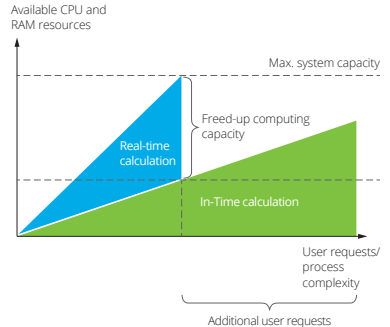
Software components:

- **In-Time server** which manages pre-calculations and maintains an optimal load on the SAP HANA server
- **In-Time Workbench** which includes the Administration Console, Application Manager and System Explorer to configure, monitor and customize In-Time applications

Installation features:

- Deloitte In-Time can be **fully integrated** into SAP HANA Platform or run on a separate server
- The In-Time add-on can be installed **on premise or in SAP HANA Enterprise Cloud**
- It supports **all** SAP HANA 1.0 and SAP HANA 2.0 versions (S/4 HANA, BW/4 HANA or HANA Native)
- In-Time supports such SAP HANA functionalities as multi-tenant databases, smart data access and workload classes

Comparison between real-time and In-Time calculations

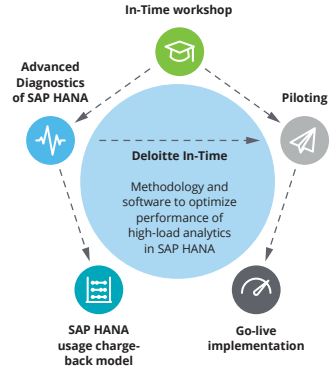


Our Services:

- **In-Time workshop** includes training materials and training sessions adjusted to the target group and elaboration of use cases
- **The Diagnostics tool** helps SAP HANA administrators get insights of what is happening in the system
- With the **charge-back model**, IT can invoice businesses for SAP HANA usage
- The duration of **piloting** depends on the size of SAP HANA system and complexity of native applications
- To **go live**, we provide the In-Time license and support

Facts and Figures:

- The In-Time add-on can reduce the **SAP HANA total cost of ownership by up to 60 %**
- With In-Time, **response time remains constant**
- The In-Time add-on helps **high-load analytics applications save up to 80 % of SAP HANA hardware capacities**
- The application „Deloitte In-Time for Profit Contribution Report“ was certified by SAP®





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For further information, please visit our website <http://www.deloitte.com/de/in-time>

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