How the fast get faster
In-Time™ for SAP S/4HANA® and SAP HANA® Platform
Deloitte + SAP
SAP’s S/4HANA technology has already introduced transformational computing capabilities for its users. But what if you could take those capabilities to the next level?
In-Time, the only tool of its kind currently certified by SAP, is designed to further optimize available system resources in an SAP S/4HANA and SAP HANA Platform environment.

Using a method called “logical scalability” for high-load analytics applications, In-Time introduces a number of important, next-level enhancements to SAP S/4HANA and SAP HANA Platform, including:

- **Faster response and processing time.** With In-Time, the data processing and reporting times of a SAP HANA system accelerate up to 215 percent.

- **Enhanced ability to handle more concurrent user requests**

- **Minimized processor, memory and power consumption**—In-Time can reduce memory usage by up to 40 percent and processor consumption by 60 percent.

- **Significant cost reduction:** Not only does In-Time reduce the total cost of ownership, but it reduces costs of processor and memory resources.

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**Why Deloitte?**

We know the ins and outs of this powerful technology because we have worked directly with SAP on SAP S/4HANA and SAP HANA Platform from the beginning. Working with clients in different industries around the world, we also have a clear understanding of the practical business needs SAP S/4HANA must serve, and where its capabilities could be extended. Those are the business-focused insights we used to inform the development of In-Time. No other firm brings the wealth of practical business insight and SAP S/4HANA-specific and SAP HANA Platform-specific knowledge that Deloitte can.
A third option for increasing performance

To keep system performance stable and deliver real-time responses, SAP HANA Platform users typically face two options:

They can either “scale out” by adding more servers to the system, or “scale up” by adding more CPU or RAM to the existing server. But these approaches may be too costly, and may not significantly benefit the use case.

Deloitte’s In-Time presents a third option—optimizing the usage of available CPU and RAM resources with an innovative approach called logical scalability. This approach is designed for high-load analytics environments—rather than augmenting CPU and RAM resources, it optimizes those resources.

In-Time can help with:

- **Batch processing**, which is marked by complex calculations and large data volumes.
- **Real-time processing**, which requires a large number of concurrent user requests and a lower degree of calculation complexity.
A third option for increasing performance

Real-time vs. In-Time calculations
Here’s one way to understand the capabilities introduced by an In-Time approach, which squeezes more out of system capacity.

<table>
<thead>
<tr>
<th>Available CPU and RAM resources</th>
<th>User requests/processing complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum hardware capacity</td>
<td>In-Time™ process</td>
</tr>
<tr>
<td>Batch processing, using SAP Data Services</td>
<td>Freed-up hardware resources</td>
</tr>
<tr>
<td>In-Time™ process</td>
<td>Additional user requests</td>
</tr>
</tbody>
</table>

Hard facts

- Resource and energy consumption of SAP HANA Platform paired with In-Time is up to 70 percent lower than those without. That means In-Time is not only cost efficient, but also environmentally sustainable.

- In-Time can reduce the total cost of ownership for SAP HANA Platform by up to 60 percent.

- Response and data processing times for SAP HANA Platform can be reduced by up to 215 percent, using In-Time. Meanwhile, hard capacities are set free and can be used by other applications.