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CTAC
ENABLING YOUR AMBITION

Business Challenge

Ctac wanted to support its customers' business process innovations with a robust, in-memory cloud solution, helping them to benefit from real-time insights and gain new competitive advantages.

Transformation

To support process innovations, Ctac deployed SAP® HANA® on IBM® Power Systems™ according to the SAP Tailored Datacenter Integration concept, creating a new cloud offering for in-memory processing.

Léon van den Bogaert
Manager Cloud Technology
Ctac

Business benefits:

95%
faster deployment of SAP HANA thanks to cloud technologies

Helps
companies take advantage of real-time analytics

Creates
new business opportunities for Ctac

Ctac

Driving competitive advantage with real-time applications, enabled by SAP HANA on IBM Power Systems

Ctac is an ICT solution provider and SAP Value Added Reseller headquartered in Hertogenbosch, The Netherlands, with offices in Belgium and France. Offering business consultancy, cloud services and software development, Ctac's 486 employees generate annual revenue of EUR83.4 million.

"With SAP HANA on IBM Power Systems we can provide more reliable services with less operational support required."

Léon van den Bogaert, Manager Cloud Technology, Ctac

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Challenge in detail

IT service provider Ctac noticed that more and more customers wanted to optimize their business processes with real-time insights. For example, retailers could adjust replenishment processes more flexibly and streamline logistics workflows to maximize profit margins if they knew exactly what was selling in which store in real time.

Ctac, a SAP Value Added Reseller, wanted to enable its customers to gain the advantages of real-time analytics without imposing high up-front investments in new infrastructure. Could it build a platform that could deliver outstanding performance and at the same time be capable of scaling in capacity as more customers took up the solution?

Driving process innovation

IT service provider and SAP Value Added Reseller Ctac spotted a trend among its customers towards more flexibility, faster business processes and real-time analytics. While many companies are familiar with nightly planning and allocation batch runs, Ctac's customers became increasingly eager to reduce the time between processing the day's transactions and being able to plan the resulting logistics and distribution workflows.

Ctac realized that if it could enable its customers to leverage rapid insights into business data cost-efficiently, it could help them to gain a competitive advantage. Léon van den Bogaert, Manager of Cloud Technology at Ctac, explains: "Customers want to get instant answers to important business questions to maximize profit margins. Waiting one day for the latest figures is becoming an issue when businesses are moving faster than ever before and market dynamics change quickly."

Addressing these needs, Ctac wanted to build a solution that would allow its customers to optimize their business processes without high up-front investments in IT. Hans Gootjes, Head of Architecture and Design at Ctac, comments: "Large customers for example could tap into business data and take advantage of advanced processing such as highly sophisticated business analytics within seconds. We wanted to offer that capability while we handled sizing, scalability and capacity."

Niek Verhaar, SAP Solution Architect at Ctac, adds: "Providing a flexible service that dynamically adapts to business requirements would also help smaller organizations and new client segments to take the next step and adopt the future ways of working, where they could eliminate delays in their business processes."

Léon van den Bogaert says: "As a service provider, we want to be ready to offer the solutions our customers need to shape the future of their businesses. For our company, it means that our business model might change as well, from a classic cloud resource provider to a cloud solution and integration provider."

Building a robust cloud solution

Ctac realized that the infrastructure of the future would likely look very different. It would run a mixture of cloud services and on-premises applications depending on their customers' needs, be capable of very rapid response to change, be highly scalable and be able to deal with very large workload peaks at short notice.

With its core focus on SAP solutions, Ctac decided to look for the right configuration for core customer workloads that would enable synergies among traditional and new real-time analytics SAP workloads in a single environment utilizing its resources as efficiently and flexible as possible. As a result, Ctac chose to establish and operate a cloud infrastructure capable of hosting the total SAP software stack, the new SAP HANA platform.

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Manager of Cloud Technology

Ctac

As a first step, when SAP HANA on IBM Power Systems became available, the company decided quickly to implement the required IT landscape according to the SAP tailored data center integration (TDI) concept based on an IBM Power® System E870 server in combination with TDI-certified IBM storage subsystems. This solution is designed to handle Big Data in a resilient environment. The leading IBM PowerVM® virtualization technology and SUSE Linux Enterprise Server for SAP Applications operating system complete the flexible system layers, as they are required for maintaining an efficient cloud environment hosting various SAP systems.

Up to 1000x performance improvements cost-efficiently

"Running SAP HANA on IBM Power Systems provides us with a highly flexible, scalable and robust environment. We plan to run thousands of SAP systems on the IBM Power System E870 server."

Niek Verhaar

SAP Solution Architect

Ctac

Hans Gootjes comments: "When it comes to TDI solutions for SAP HANA, IBM could provide a credible system architecture that actually worked. In fact, it even surpassed our expectations and easily met the challenging SAP performance requirements for customized SAP HANA solutions.

"We have been using the IBM POWER platform for many years – we really value the reliability and stability of IBM Power Systems. Most of our customers need 24/7 availability of their mission-critical business applications, business continuity is key. And the IBM POWER platform never lets us down."

Ctac connected the IBM Power System E870 server to a mirrored IBM Storwize® V7000 storage solution. To ensure best performance across all managed SAP systems, Ctac relies on the integrated IBM Easy Tier® technology. This automatically moves the most frequently accessed data of traditional, disk based SAP database servers to the fastest available storage. By migrating hot data transparently from hard disks to solid state disks, IBM Easy Tier optimizes storage performance based on actual data usage without the need for any manual storage tuning by system administrators.

The company takes advantage of storage replication to protect its SAP applications, including SAP HANA. In addition, Ctac creates regular backups using the IBM FlashCopy® feature of its storage systems.

Niek Verhaar confirms: "Running SAP HANA on IBM Power Systems provides us with a highly flexible, scalable and robust environment. We plan to run thousands of SAP systems on the IBM Power System E870 server – from SAP HANA via SAP Business Suite and SAP Business Warehouse to the cutting-edge SAP Business Suite 4 SAP HANA® (SAP S/4HANA) applications and SAP Fiori mobile apps.

"Choosing a virtualized IBM POWER platform in a TDI setup allows us to utilize our available resources more efficiently than with a combination of consolidated SAP database and application servers plus dedicated SAP HANA appliances. By collocating application servers and SAP HANA on one server, we can also take full advantage of the leading aggregated throughput thanks to the high bandwidth and well balanced IBM Power System design. Additionally, we are able to operate application servers and SAP HANA in a single logical partition, which further minimizes the administration overhead."

Throughout the implementation, Ctac was very satisfied with the IBM team. Léon van den Bogaert says: "Everyone, from pre-sales to technical experts and all the IBM staff involved in the project worked very smoothly together with our own staff, on-site and off-site. IBM also provided very helpful input for the solution architecture. We see it as a big advantage that we can build on our years of experience with IBM POWER to provide next-generation cloud services to our customers."

Evaluating the potential of the SAP HANA platform, Ctac also wants to run its own XV Retail solution on SAP HANA to enable real-time analytics for point-of-sales data.

The newly designed POWER8®-based infrastructure seamlessly integrates with the established Ctac IT environment which hosts application servers for the solutions running on SAP HANA and

Solution delivery

Ctac built a new, highly flexible and scalable cloud infrastructure to offer customers a robust environment for SAP Business Suite, SAP Business Warehouse and cutting-edge SAP S/4HANA applications and SAP Fiori mobile apps.

Ctac partnered with IBM and SAP and created a tailored data center integration solution to provide innovative cloud services, based on SAP HANA on IBM® Power Systems™.

The company deployed IBM Power System E870 servers with the latest IBM POWER8 processors, the leading IBM PowerVM virtualization technology, and SUSE Linux Enterprise Server for SAP Applications.

To provide fast and cost-efficient data storage, Ctac selected IBM Storwize V7000 storage systems with the integrated IBM Easy Tier technology, ensuring automated performance optimization across all systems and applications.

Benefits in detail

- Creates new business opportunities with flexible in-memory cloud offering where companies can scale capacities up and down as it suits the business.
- Helps companies take advantage of real-time analytics with up to 1000x performance improvements cost-efficiently without the need for high investments in servers, storage or appliance solutions.
- 95% faster deployment of in-memory platform substantially cuts implementation time for real-time business applications and significantly increased responsiveness to fluctuating demands.
- Supports quick and easy integration of external data streams like sensor data from internet of things solutions or social media data with business information.
- Reduces IT operating costs by simplifying business application landscapes, increasing capacity utilization with advanced virtualization and lowering the overall administration workload.

multiple other SAP environments: Ctac operates more than a dozen IBM Power System S824 and IBM Power 750 servers, with data storage being managed through IBM Spectrum Virtualize in combination with IBM FlashSystem™, IBM Storwize V7000 and IBM Storwize V5000 storage systems. For some customers, the company uses IBM Spectrum Protect™ as central backup solution.

Offering rapid, cost-efficient solutions on-demand

Running SAP HANA on IBM Power Systems enables Ctac to create new business opportunities to grow its operations by offering a scalable real-time analytics service to existing and new customers.

Léon van den Bogaert explains: "We see a demand for real-time analytics and decided to go to market quickly with our offering. While many customers still prefer on-premises appliances, we think we can provide better performance more cost-efficiently."

"We believe that companies who have been relying on the IBM POWER platform for their SAP applications for many years will be more likely to adapt SAP HANA when it runs on the platform they know and trust. With our cloud solution, we can now provide the reliability they are used to with the flexibility they need to gradually adjust their business processes to support real-time analytics."

The big advantage for Ctac's customers is a dramatically shorter lead time. Niek Verhaar elaborates: "While deploying an appliance solution can easily take weeks – from procurement, to delivery, to installation and basic configuration – we can now provide the SAP HANA platform to a new customer within a few hours. In effect, we can cut deployment time by more than 95 percent, thus also speeding up overall implementation time."

Hans Gootjes adds: "With our cloud solution, we can offer the SAP HANA platform and applications like SAP S/4HANA in a pay-per-use model. By allowing customers to start small and grow – or also shrink – their systems as needed, no high investment costs are needed to start the transition and achieve real business benefits based on real-time analytics.

"Using IBM PowerVM virtualization scaling the solution up or down requires only a single click, lending itself to rapidly deploy proof of concept environments that can later be scaled up to support production operation. Customers no longer need to think about sizing and buy an appliance to get started, they can test the new capabilities cost-efficiently."

Customers also benefit from the easy scalability when they for example decide after a few years to move older data onto near-line storage solutions. If they have an appliance, they cannot scale down the physical system. With Ctac's cloud solution, they can always move data off SAP HANA to reduce operating costs.

For Ctac, the advanced virtualization technology IBM PowerVM allows fine-grained assignments of server resources to customers to offer right-sized solutions and utilize the system capacity more efficiently. Niek Verhaar says: "Running SAP HANA in a virtualized environment on IBM Power Systems makes it easier for us to ensure reliable service level agreements. After moving the first customers to our new platform, we even noticed that the system provides better performance than expected.

"Compared to an appliance solution, IBM PowerVM helps us to provide better availability, not least because we can for example move workloads between physical servers without downtime using the Live Partition Mobility feature."

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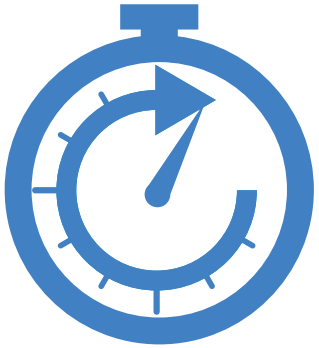
Hans Gootjes

Head of Architecture and Design

Ctac



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Once Ctac's customers have moved their SAP applications to SAP HANA, they can take advantage of the simplified data integration capabilities of the in-memory platform. By connecting, for example, sensor data from the internet of things, companies can incorporate real-time analytics into decision-making and optimize production planning, inventory and logistics processes dynamically. Companies are then able to create business value by increasing the accuracy of central panning tasks when using real-time insights instead of predictions. Similarly, companies will be able to integrate data streams such as social media in business decisions, and use the SAP HANA smart data streaming option for more advanced big data analytics.

Léon van den Bogaert concludes: "We are very confident that SAP HANA on IBM Power Systems is the right choice for us. We can provide more reliable services with less operational support required.

"The granularity of the IBM PowerVM virtualization is exactly what we need to create an attractive cloud offering, as we can run very diverse workloads on a single platform and optimize performance for each instance individually.

"As the innovative architecture of the SAP HANA in-memory platform provides up to 1000 times better performance compared to traditional database systems, many companies will want to move their applications to the new technology in the coming years. With our cloud solution for SAP HANA on IBM Power Systems, we provide exactly what they need, an in-memory platform that grows with the business.

Scan the QR code with your mobile to jump to the video

Key components

Industry: Computer Services

Applications: SAP® HANA®, SAP Business Suite, SAP Business Warehouse, SAP Business Suite 4 SAP HANA® (SAP S/4HANA), SAP Fiori®, SAP Customer Activity Repository.

Software: IBM® Spectrum Virtualize™, IBM FlashCopy®, IBM Spectrum Protect™, SUSE Linux Enterprise Server for SAP Applications.

Hardware: IBM Power Systems™ Solution Editions for SAP HANA, IBM Power® System E870, IBM Storwize® V7000, IBM Power System S824, IBM Power 750, IBM FlashSystem™, IBM Storwize V5000.

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