



## EXASOL and Intel enable enterprise data warehouse solutions



With its four processor cores, the Intel® Xeon® quad-core processor enables maximum performance of the flexible, scalable database management system from EXASOL.

### SOFTWARE AND SOLUTION

- EXASolution 2.0
- Server with Intel® Xeon® 5300 quad-core processors
- Intel® C++ Compiler 9.0
- Intel® VTune™ Performance Analyzer 9.0, Update 1
- Intel® Cluster Toolkit 3.0.1

### FLEXIBLE SCALABLE IN-MEMORY CLUSTER DBMS

#### *EXASolution*

- BI analyses up to 100 times faster
- More confidence in decision
- Wider range of analyses
- Up to 50% reduction in IT costs

The speed, quality and flexibility of data analyses are key success factors for innovative business intelligence solutions. These factors are essentially determined by the performance of the underlying database management system (DBMS) and the hardware used. With increasing data volumes and ever more complex analyses, previous database systems are being pushed to their limits. The optimizations necessary to increase performance resulted in an exponential increase in costs.

### The EXASOL approach: high performance cluster computing

With EXASolution, a flexible, scalable DBMS, EXASOL meets these analytical requirements from the business intelligence environment head on. The system is based on efficient algorithms from the field of high performance cluster computing. Thanks to unique in-memory cluster technology combined with innovative compression algorithms, the software allows a completely new level of performance in the field of enterprise data warehousing.

EXASolution enables the use of cost-effective standard servers. In which EXASOL pays particular attention to the processor performance.

### Cooperation with Intel: a success story

As early as 2005, EXASOL impressed Intel with the first version of its DBMS. In the subsequent collaboration, Intel provided both software licenses for the Intel® C++ Compiler 9.0 and Intel® VTune™ Performance Analyzer, as well as server platforms based on the Intel® Xeon® dual-core processors.



With the help of a parameter study, switching to the Intel® C++ Compiler 9.0 was easy. For optimizing and porting, the EXASOL development team collaborated closely with experienced Intel engineers. The use of the Intel® Compiler in combination with the Intel® VTune™ Performance Analyzer improved the performance of the EXASOL DBMS.

Since then, during the development process, Intel has sometimes made its tools and processor prototypes available to EXASOL before market launch and supported EXASOL in the development process. For example, when adapting EXASolution to use the Intel® cluster tools for the analysis and optimization of distributed applications.



## EXASolution uses the full potential of the latest Intel® Xeon® quad-core processors

Today, EXASolution 2.0 runs on standard servers, each with two Intel® Xeon® quad-core processors X5365. EXASOL tests the scalability and performance on a large cluster with more than 100 nodes and can thus utilize all the available potential of the 64-bit multi-core technology. The use of the latest 3.0 GHz processors further boosts performance.

*“Thanks to the close cooperation with Intel, we can continue to optimize our software at an early stage to the latest innovations and consolidate our technological lead. Whether 64-bit architecture, the latest multi-core processors or the next compiler generations – our software benefits immediately from the technical progress. Thanks to the Intel® cluster tools Trace Analyzer and VTune®, EXASOL can reduce development times and simplify software tuning”,* thus explains Mathias Golombek, Head of R&D at EXASOL, the advantages of the collaboration with Intel.

## EXASOL’s technology partner concept

EXASOL offers its customers a broad range of technologies and products that support the EXASOL solution. This gives rise to technology partnerships with innovative companies that have a pioneering role in their market segment. Thanks to this collaboration, EXASOL participates in a continuous exchange of information in order to maximize the use of state-of-the-art technical possibilities when further developing its DBMSs.

*“The collaboration with technology leaders such as Intel in particular ensures that EXASolution always delivers the maximum performance. Access to state-of-the-art standard hardware in combination with innovative technology offers our customers the highest possible performance”,* thus explains Dr. Michael Gutzmann, CEO of EXASOL AG, the decision to collaborate with Intel.

*“Innovative software such as the database management system from EXASOL needs powerful processors, such as the latest Intel® Xeon® processors. In the database environment in particular, scaling software and hardware is an important performance feature. The collaboration between Intel and EXASOL has resulted in innovative business intelligence solutions that use cost-efficient hardware”,* says Hannes Schwaderer, Member of the Board and Managing Director Central Europe Intel GmbH.

## EXASOL at a glance:

EXASOL AG is a leading supplier of next generation high performance business solutions. More than 20 years of experience in parallel processing and more than 10 years of specialization in data warehouse solutions have resulted in the development of EXASolution – a unique product that has already demonstrated its superiority in numerous benchmarks. Our reference customers, operating in a variety of business sectors, have successfully employed EXASolution for a number of years. Because EXASolution can support a wide array of usage profiles with highly elaborate database schemas, it can be used as data warehouse for the entire enterprise. That enables our customers to boost their competitive edge and optimize their business processes.