sadas Engine
DBMS for Data Analytics

BCC Sistemi Informatici

sadas

BCCSI: Migration from Oracle to Sadas Engine

SADAS ENGINE

Sadas Engine is a **columnar Database Management System** able to perform from 10 to more than 100 times faster than transactional DBMSs, and able to carry out searches on huge quantities of data over a period even longer than 10 years. Sadas Engine was designed to store, manage and analyze huge quantities of data, and seamlessly integrates with any data warehouse environment. It ensures exceptional performances during the phases of ETL and enquiry.
Sadas Engine is specifically designed to achieve outstanding performances in Data Warehouse environments, making access to information easy and quick. It is able to simplify structures and procedures without overlooking efficiency and quality of performances.

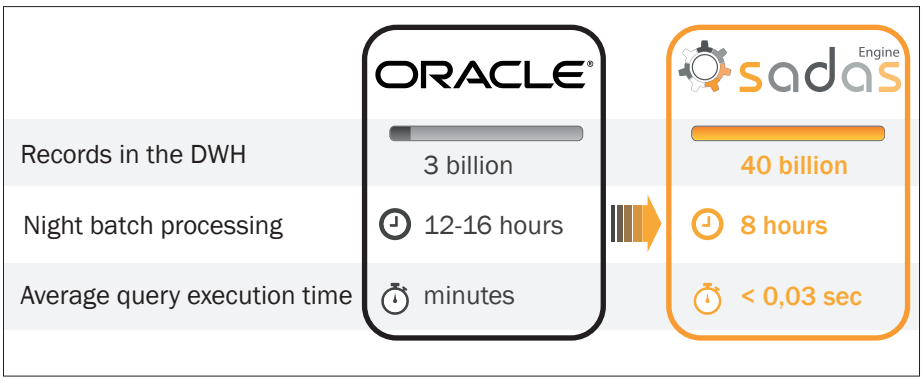
BCC Sistemi Informatici (BCCSI)

Born in 2000, BCCSI (IT systems for Cooperative Credit Banks) has the objective of supporting cooperative credit banks in the ICT field.
BCCSI in numbers:

- 16.000: users connected everyday to the main applications of the information system;
- 2.500: servers, with a virtualization rate of the environments approaching 90%;
- 1.700 TB: information available on each of the two data centers;
- 400 services: applications offered to the banks and the companies of the bank group;
- 90.000: annual working days supplied for the development of IT products or services.

ORACLE COULD NOT ENSURE ACCEPTABLE PERFORMANCES

BCCSI was facing big difficulties in providing the necessary information to the Cooperative Banks management. The data related to hundreds of Cooperative Credit Banks (aka BCCs) and millions of customers produced a total of tens of billions of records, but only as little as 3 billion could be uploaded on Oracle dbms. Despite the DWH was limited to such a small size, frequently the night processes feeding the DWH did not end before noon and, at any rate, queries were not as rapid as necessary.



The solution was the migration from Oracle to Sadas Engine. This produced a very efficient night schedule and exceptional response times on complex queries. Meanwhile, the volume has kept growing and the DWH now has more than 40 billion records, so BCCs have all the data available to take more informed decisions. Everything was achieved with dramatically reduced costs. Today, the users of the banks have about 135,000 catalogued queries, dashboards and a bank reporting system.

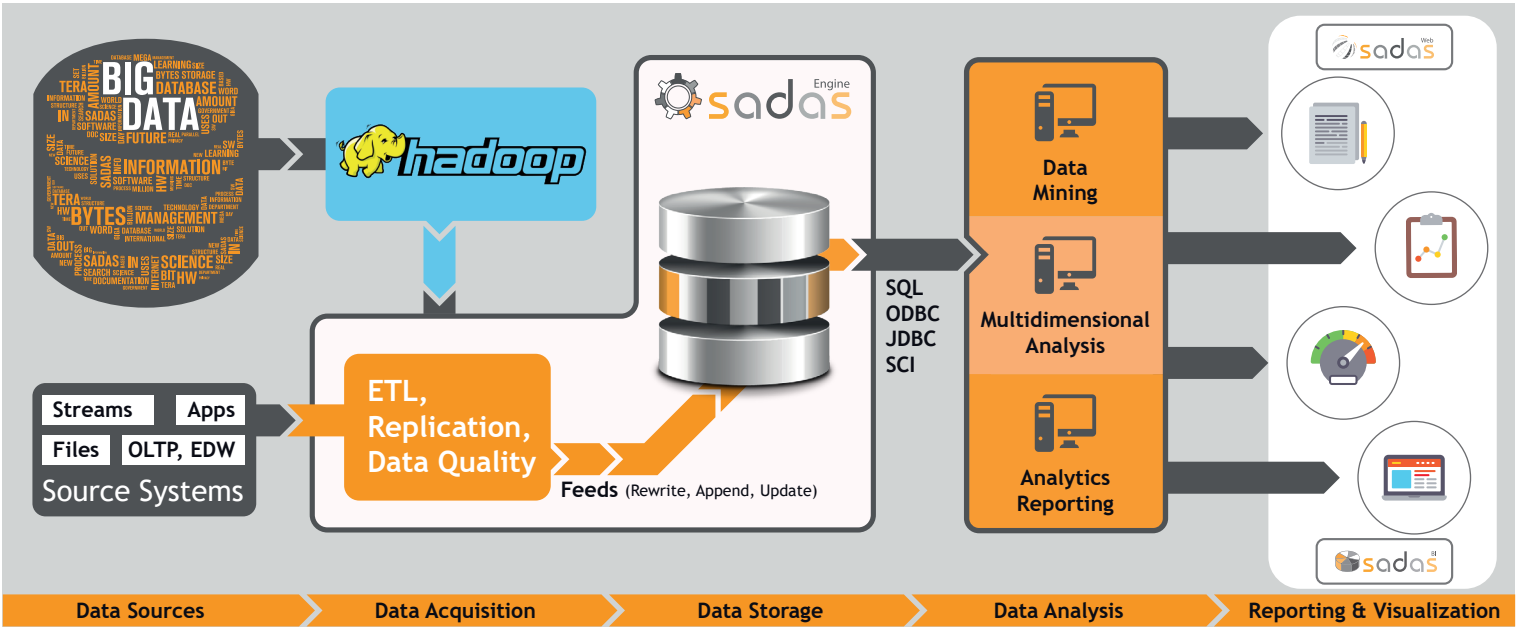
PERFORMANCES OF SADAS ENGINE FOR THE DWH

Today the DWH of BCCSI is one of the largest in Italy. The number of records, users and daily queries constantly increases, but performances remain unchanged.

Operating System	LINUX
Number of schemas	200
Number of tables	~ 150,00
Total number of records	**~ 40 Billions (~ 20TB)**
Number of records in the largest table	~ 2 Billions
Number of queries per day	~ 2,600,00
Average query execution time	**< 0,03 sec**
Total number of users	~ 6,500
Average number of users per day	~ 1,000
Daily updates (number of records per day)	**~ 8 Billions (~ 3TB)**
Update frequency	hourly, daily, weekly, monthly, yearly
Update types	rewrite, append, update, delete, insert
Connections	SadasWeb, SadasBI, ODBC, JDBC, SCL
Total number of analytic queries in catalog	> 135,000

SADAS ENGINE DWH APPROACH

Sadas Engine can receive data from unstructured and structured data sources.



SADAS can deliver the services of the DB and SADAS BI both on-premises and in cloud: the cloud infrastructure is made available to the client, so they can manage their data directly through the DB or with Sadas WEB and Sadas BI.

THE WEB INTERFACE

Sadas Web is the web interface to access and query any size of archives on any Sadas DB.
Flip through your DBs directly through your web browser.

sadas Web

- User-friendly interface to make the user independent right from the beginning;
- No programming language nor particular syntax;
- Possibility to export extracted data in the most common formats;
- Quick and easy queries.

THE BI FRAMEWORK

Sadas BI is the tool for creating management dashboards and corporate reporting documents, which can be entirely consulted and managed through web pages.

sadas BI

- Drag and Drop interface;
- Easy to use;
- What-if analysis;
- Export in csv, xls, pdf, etc;
- Powerful report dashboards with a few clicks.

To know more about Sadas Engine, visit our website www.sadasengine.com, or email us at sadasengine@sadasengine.com

sadas

MILANO Headquarters
Via Boschetti, 1 • 20121, Milano
Tel: +39 02 29017449

BATH Consulting & Training Services
1 Priory Close • Bath, BA2 5AL, UK
Tel: +44 1225637004

SAN FRANCISCO USA International Office
20 California St. 7th floor • San Francisco, CA, 94111, USA
Tel: +1 415 429 3969