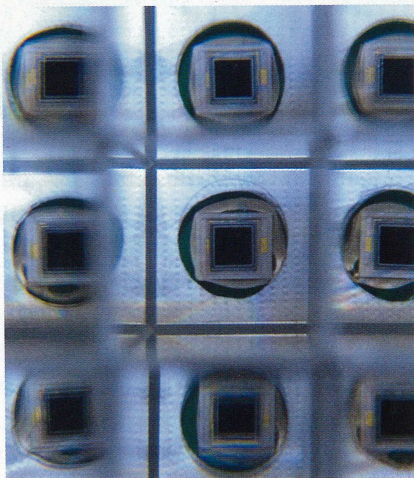# Where science meets technology

CERN and Oracle – a long-standing partnership

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Even though the partnership between CERN and Oracle has lasted 27 years, the partnership between CERN openlab and Oracle only began in 2003. This collaboration has allowed both companies to team up at the intersection of business and technology and to excel in their respective endeavours.

"Incubator for innovation" – Oracle has most specifically been involved with CERN's Database Competence Centre, which organizes and manages complex IT infrastructures with highly available data services and highly equipped application design. The CERN/Oracle partnership has been especially important in openlab which, according to the most recent report, has "proved to be an incubator for innovation".

Modification, simplification, automation – Oracle's efforts have already reduced the amount of work done between CERN and the tier-1 centres. Known as Oracle Streams, the Relational Database Activity team, or Oracle RAC, has developed technology that facilitates and automates data distribution for the Grid project. It now spends more time organizing and monitoring data with the Oracle Enterprise Manager 10 gigabyte Grid Control product.

Other work on the Grid Project – Because of advancements in technology, Oracle has identified database systems specific to CERN's IT infrastructure. The Data Management group implemented the Oracle Data Guard, which has one central database and several standby databases in case of automatic failover, to manage the Large Hadron Collider and large amounts of data produced each year. Primarily dealing with monitoring the managing of the infrastructure, Oracle Data Guard will help organize the LHC Grid Project's data output.

Oracle acts as a trusted adviser – Other than the Grid Project, employees of CERN and Oracle have worked together for the past few decades; they have together created worldwide data processors, such as the Maximum Availability Architecture technologies, as well as dealt with software upgrades. Since the start of the collaboration, Oracle has been a technology supplier but has grown to be a trusted adviser of CERN.

For example, Oracle Customer Advisory Boards include CERN employees who attend their conferences, including the annual Oracle Openworld in San Francisco, and conferences across the globe. In relation to CERN openlab, Oracle has launched an Oracle Fellowship programme, allowing young scientists of both companies to get the scientific and commercial experience necessary for a future job. Recently, 100 CERN employees have become Oracle Certified Professionals after going through an intensive Oracle training programme.

A long-standing partnership – For three decades, Oracle has helped clients sort out immense amounts of information. They have hoped to simplify and reduce costs of complex IT infrastructures, and to create a globalized view of their client. Similar to CERN openlab, Oracle believes that innovation is the key to advancement, development and success; it plans on being an integral part of the process as CERN openlab enters into its third phase. «««