Industry: Manufacturing, Process Control & Automation

The Challenge:
Sometimes hard data demands hard proof. A major Industrial Automation ISV challenged Objectivity to a rigorous test under conditions that would expose any weaknesses or overstatements of Objectivity/DB’s prowess.

The plan was to not only see what Objectivity/DB could do, but how its results would compare to a leading, specialized historian database product, in a controlled, representative environment – an apples-to-apples test of Objectivity/DB against an incumbent that was specialized for the task at hand.

For the throw down, Objectivity/DB was provided with real historian information, and asked to run the benchmark with both static (pre-defined) schema and dynamic schema (defined with Objectivity Active Schema), all using equipment equivalent to that used by the other product.

The Objectivity/DB Winning Result:
There's nothing like letting someone else do the bragging for you. In this vendor’s challenge, even on lesser hardware, Objectivity/DB blasted past the performance of the specialized tool. While the other product hit a peak performance benchmark of 890,000 values per second on a dual core processor, Objectivity/DB roared in at 2,159,000 values per second on a single core processor.

Peak Performance (in values per second):
- Other product 890,000 on a dual core processor
- Objectivity/DB 2,159,000 on a single core processor
Several variations were tested - static schema/single thread; static schema/multithread; dynamic schema/single thread; dynamic schema/multithread – and Objectivity/DB’s superior capabilities for ingest speed outperformed the competition in every instance.

Objectivity/DB also proved its compatibility with SQL/ODBC queries and tools, and Objectivity/SQL++ and ODBC adaptors were shown to work seamlessly with the ingested objects. (Incidentally, Objectivity/SQL++ now automatically takes advantage of Objectivity/DB associations (relationships) if they are present, completely eliminating any JOIN processing.)