

NEXAXIOM[®] TECHNOLOGY

Bruce Power Uses Scheduling Interface Solution from NextAxiom Technology to Ensure Speed and Agility

Bruce Power

- Among the largest independent power producers serving Ontario, Canada
- Canada's first private nuclear generating company
- 2,300-acre site near Toronto supplies nearly 25% of Ontario's electricity
- 8 nuclear units (6 operational, 2 in restart / refurbishment mode)
- ~4,700 MW current capacity; ~6,200 MW after restart

When Bruce Power elected to upgrade from Ventyx Asset Suite 6.0 to release 10, the strategic decision was made to improve the approach to the Primavera P6 scheduling interface. A new interface solution was needed to reduce complexity, cost of ownership and failure rates, to shorten cycle times, and to support real-time interfacing.

Prior Scheduling Integration had Limitations

Bruce Power's previous interface was cumbersome, problematic, took 18 months to develop and was costly to modify. It used business rules coded in SQL, a Work Control Build table populated in Access, and additional rules in the Primavera application interface (API).

The build, which pulled data from Ventyx into the table, had to be complete before the interface from the table to Primavera would execute. It took three to four hours to run, and failed approximately every two weeks. When the nighttime process failed, a third-party call center notified the Bruce Power IT personnel on call, who would have to come in, fix the problem, and complete the interface. If it wasn't fixed by morning, system performance was affected. If it was not complete by mid-day, the integration would be called off for the day, leaving users to status the daily schedule manually. As a result, the schedulers and crew lost productivity, data accuracy was sacrificed, and maintenance processes were at risk.

"NextAxiom's pilot demonstration and the speed of set-up really impressed us. The real-time capability and their deep experience in creating interface solutions were other key factors in our decision."

Murray McKague, Work Management Contractor (retired Work Management Coordinator), Bruce Power

Search for Speed, Reliability and Flexibility

Bruce Power already had a third-party integrator in mind when they were referred to NextAxiom Technology by a fellow Canadian electric utility. NextAxiom came in with a proof-of-concept pilot and within days was successfully exchanging critical data between the systems. NextAxiom's service configuration platform was promptly chosen over the other integrator's product, which was not as user friendly or robust.

NextAxiom Work Order Scheduling Interface Solution

Bruce Power worked in partnership with NextAxiom to identify the business rules for the scheduling interface and automate the processes. The Work Order Scheduling Interface Solution was designed, configured, tested and implemented in just three months largely by two people working part time, and it went live in August 2008. The interface, which synchronizes over 80 integration points from Ventyx and 8 from Primavera, is now available from NextAxiom as a pre-packaged solution.



Scheduling Interface Solution Benefits

- Cost of ownership is lower because the interface is configured rather than programmed, and the data is synchronized in a single step without builds or tables.
- Responsiveness is improved because business rules are easy to modify.
- Cycle time is faster because hundreds of tasks are processed per second.
- Failures have been eliminated, allowing the utility to avoid call center calls and nighttime IT support.
- Interfaces are in real time, giving work crews and schedulers reliable access to the most accurate, up-to-date information.
- Flexibility allows the interface to be run on a schedule or to have projects and tasks downloaded on demand.
- Downtime is reduced because management tools and reports allow proactive handling of exceptions or bottlenecks.

Optional Tag Out Interface Module

Satisfaction with NextAxiom's Work Order Scheduling Interface Solution motivated Bruce Power to expand the solution to the clearance, tag out and lockout processes. Approximately 3,000 clearances were applied in 2008 using a manual, paper-based process. With the integration of Ventyx Tag Out and the use of the NextAxiom interface, Bruce Power now has an electronic process to ensure safe and efficient equipment maintenance. Ventyx Tag Out and the new integration with Primavera will automate the process of Clearance Tag Out scheduling for 751 operations personnel and 488 maintenance personnel throughout the site.

The NextAxiom Tag Out Interface Module synchronizes checklist and clearance-related data. It took a total of four weeks to configure—two weeks to review and revise the business rules and two weeks to assemble and test the solution.

"Fewer fields are involved in the Tag Out Interface Module although the business rules are very sophisticated. The NextAxiom team quickly adapted their solution to our environment."

Tim Bellamy, Operator Training Technician (former Tag Out Module Lead), Bruce Power

Bruce Power Operations & Maintenance

420,000 Assets in the Master Equipment List
250,000 Work Order Tasks Performed Annually
20,000 Scheduled Tasks in a Typical Planned Outage
2,000 Non-Outage Tasks per Week
3,150 Total Annual Clearances Applied
5,000 Ventyx Asset Suite Users (2,500-3,000 frequent users)
1,240 Ventyx Tag Out Module Users
100 Primavera Users

NextAxiom Delivers Real Time Agility

For nearly a decade, NextAxiom Technology has helped Global 2000 companies harness their existing applications to improve productivity, lower costs and increase business agility. The service configuration platform and interface solution company takes pride in the fact that Version 7 of its robust platform is deployed in some of the largest utility companies worldwide.

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