



Company: **ActiveBatch® Case Study**
 Children's Hospital & Medical Center of Omaha

Children's Hospital & Medical Center Prescribes ActiveBatch®, Sees Significant Improvement in BI/Data Warehouse Effectiveness

*All-In-One, Event-Based Scheduler Unifies Scheduling Tasks,
 Frees Up Resources, Gives Employees Current Data Faster*



About the Company

Company: Children's Hospital & Medical Center of Omaha

Industry: Healthcare

Installation Site: Omaha, Nebraska, United States

ASCI Product: ActiveBatch® Enterprise Job Scheduling and Workload Automation Software

Brief Company Overview:

Children's Hospital & Medical Center of Omaha is the only full-service pediatric specialty health care center in Nebraska, serves a five-state area and handles over 250,000 patient visits every year.

Case Study Highlights

- ✓ Multiple Database Job Schedulers Eliminated
- ✓ Support for Cross-Platform Database and Operating Systems
- ✓ Event-Based Job Triggers Give Workers Up-to-Date Data Faster
- ✓ Single Platform Simplifies Troubleshooting, Reduces Job Failures

Challenge

Like blood flowing through a person's veins, data courses through the corridors and treatment rooms of Children's Hospital & Medical Center of Omaha, Nebraska. As the only full-service pediatric specialty health care center in Nebraska, Children's serves a five-state area and handles over 250,000 patient visits every year. This high patient load generates a massive amount of information; it is the job of the IT staff at Children's to not only get that data where it needs to go, but also make it usable to hundreds of different workers throughout the facility.

Of all the IT systems at Children's Hospital & Medical Center, however, the one that has perhaps undergone the most change over the past two years is the Business Intelligence (BI) platform. "There was a time when only a few back-office people were involved with BI. Not anymore," said Wendy Worthing, Manager of Data Services for the center. "Everyone from Finance, to Admitting, to Infection Control and even our C-level executives, has begun using our Business Intelligence application to analyze, plan and report on various aspects of the hospital's performance."

As the hospital's BI needs have grown, so has the need to extract and manage information from various sources. Children's employs a number of mission-critical enterprise applications: Eclipsys' Sunrise Clinical Manager, EpicCare Ambulatory EMR (Emergency Medical Records), and Lawson Software's full BPM (Business Process Management) suite, to name just a few. Data from each of these, in various combinations,

is fed into several data marts for use by the hospital's two primary BI applications, Crystal Reports and QlikTech's QlikView.



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Basic job scheduling tools from several sources were used by the hospital's data administrators. Cron was in use on a Linux system; SQL Server and Cache', two database management applications, provided other functionality, as did Microsoft Windows. Each had its limitations, however, and none could handle the complex, multi-platform tasks required by QlikTech and Crystal Reports. A better alternative was needed.



Solution

After looking at various dedicated job scheduling applications, the Children's IT team selected ActiveBatch, from Advanced Systems Concepts, to unify and manage its wide range of data warehousing maintenance tasks. According to Worthing, a key factor was ActiveBatch's ability to interface with a wide range of operating platforms, databases and applications.

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Deployed at enterprises in 36 countries, ActiveBatch lets users automate and centrally manage highly disparate jobs and workflows, including tasks involving the most common operating systems, enterprise business applications and even Web Services. Its event-based architecture provides maximum efficiency in job and workflow management; what's more, its jobs library helps users quickly and efficiently create and reuse templates, calendars and services across the product.

Kevin Sherlock, Database Administrator, said that ActiveBatch's advantages were quickly felt. "Using

Cron, for example, we would extract data periodically on a Linux-based FTP server and send it to a staging box which ran on Windows. There the data would sit until it could be sent to the appropriate data mart. Everything was based on time or date. If we wanted to create an event-based trigger, we would have to write a script for it."

Further complicating the situation was the inability to institute automatic restarts if a job failed. "One failed task would create a domino effect among other jobs. Since there was no central monitoring capability, we wouldn't know until later that there was a problem—and then we would have to follow the breadcrumbs to identify the failure point," noted Sherlock.

By contrast, he continued, ActiveBatch can both eliminate latency between jobs, and assure that jobs will run as scheduled. "Scheduling by time or date has its limitations. A job may take one hour one day and 20 minutes on another—yet we would have to schedule a 'worst-case scenario' each time," he stated. "With event triggers we can totally remove downtime and get data to our users as soon as it's ready." He added that email and pager alerts—both a part of ActiveBatch—keep him and his colleagues apprised of failed jobs. If necessary, they can restart jobs manually through either messaging system to keep workflows underway.

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Impact

Since moving to ActiveBatch, Children’s Hospital & Medical Center’s database team has discovered the true power of advanced job scheduling. “Job queues, for example, don’t have to be static,” Worthing points out. “We may have 12 jobs scheduled in ActiveBatch and, depending on the situation, we might run four at a time, saving another four for later and perhaps the remaining four at 3AM. That kind of throttling capability conserves resources—in the past, such a capability would have required a lot of manual scripting.”

By combining the work of four or five schedulers into one unified application, noted Sherlock, data mart management is much less of a hands-on responsibility. “Failures don’t require a ‘dive-in’ anymore,” he states. “When there’s a problem—a much less frequent occurrence these days—we can quickly ascertain the cause and correct it.”

Cummings, the CIO, points to how ActiveBatch has helped her IT staff keep up with the growing database demands of a large, progressive medical center. “ActiveBatch’s reliability, flexibility and scheduling power has turned around our delivery methodology, allowing our people to focus on higher level tasks.”



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