



ActiveBatch® Workload Automation & Job Scheduling Case Study

Company:

SBA Communications

Taking Cellular Towers To New Heights:

How One Cellular Network Builder Uses Workload Automation to Support Its Rapidly Expanding Cellular Infrastructure



About the Company

Company:	SBA Communications Corporation
Industry:	Telecommunications
Installation:	Boca Raton, Florida, United States
ASCI Product:	ActiveBatch® Workload Automation & Job Scheduling

Brief Company Overview:

SBA Communications Corporation (SBA) is a leading independent owner and operator of wireless communications towers across North America.

In their site leasing business, they lease antenna space on towers and other structures that SBA owns or manages. In their site development business, they offer wireless service providers and operators assistance in developing their own networks.



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Case Study Highlights

- ✓ Using Workload Automation Centralizes Disparate Scheduling Tools and Automates Processes
- ✓ Automate Hundreds of Accounting Processes for Securely Sending and Receiving Payments
- ✓ Construct End-to-End Workflows Simply with Production-Ready Job Steps
- ✓ Implement Self-Service Automation
- ✓ Seamlessly Integrate with Third-Party Technologies

The next time you happen to take note of a cell phone tower, do not take the tower or the great reception on your Smartphone for granted. There is a lot more to managing that tower than meets the eye. When you are in the business of managing 10,000 towers, spanning from the tropical reaches of the Panama Canal to the northern stretches of the Canadian Yukon, the number of disparate IT systems and processes required to support their infrastructure can be daunting for even the largest IT organization.

This is the case for SBA Communications, one of the largest independent owners and operators of cellular infrastructure across North and Central America. Experiencing rapid growth and expansion, SBA's IT organization was relying on a mix of disparate scheduling tools to automate the myriad of processes that support the building and upkeep of its cellular tower network. To solve this, SBA turned to ActiveBatch Enterprise Job Scheduling and Workload Automation.



Secure Banking Requires Secure Automation

At the heart of these operations lies the ability to effectively manage accounting and banking processes for nearly 2,000 vendors who support SBA's cellular towers. These vendors can include telecommunication companies who rent space to place their equipment on SBA towers or to vendors who upkeep the towers, such as power companies.

ActiveBatch now serves as the scheduling engine to automate hundreds of accounting processes for securely sending and receiving vendor payments on a daily basis. The processing and movement of payment files is based on data that SBA's accounting system produces, says Brian Yaciuk, network engineer at SBA.

To automate these processes, Yaciuk uses ActiveBatch to construct workflows leveraging many of the more than 100 + Production-Ready Job Steps ActiveBatch provides via its Integrated Jobs Library, including jobs for Secure FTP, OpenPGP and data encryption. For many of the custom scripts SBA already had in production, Yaciuk was able to encapsulate them to use as reusable Job Steps within the Integrated Jobs Library.

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Before ActiveBatch, SBA was relying on a series of homegrown batch processes and custom scripts running across Windows Task Scheduler. This process required a lot of manual intervention. To make matters worse, Yaciuk had to rely on three different encryption solutions to encrypt and send secure payment files for different vendors. The error-reporting was limited and Yaciuk was forced to rely on a schedule to manually check for files that SBA was expected to receive from banks. "If something did go wrong and we didn't receive a file, we wouldn't know about it or know why it happened," Yaciuk says. "If there was an error during the transmission but the file already sent, accounting would have to call the bank or vendor, make sure they received the file, etc. It was hardly an ideal situation."

Due to the time sensitive nature of sending and receiving payments, any error could start an avalanche of emails between accounting and IT. "Let's say we're building a new tower and a vendor is waiting for receipt of a payment to continue the work. If the payment doesn't arrive on time they won't show up and complete the work. That's a big problem," says Robert Gonzalez, Director of IT Operations at SBA Communications.

It was for these reasons that SBA went to market in 2011 looking for a centralized scheduling solution, rather than continuing to run custom scripts across various machines. More importantly, the solution had to provide SBA with reporting and alerting capabilities that would allow IT operations to pinpoint an error quickly, as opposed to spending an hour trouble-shooting the problem. "With ActiveBatch, we've seen a huge reduction in time spent when an error does occur, from an hour to about 5-10 minutes," Yaciuk says. This has been accomplished by using many of the system views that ActiveBatch provides from its GUI, including the Operations View to view jobs across Past, Present and Future status, and the Log File views, which allow a user to drill-down into a specific job to view its output status.



Self-Service Automation

Gonzalez's team is now taking the automation of accounting and banking processes a step further by deploying ActiveBatch to two or three users within their accounting department. The goal is to allow for "self-service automation," or giving non-IT end users the ability to select directly from a service catalog within ActiveBatch and initiate certain jobs or process themselves without the need to involve IT. Gonzalez is providing these two or three users with limited access to certain jobs and functionality within ActiveBatch by leveraging ActiveBatch's security framework, which allows administrators to apply role-based permissions to any objects, jobs and plans within ActiveBatch. "The idea is to push ActiveBatch to them and allow them to rerun certain jobs or processes without giving them access to the entire console," Gonzalez says. "That way, if accounting needs to run a process again, they can without involving us, and that will improve IT service levels."

The implementation of ActiveBatch has now expanded to include SBA's developer team, which is responsible for managing a broad portfolio of both in-house developed and Microsoft-based applications and systems that SBA uses for management of the cell phone towers and their surrounding property. This can include everything from leasing agreements with customers to billing and activities on individual towers, all managed via a custom-developed property management solution that integrates directly into Microsoft Dynamics ERP.

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Operating in an environment built almost entirely on SQL databases and a .NET framework, Gonzalez says the ability for ActiveBatch to automate many of the nightly backup and movement of data processes has been beneficial and continues to grow in importance as the developer team expands ActiveBatch's role. For example, one process within ActiveBatch automates data replication every time a user queries a SQL database using Microsoft reporting, Gonzalez says. "We replicate that data to a secondary database and server for redundancy. We also have maintenance jobs to clean data up."

All in all, ActiveBatch has proved a catalyst for change within SBA by improving service levels and "dramatically simplifying IT operations," Gonzalez says. "ActiveBatch has set a new standard within our company on how to implement and automate critical business and IT processes." Gonzalez estimates ActiveBatch has provided a 50% productivity improvement for his IT staff and is saving accounting/finance a substantial amount of time as well. "As we continue to find new ways to leverage ActiveBatch; new processes and tasks to automate; I fully expect the benefits to continue to grow."

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