ActiveBatch®
Customer IT Automation Success Story

Türkiye Finans Is Servicing Web Services in a New Way with Workload Automation

Company: Türkiye Finans
Industry: Financial: Banking
Customer Site: Kartal, Ìstanbul, Türkiye

Brief Company Overview:
Türkiye Finans serves over 1 million customers at 182 branches and with over 3,350 employees. It was acquired on March 31, 2008, by The National Commercial Bank (NCB), the largest bank in Saudi Arabia and one of the leading banks in the Middle East. Türkiye Finans maintains its vision of becoming a leading participation bank.

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Türkiye Finans

- Build workflows that trigger jobs based on events
- Achieve a central Point of automation and integrate processes that span multiple applications and databases across the enterprise
- Manage workflows via the Service Library which is a dynamic SOA and web services tool
- Automatically retrieve processing data to provide audit and reporting data
- Ability to monitor ActiveBatch via the SCOM console for a central point of monitoring

Servicing Web Services with Automation

With over one million customers and nearly 200 branches, Türkiye Finans is a leading commercial and participation bank in the Middle East. Driven by its vision to become the premier source of principles-based banking and investment for individuals and business owners in Turkey, the bank is constantly making improvements in all its processes, and IT is no exception.

To better enable IT to deliver on its ambitious business goals to improve financial processes over the long term, Türkiye Finans' IT department realized the company needed to locate a best-in-class automation solution, and it found that solution with ActiveBatch Job Scheduling and Workload Automation from Advanced Systems Concepts, Inc.

Operating in a predominantly Microsoft IT environment, Türkiye Finans relies heavily on a collection of PowerShell, .NET Assemblies, Microsoft WCF LOB Adapters, and web service protocols executed via Windows Task Scheduler and SQL Server Agent. But Task Scheduler presented its own issues, primarily the inability to build workflows that triggered jobs based on events, such as a file being downloaded, and the need to write scripts and conversa-tion files for the long list of jobs that Türkiye Finans was looking to automate."You could easily make a mistake," says Mucahit Yavuz, release and patch manager, IT Oper-ations at Türkiye Finans. "These scripts were automating critical jobs for the transfer of financial and transactional data, payments, reports, etc. Each time we defined a job in Task Scheduler or had to make an update, a single mistake could block the execution of all other scheduled operations. As the list grew and the jobs became more complex, the workload became unmanageable."

The increased workload was driven primarily by the limitations of Task Scheduler and SQL Server Agent. Yavuz was using Task Scheduler to schedule the various PowerShell scripts, Microsoft WCF and Web Services protocols, but he had to use a third-party program and an XML configuration file to run the jobs. In addition, scheduling jobs using Windows Task Scheduler meant defining and executing the same job on individual servers, which in turn required security credentials to be entered each time.

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>
> *- Mucahit Yavuz, Release and Patch Manager, Türkiye Finans*

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From Task Scheduler to End-to-End Automation

In 2009, Türkiye Finans went to market, and after considering numerous vendors, selected ActiveBatch. With ActiveBatch in place, the IT organization has a central point of automation to schedule and execute workflows critical to the success of the business. This includes processes that transfer financial data to customer accounts that were previously being executed by SQL Server Agent. Microsoft WCF, .NET Assemblies, and PowerShell scripts are responsible for executing bill payments or delivering credit card transactions for processing.

The cornerstone of managing and executing these workflows is the ActiveBatch Service Library, which has altered the way Yavuz executes and manages many of the custom workflows the team uses. The Service Library is a dynamic SOA and web services tool that supports a multitude of integration points, including .NET assemblies, command line, stored procedures, and more. Yavuz uses the Service Library to call upon a .NET assembly or web service, retrieve those methods, and provide those methods as reusable Job Steps within the ActiveBatch Integrated Jobs Library. Values returned from these methods are passed downstream to be used as execution variables to trigger ensuing jobs.

The ability to retrieve methods and parameters from web services and .NET assemblies and automatically pass them to others has streamlined what had previously been an arduous and error-prone process. In addition, Yavuz uses ActiveBatch to automatically retrieve pro-cessing data to provide audit and reporting data, which wasn't an option when using a third-party program and an XML configuration file. "We're now able to process data returning from the methods ActiveBatch retrieves," Yavuz says. "It's a huge time saver and gives us a level of control and management over these processes that never existed before ActiveBatch."

For SQL Server scheduling, Yavuz has seen many advantages, such as the ability to execute SQL Server Jobs across multiple machines without having to schedule them individually. Yavuz can also combine these jobs with PowerShell scripts and Web Services to integrate processes that span multiple applications and databases. For a series of monthly, quarterly, and yearly financial reports, Yavuz leverages the SSRS (SQL Server Reporting Services) Job Step within ActiveBatch's Integrated Jobs Library to generate these reports and then automatically distribute them via a single workflow within ActiveBatch.

"Automated tasks running on multiple platforms have all been moved to ActiveBatch. As a result, scheduling, running, and monitoring all of the automated tasks has become much easier and more manageable thanks to ActiveBatch. High availability also has been provided by informing the relevant parties immediately when a problem occurs, thus reducing the time of action in the event of an emergency."

- Celal Hakyemez, Assistant Manager of IT Operations Management, Türkiye Finans

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A Central Point of Automation Means a Central Point of Monitoring

One key aspect of the ActiveBatch implementation lies with the ability to monitor ActiveBatch via System Center Operations Manager (SCOM). This has allowed the IT Operations team to overcome a major challenge to scheduling jobs with disparate scheduling tools: a central point of monitoring. "When we were running jobs via SQL Server Agent and Windows Task Scheduler, we had no integration with SCOM. As a result, IT Operations could miss errors for SQL Server jobs. If that happened, the issue wouldn't be corrected until somebody else came along and realized the scheduled task wasn't completed."

As part of their ActiveBatch implementation, Türkiye Finans purchased the ActiveBatch Management Pack for SCOM, which provides direct integration between ActiveBatch and SCOM and gives IT Operations the ability to monitor ActiveBatch via the SCOM console, including the ActiveBatch Job Scheduler, Execution Agents and ActiveBatch Objects, such as Jobs and Plans. Yavuz is able to simply "tag" any ActiveBatch Object he would like monitored by SCOM, resulting in an alert automatically being raised on the SCOM console in the event of a failure. Since making the switch over to ActiveBatch and using the Management Pack for SCOM, Türkiye Finans has experienced 45% faster resolution times for failures.

Moving forward, Türkiye Finans is expanding its ActiveBatch implementation to automate workflows to include a new ERP system. While the IT organization is predominately Microsoft-based, the new ERP solution runs off an Oracle database, and Yavuz is excited about executing PL-SQL blocks via ActiveBatch to integrate the new architecture into the existing one. "We're building workflows that will run jobs on a SQL server and pass data to an Oracle database for the ERP system. It's about automating the passing of data between various data sources to allow us to integrate various components of our IT infrastructure."

Additionally, Yavuz is gearing up ActiveBatch to manage Türkiye Finans' rapidly expanding virtual environment to manage VMware and eventually Microsoft Hyper-V, including creating, deleting, and provisioning virtual machines "on the fly" as part of broader workflows that will run jobs across various virtual machines. "ActiveBatch will not just automate tasks and workflows but also automate the management and provisioning of resources throughout the IT organization. ActiveBatch is expanding into an enterprise-wide IT automation tool."

Türkiye Finans is confident in moving forward with ActiveBatch thanks largely to the technical support the IT organization receives from Advanced Systems Concepts. "The answers are accurate and timely," Yavuz says, and with ActiveBatch's ease of use and simplicity of implementation and upgrade, Yavuz knows the days of requiring vendor, on-site support are no longer required. "With the evolution of technology, there's no need to be in the same place to resolve an issue, and that's a testament to the simplicity of ActiveBatch."

> *"ActiveBatch has been important for our company in terms of automation and scheduled tasks. Scheduled tasks are more managable, flexible, stable, and consistent. ActiveBatch makes it easy to design complex workflows that span heterogeneous systems."*
>
> *- Fahri Obek, Executive President of IT, Türkiye Finans*

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