EMA RADAR for Workload Automation (WLA): Q4 2019

An Enterprise Management Associates® Radar Report Written by Dan Twing



Q4 2019

OVERVIEW



EMA Radar[™] for Workload Automation (WLA) Q4: 2019

SYSTEMS CONCEPTS, INC.

ASCI ActiveBatch is once again a Value Leader. The product's Integrated Jobs Library offers hundreds of prebuilt job steps, and the Service Library extends this power with strong API accessibility. ActiveBatch recently introduced a new REST API, added performance improvements for Microsoft SQL Server and Service Broker, and enhanced the FTP Event Trigger. New security features include multifactor authentication for the ActiveBatch Console, Web Console, Self-Service Portal and Mobile Operations (mobile application), and an out-of-the-box integration with CyberArk that allows workflows to dynamically retrieve credentials at runtime, simplifying credential management for workflows. To EMA, the standout feature is still the automated provisioning and deprovisioning of virtual and cloud-based resources, based on historical and predictive analytics. This was augmented with Heuristic Queue Allocation to add machine learning to enhance the performance of machine resources. ActiveBatch V12 also includes dynamic, user-defined queue characteristics, which can allow developers to configure workflows to monitor Queue Characteristics at runtime and select the Execution Queue best suited for the job. ASCI has also stepped up their services with ActiveBatch Academy, an online training portal, and a user certification program. ActiveBatch is a great choice to manage a diverse IT landscape across workload automation, business process automation, IT process automation, file movements, and big data within a single unified console designed for operational efficiency.

EMA RADAR



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Founded in 1981 in Hoboken and currently headquartered in Morristown, New Jersey, Advanced Systems Concepts, Inc. (ASCI) is a privately-held software firm with a line of multiple enterprise software products, including ActiveBatch workload automation, XLNT command and scripting language, and RemoteSHADOW disaster recovery products for Unix and OpenVMS. EMA reviewed ActiveBatch version 12 for this report.

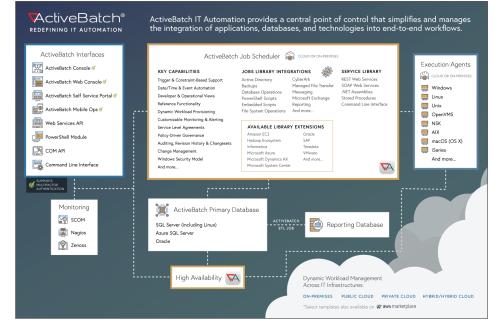
ARCHITECTURE

ActiveBatch makes use of a dynamic, event-driven architecture to effectively manage and automate business and IT processes based on near-real time requirements.

KEY FEATURES SUMMARY

Workflow Development and Optimization Tools

ActiveBatch provides a flexible, real-time, graphical display and dynamic development environment with Map View. Map View is a centralized, 360-degree interface that allows users to build, design, modify, schedule, optimize, simulate, and trigger workflows all from a single pane. An Integrated Jobs Library provides drag-and-drop access to hundreds of prebuilt integrations. Workflow Optimizer graphically presents completion times, while Simulation Mode simulates a workflow to test logic.



ActiveBatch Architecture



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Dynamic, Event-Driven Automation

ActiveBatch supports an extensive array of events, including application integrations, email, files, message queues, databases, etc. The Job Scheduler monitors the systems for incorporated events so workflows can begin unhindered execution after the events are declared.

Flexible Job Scheduling

ActiveBatch supports both trigger-based and constraint-based scheduling. Trigger-based includes extensive calendar features and ensures idle or wait time is eliminated. Constraint-based scheduling breaks from time-specific scheduling and allows jobs to start when constraints are met, and can support rolling the start of the business day across time zones.

Reference Objects and Variables

Jobs can be defined as templates for reuse, easy maintenance, and global changes. Reference Templates can include variables to share data with other jobs or objects, and provide more reusability compared to hard-coded values.

Managed File Transfer and Hadoop/Big Data Integration

ActiveBatch includes predefined Managed File Transfer (MFT) job steps and support for a variety of file transfer protocols, advanced file filtering, parallel file transfer functionality, FTP file trigger, and built-in reliability checks made for effective MFT. Integration for the Hadoop Ecosystem includes Pig, Hive, HBase, HDFS, Sqoop, MapReduce, Spark, Oozie, and more. This integration includes prebuilt content (ActiveBatch Job Steps) for assembly into big data workflows, as well as an HDFS File Trigger.

Machine Learning, Algorithms, and Cloud Marketplace

Heuristic Queue Allocation in ActiveBatch allows for seamless scalability using machine learning to analyze historical data for optimal allocation of future Execution Queues (machine paths) to intelligently distribute job loads across available and acceptable Execution Agents. This reduces slack time and idle machine resources.

ActiveBatch tools and integrations help IT professionals manage automated processes within cloud, on-premises, and hybrid environments. Managed/ Smart Queue facilities dynamically scale resources up or down based on real-time demands and historical analysis of past scheduling periods to minimize unnecessary expense and increase the likelihood of successful, on-time job completion. The ActiveBatch Integrated Jobs Library helps users construct workflows to provision, terminate, manage, and configure their resources. With Amazon Machine Images (AMIs) and CloudFormation Templates for ActiveBatch on AWS Marketplace, organizations can quickly adapt to changing environmental conditions, at scale.

Policy-Driven Governance

Organizations are provided with a single, authoritative source to know exactly what's running and when, with the ability to easily control and monitor the behavior and security of workflows. Check-out/Check-in functionality allows multiple developers to simultaneously work on the same objects. Change sets allow users to track, associate, and identify multiple object changes over time as part of a single check-in, or rollback multiple changes at one time. Change Management allows users to rollback, restore, and audit groups of changes.

Customizable Alerting and Monitoring

ActiveBatch supports over 60 different alert types across all object types (jobs, plans, queues, scheduler, etc.) and offers reusable alert objects to notify users and operations when a specified condition is raised. Each alert is deliverable, using 12 different delivery methods including email, JMS, Microsoft Message Queues, SMS text, Twitter, SNMP, Skype, Office Communicator, and more. This group includes monitoring and alerting workflows with completions tied to a service-level agreement (SLA) or business policy.

SLA Integration and Support

SLA Monitor allows for specific attention to SLA-marked objects, with emphasis on providing insight toward whether the SLA is expected to be met or breached. When a workflow reaches a defined critical stage, ActiveBatch can trigger supporting actions and jobs to help remediate the issue.

Variety of User and Programmatic Interfaces

The variety of interfaces includes admin "thick" clients, full web consoles, self-service portals for the help desk and business users, and native mobile support, as well as full inbound and outbound web services API.

Security-Focused Automation

ActiveBatch includes support for the Microsoft Security Model for consistency within an organization's existing security implementation, as well as an out-of-the-box integration with CyberArk Application Access Manager to bring Privileged Access Management. Workflows can dynamically retrieve credentials at runtime so jobs have the appropriate access, and changes to passwords and usernames are no longer a concern.



EVALUATION SUMMARY

)	DEPLOYMENT & ADMINISTRATION	
	EASE OF DEPLOYMENT	
	Deployment Time/Effort	Outstanding
	Conversion Facilities	Strong
	Job Discovery & Import	Strong
	Staff Training	Outstanding
	SUPPORT AND SERVICES	
	Customer Support	Strong
	Professional Services	Outstanding
	EASE OF ADMINISTRATION	
	Console Ease of Use	Outstanding
	Upgrade Process	Strong
	Test Environments	Solid
	Automation of Management	Outstanding

ARCHITECTURE & INTEGRATION		
ARCHITECTURE		
Business Focus	Outstanding	
Scalability	Outstanding	
Dynamic Workload Placement	Strong	
Breadth of Platform Support (incl. agentless)	Outstanding	
Breadth of Application & Database Support	Outstanding	
Disaster Protection	Outstanding	
Containerized Workloads	Strong	
Container Deployment	Outstanding	
INTEGRATION/INTEROPERABILITY		
Comprehensive API	Outstanding	
Cloud Integration	Strong	
CMDB Integration	Solid	
ITPA Integration	Solid	
Capacity Management Integration	Outstanding	
MFT Integration	Outstanding	
Big Data Integration	Solid	
Social Media Integration	Limited	
Heterogeneity Across Environments	Outstanding	
Developers Schedule in Code (DevOps)	Strong	



EVALUATION SUMMARY

FEATURES Automation Design Flexibility Outstanding End-to-End Monitoring Outstanding Outstanding Outstanding	
End-to-End Monitoring Outstanding	
Ormaliance Management Change	
Compliance Management Strong	
Triggering Outstanding	
Self-Service Portal Outstanding	
Forecasting, Analytics, & Reporting Outstanding	
Alerting Strong	
Security Strong	
What-If Scenarios Strong	
Conditional Logic & Auto Remediation Outstanding	
Logging/Auditability Outstanding	
Business User Features Outstanding	
Hadoop Support Strong	
RPA Orchestration Limited	
EASE OF USE	
Simplicity of GUI Outstanding	
SLA & Policy Awareness Outstanding	
Root Cause Analysis Strong	
Mobile Device Support Outstanding	
Language Support Solid	
Available Help Resources Outstanding	

COST ADVANTAGE		
Flexibility of Licensing Model	Outstanding	(… ခဲ့)))
Pricing Scenarios	\$\$\$	
SaaS Availability	None	

VENDOR STRENGTH		
Vision	Outstanding	(· · · à)
Strategy	Strong	
Financial Strength	Strong	
Research & Development	Strong	
Partnerships/Channel	Solid	
Market Credibility	Outstanding	
Geographic Coverage	Strong	



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CUSTOMER LOCATIONS



NUMBER OF CUSTOMERS

= 1000

= 100

22+

Languages Available: English

NOTE: ActiveBatch supports usage of world language and non-English characters in the naming of ActiveBatch Objects, within Job Log files, within documentation and commenting fields, etc. (where input by the user).

FAVORITE FEATURES MENTIONED IN CUSTOMER INTERVIEWS

"ASCI can run jobs in parallel and monitor it all so you know what is going on. You can launch a dozen Cron tabs in parallel, but you cannot monitor that. Our 6.5-hour job was reduced to 40 minutes with ActiveBatch."

> "By centralizing all the code in ASCI, we can move things to new servers with a few clicks."

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"Support is very good. Whenever we have a question or issue, we get a very quick response." *"Whenever I ask a question, the answer is 'Yes, ActiveBatch can do it!"* "Anyone who cannot get value out of this product at this price point is certainly doing something wrong."

> "The Reference Jobs function is a favorite feature. Using a Master Job for setup, you can change the master and all that reference it change."

> > *"We take advantage of load balancing and round robin."*



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Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help EMA's clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals, and IT vendors at www.enterprisemanagement.com or blog.enterprisemanagement.com.



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