



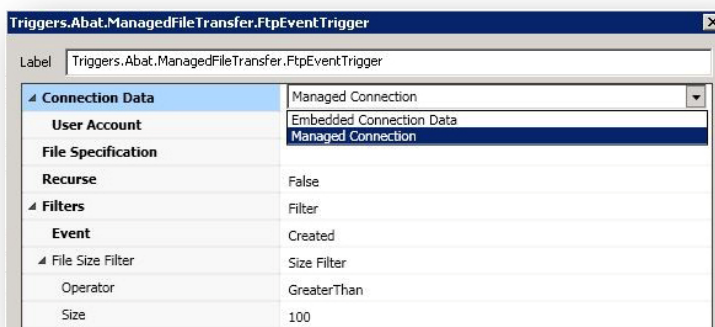
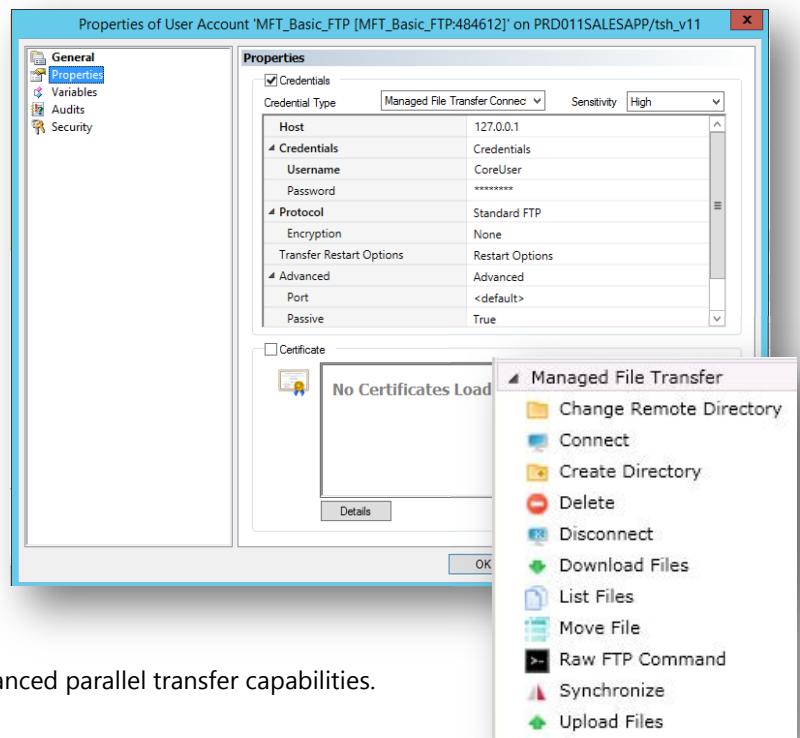
Redefining IT Automation

ActiveBatch® V11 Capabilities

Built for the changing IT landscape and with valuable feedback from our users, ActiveBatch Version 11 provides new capabilities to the industry's most comprehensive IT Automation solution, allowing organizations to automate even more in the areas of workload automation, business process automation, IT process automation, managed file transfer, big data automation, and more, all within a single automation environment. ActiveBatch V11 introduces powerful and incremental automation functionality for improved reliability, updates to the Jobs Library for faster and more reliable workflow development, and new innovative extensions. Please note this is not an exhaustive list of new ActiveBatch V11 features.

New Managed File Transfer Capabilities

New Managed File Transfer (MFT) capabilities provide increased flexibility and performance for file transfer processes. Actions that previously required scripting can now be handled through Job Steps. Advanced filtering allows users to restrict transfers based on factors like relative age, absolute age, or size of the file. With the new MFT User Account Object, connection parameters can be specified within the User Account Object itself for easier manageability, maintainability, and audit tracing, all while maintaining secure access to the Object. The new MFT capabilities allow for checks to determine whether files have been successfully transferred, transfer restart options to enable the restart of transfers upon detecting an error, and advanced parallel transfer capabilities.



FTP File Trigger

ActiveBatch's new FTP File Trigger allows users to, depending on FTP server implementation, trigger a Job or Plan based on the creation or deletion of a file on an FTP server, where direct file system access may not be available.

ActiveBatch® V11 Features

Automation for Big Data/Support for the Hadoop Ecosystem

ActiveBatch simplifies big data automation with production-ready content for the Hadoop Ecosystem including HDFS, Hive, MapReduce, Spark, HBase, Pig, Sqoop, Oozie, and more, giving users the advantage of focusing on function, rather than coding. This approach provides ActiveBatch users the ability to more reliably build, automate, and maintain Hadoop workflows. Users have the option of assembling new Hadoop workflows, running existing Hadoop scripts, and/or augmenting Hadoop scripts with components of the Jobs Library. The ActiveBatch Extension for Hadoop also simplifies the integration of Hadoop components within the IT infrastructure and provides Hadoop users with all ActiveBatch's advanced scheduling and automation functionality.

With this integration comes a powerful new HDFS Event Automation Trigger, which improves time to insight by getting data into the hands of the end user faster.

The ActiveBatch Extension for Hadoop is separately licensed.

Changesets

Changesets allow users to Check-In and rollback multiple changes made to and across a series of Objects at one time, providing an audit trail to show what changes were deployed, when, and by whom. This provides a new degree of maintainability, manageability, and control of ActiveBatch Objects. Users can also add comments to document the purpose of a Changeset and indicate why a set of changes were made. Additionally, Changesets within Change Management allow users to identify, rollback, restore, and audit groups of changes made within ActiveBatch Change Management.

| History of ChangeSetsExample | | | | | Included Objects in Changeset 47 | | |
|------------------------------|----------------------|-------------------|---------|--|----------------------------------|----------|-----------|
| Changeset ID | User | Date/Time | Objects | Comment | Name | Revision | Operation |
| 47 | ADVSYSCON\varblaster | 2/21/2017 3:19 PM | 7 | Checked in by ADVSYSCON\varblaster | /Sandbox/RA | | |
| 46 | ADVSYSCON\varblaster | 2/21/2017 3:18 PM | 2 | Checked in by ADVSYSCON\varblaster | ChangeSetsExample | 2 | Modify |
| 45 | ADVSYSCON\varblaster | 2/13/2017 1:10 PM | 1 | 'Job1' checked in implicitly by ADVSYSCON\varblaster | PlanA | 3 | Modify |
| 44 | ADVSYSCON\varblaster | 2/13/2017 1:10 PM | 1 | 'Job1' checked in implicitly by ADVSYSCON\varblaster | Job1 | 6 | Modify |
| 43 | ADVSYSCON\varblaster | 2/13/2017 1:10 PM | 1 | 'Job1' checked in implicitly by ADVSYSCON\varblaster | Job2 | 3 | Modify |
| 42 | ADVSYSCON\varblaster | 2/13/2017 1:10 PM | 1 | 'Job2' checked in implicitly by ADVSYSCON\varblaster | PlanB | 3 | Modify |
| 41 | ADVSYSCON\varblaster | 2/13/2017 1:10 PM | 1 | 'Job2' checked in implicitly by ADVSYSCON\varblaster | Job1 | 2 | Modify |
| 40 | ADVSYSCON\varblaster | 2/13/2017 1:10 PM | 1 | 'Job1_Copy1' checked in implicitly by ADVSYSCON\varblaster | Job2 | 3 | Modify |
| 39 | ADVSYSCON\varblaster | 2/13/2017 1:10 PM | 1 | 'Job1' checked in implicitly by ADVSYSCON\varblaster | | | |

Non-Windows Integrated Jobs Library Support

ActiveBatch V11 will ensure that the Java Workflow Host program supports the same framework as the Windows version for runtime. This change will ensure consistency and full functionality of most Job Steps for Jobs executed on most non-Windows servers, including Linux, Unix, OpenVMS, and others.

Web Services API

A new Web Services API, supported on ActiveBatch V11 (with limited support for ActiveBatch V10 SP3) will now be available as part of the core ActiveBatch license. The Web Services API, which supports Soap 1.1 and 1.2, is a more powerful Web Services model with backend improvements for advanced performance and speed. *Note: ASCI will continue to distribute and support the existing Web Services ENV framework, but Web Services ENV users are encouraged to use Web Services API for future development.*

ActiveBatch® V11 Features

Jobs Library/Job Step Updates

Job Steps can now be grouped, copied & pasted, and/or saved to a Template Library area and reused in other Jobs on a per user or global basis. These new enhancements will both improve reliability and as well as simplify the development of Jobs that make use of the same Job Steps, as users will be able to reuse previously-built templates consisting of individual Job Steps or groups of Job Steps. Additionally, users can leave comments on a Job Step or Jobs Library Job to assist developers in more easily conveying and understanding the purpose of a Job or Job Step.

CollectData_OracleJob
Comments: Collect new user data into a table that can be consumed by Sqoop

| | |
|-------------------------------|---|
| Connection Information | |
| Data Source | \${ORACLE_PROD} |
| Credentials | /EXAMPLES/EXTENSIONS/APACHE/Hadoop/Oracle |
| JobName | Collect_New_User_Data |
| WaitCompletion | True |
| PollingInterval | 30 |

GetLastID_HiveQuery
Comments: Get the last imported user ID so as to only import new users

| | |
|-----------------------|---|
| Hive Server | \${HADOOP_SERVER} |
| Port | 10000 |
| Authentication | |
| Credentials | Kerberos Username/Password |
| Database | /EXAMPLES/EXTENSIONS/APACHE/Hadoop/HiveKerberos default |
| Statement | SELECT MAX(ID) AS ID FROM UserData; |
| Timeout (+hh:mm:ss) | Infinite |
| Output Results | False |

Support for Local Business Day Start Time Across Time Zones

When ActiveBatch is implemented across a global enterprise, developers and operations need to ensure that Jobs and Plans are being executed at the right time, regardless of things like time zones or daylight savings time. For those ActiveBatch users employing Constraint-Based Scheduling (CBS), ActiveBatch offers support for a rolling start of the business day across time zones. For example, a 6 a.m. start time can be 6 a.m. local time, regardless of the Job Scheduler's time zone, making the implementation of complex scheduling requirements simpler.

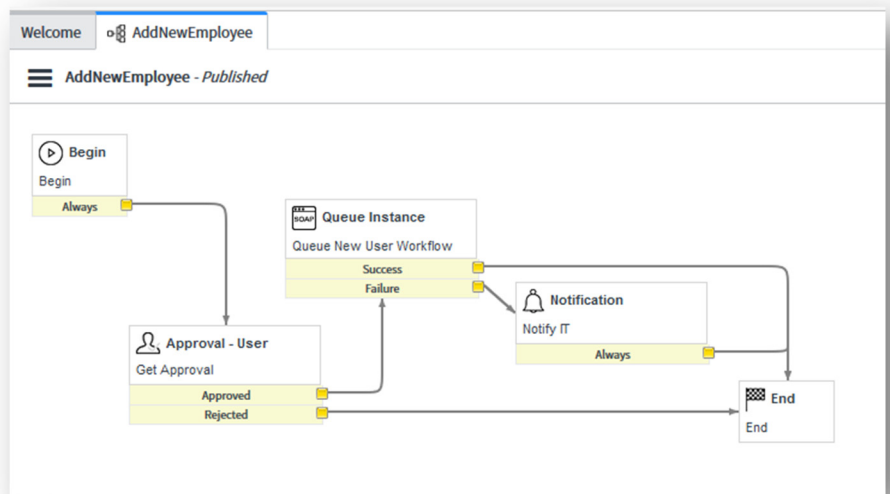
| Time Zone | Local Time | Current Business Date | Hours Until EOD | Business Day Status |
|---------------------------------------|----------------|-------------------------|-----------------|---------------------|
| Sakhalin Standard Time | 2/22/2017 7:54 | Wednesday, February 2 | 16 | On Schedule |
| E. Australia Standard Time | 2/22/2017 6:54 | Wednesday, February 2 | 17 | On Schedule |
| Tokyo Standard Time | 2/22/2017 5:54 | Wednesday, February 2 | 18 | On Schedule |
| Russia TZ 8 Standard Time | 2/22/2017 5:54 | Wednesday, February 2 | 18 | On Schedule |
| China Standard Time | 2/22/2017 4:54 | Wednesday, February 2 | 19 | On Schedule |
| West Asia Standard Time | 2/22/2017 1:54 | Wednesday, February 2 | 22 | On Schedule |
| E. Africa Standard Time | 2/21/2017 11:5 | Tuesday, February 21, 2 | < 1 | On Schedule |
| Syria Standard Time | 2/21/2017 10:5 | Tuesday, February 21, 2 | 1 | On Schedule |
| South Africa Standard Time | 2/21/2017 10:5 | Tuesday, February 21, 2 | 1 | On Schedule |
| Greenwich Standard Time | 2/21/2017 8:54 | Tuesday, February 21, 2 | 3 | On Schedule |
| Argentina Standard Time | 2/21/2017 5:54 | Tuesday, February 21, 2 | 6 | On Schedule |
| Eastern Standard Time (Job Scheduler) | 2/21/2017 3:54 | Tuesday, February 21, 2 | 8 | On Schedule |
| Pacific Standard Time | 2/21/2017 12:5 | Tuesday, February 21, 2 | 11 | On Schedule |
| Alaskan Standard Time | 2/21/2017 11:5 | Tuesday, February 21, 2 | 12 | On Schedule |
| Hawaiian Standard Time | 2/21/2017 10:5 | Tuesday, February 21, 2 | 13 | On Schedule |



ActiveBatch® V11 Features

ServiceNow Integration

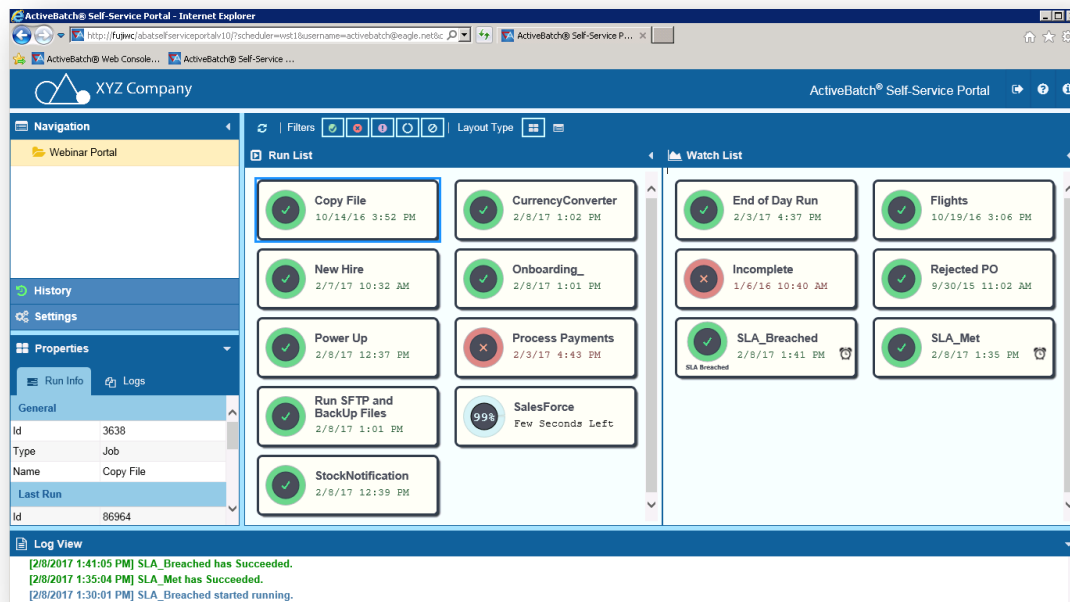
ActiveBatch V11 will extend the existing ActiveBatch Extension for ServiceNow by providing bidirectional integration. ActiveBatch workflows will now be able to be triggered based on conditions or activities that occur within ServiceNow, either through integration with ServiceNow Orchestration or with ActiveBatch's new ServiceNow Event Trigger. This orchestration piece, along with a new "Query Incident" Job Step, are in addition to the ServiceNow Alerts and Job Steps currently offered in the ActiveBatch Extension for ServiceNow.



The ActiveBatch Extension for ServiceNow is separately licensed.

ActiveBatch Self-Service Portal [V10 SP2 and above]

ActiveBatch Self-Service Portal empowers Business Units and Help Desk teams to take on daily and ad hoc processes with a user-friendly, web-based interface for desktop or tablet browsers. Now, these users can run and monitor approved tasks like generating BI reports, querying data, adding new hires, resetting passwords, or sharing files without relying on IT's day-to-day involvement, making IT less busy.



ActiveBatch Self-Service Portal is separately licensed.