

**SmartBatch Version 10.0.0.181**  
**Enterprise, Standard, Lite and Free Editions**  
**October 2016**

## **Overview**

SmartBatch is an advanced Windows automation solutions. It provides the industries first n-tier, job scheduling and automation system based on .NET technologies.

If you are upgrading from SmartBatch 2009, no database migration is necessary. Any database schema changes are applied by the Database Manager when you register the database.

If you are upgrading from SmartBatch32, SmartBatch 2004 or SmartBatch 2006, please read the section in online help under Contents, Introduction, Obsolete and Changed Items. You will want to check for compatibility issues to make sure your upgrade is coordinated properly.

If you are not sure of the compatibility of your version of SmartBatch, please contact support for assistance.

## **Installation**

SmartBatch is installed by using the installer file (setup.msi) obtained from the OnLine ToolWorks Corporation web site under downloads or from the product CD. The install requires the .NET 4.5 Framework to be present on your computer. If you do not have the .NET framework version 4.5, you can obtain it from Microsoft.

Run the setup.exe or for the Remote Agent (setupra.exe) file by double-clicking on it in File Explorer.

Follow the prompts to install the product.

The default database is MS Access. You can change the database used to host the SmartBatch configuration to any edition or version SQL Server start with SQL Server 2005. You can change the database after the install using the Database Manager program.

The SmartBatch Executive Server in Control Panel, Service must be started before you can use SmartBatch. Go into the Control Panel, Services and select the SmartBatch Service and Start the service if it is not already started.

Run the SmartBatch Administrator from the Start Menu, OnLine ToolWorks, SmartBatch, Administrator

## **Uninstall/Remove**

Use the Add or Remove programs capability in Control Panel to remove SmartBatch. You can remove SmartBatch by selecting this entry and chose to uninstall.

Some files will might remain in the directory where SmartBatch was installed. If these files are no longer needed, they can be deleted with File Explorer.

## **History**

### **October 2016**

A major revision has been provided and the version of the product has been changed to V10. Also, SmartBatch is the full name of the product as the year is no longer part of the name.

Refer to the online help for details of the changes that include :

An improved Office style user interface.

A new Dashboard view.

Improved performance in the list displays.

Various minor bug fixes and enhancements.

### **August 2015**

Fixed an issue with Parameters loading too often.

Optimized Parameters so that they are only read when by the executive server when a Parameter value changes. The ES will cache Parameter Groups and values and refresh the cache as needed (i.e., when a Parameter values changes). If a direct database call is made changing a Parameter value, the cache is NOT refreshed. A call to the API or use of the SmartBatch Administrator to update a Parameter value is necessary to get the ES to update this cache.

### **April 2015**

Fixed an issue with writing Operation and Schedule data to the Audit. The deserialization of the Enum for bit mapped fields was throwing an error.

Fixed an issue with Monthly days of the month schedules. It was not accounting for the time of the day when recalculating the schedule.

Fixed a concurrency problem in the Executive Server which might occur under heavy load.

### **February 2015**

Fixes an issue with ingnoring dependencies after a schedule time change. Previously, when a new schedule time (recurring time or time past midnight occurred), the dependency would be ignored if it was already satisfied. Now a dependency check is made anytime a new schedule time is calculated.

### **August 2014**

Fixes an issue with dependency timeouts. Previously the timeout minutes were not being calculated correctly.

### **June 2014 (Version 6.0.0;.173)**

Added logging to administrator in history control to help debug index out of bounds error. Fixed an index out of boulds when listing history in an appGroup other than Default.

Fixed a concurrency issue for Job objects that could cause an Operation within the a Step to run twice.

### **April 2013 (Version 6.0.0.171)**

Fixed an issue with Operations running over midnight with recurring schedules. It was possible that the Operation would either continue to reschedule based on time into the next day even though the time window had not been reached. Also, the Operation may have not reschedule into the new day depending on when it completed.

Fixed an issue with Run Between Time schedules where the Operation went to the error status if the ES tried to run it past the end time. The Operation is now removed.

### **September 2012 (Version 6.0.0.169)**

Round-robin computer groups are now updated dynamically.

The queued status would sometimes persist when an Operation was executed on a Remote Agent and it

completed very quickly. This should not occur and will instead move to the next status (typically running). The executive server would previously try and communicate with the Remote Agent in a Round-robin or App Group computer group before selecting the computer. This, in some environments, will cause computers that are actually available not to be selected. The behavior can be turned on in the esservice.exe.config file with the RAUpCheck key value set to true.

The Preview Operation has been changed to remove an error message in regards to no Parameter Group setting when there actually was one selected.

Fixed a problem with reset of timer object under certain status condition that were not getting reset (ex., waitondependency and retries).

Fixed a problem with recurring time schedules that run past midnight. It was possible the schedule would not reset to the current day if the object ran past the start time.

### **June 2012 (Version 6.0.0.162)**

The remote agent under stress could potentially not process an Operation for an indefinite period of time. The order of Operations retrieved from the database has been changed to help this processing.

The Executive Server was changed to make sure it does not try and restart an Operation in the Queued or Running status from the monitor thread.

The UI component library has been updated.

Fixed a problem with the Runbook form not displaying in the Administrator.

### **October 2011 (Version 6.0.0.160)**

Fixed display problems associated with some controls not showing underlines.

Fixed object error reference problem that occurred in the Administrator when the Status window refreshed. This might occur once or twice a day for an Admin left running continuously.

Fixed length of Database Instance name in Database Manager.

### **July 2011 (Version 6.0.0.158)**

Fixed a problem with dependency being satisfied if the database connectivity was not available or other database error occurred.

### **February 2011 (Version 6.0.0.156)**

First release providing the Free Edition. The Free Edition is limited to 20 Operations. The Lite Edition is still available but now supports up to 50 Operations. All Editions must be registered but there is no charge for the Free Edition registration. The Lite, Standard and Enterprise Editions require a purchased license for each computer where they are installed. Email support only is available for the Free Edition. The Lite, Standard and Enterprise Edition provide email, phone and web session support.

### **November 2010 (Version 6.0.0.155)**

Fixed the following:

Changed the Database Management Program for better integration with SQL Server and Windows 2008.

Change the way the Administrator saves settings to have better compatibility with different OS platforms.

Fixed a problem with parallel steps in a job. The parallel step could throw an exception causing the job to not run.

Fixed concurrency problem around short running Operations that run on a Remote Agent computer.

### **January 2010 (Version 6.0.0.153)**

Fixed the following:

A problem existed in recurring (run between times schedules) if the Operation, Step or Job completed just before the end time. It would get rescheduled again and would get placed into an error status when it tried to run past the end time. This has been corrected.

The version for the CompanyFactor Windows Forms controls has been updated to the latest. This may help with some stability problems seen in the Administrator client.

A new Specific Time Schedule could not be created as a database exception occurred. This has been corrected.

### **May 2009 (Version 6.0.0.149)**

Fixed the following:

Update a forms control component to the latest revision to fix a random UI crash problem seen in some environment.

Corrected a problem with Parallel Steps where the next date/time was not calculated correctly. The date would always calculate to the next day.

Corrected a problem with Operations and the retry option. Operations were not restarting on retry.

Correct a problem with Steps not being deleted when an Application Group is deleted.

Corrected a problem with Steps and Jobs executed on demand would always start with the first Operation in the Step or Step in the Job even if a different object was selected.

Corrected a problem with a date calculation on monthly dates based on non US regional settings.

Corrected a problem with the set date format being used on non SQL Server databases.

Corrected a problem with the Remote Agent not starting with integrated security.

Corrected several typos in the user interface and documentation.

Added an Integrated Security checkbox in the Database Manager to make it more intuitive on how to setup the connection. The SQL Server connection string example will add the Integrated Security SSPI value.

Added support for new features in the Web Administrator (available in a separate release) to support the new End User and End User View only roles.

### **January 2009 (Version 6.0.0.144)**

Initial release of SmartBatch 2009.

### **August 2008 (Version 5.0.0.131)**

Corrected or enhanced the following:

This version supports the .NET 2.0 Framework.

This version, by default, installs SQL Server Express 2005 rather than MSDE. SQL Server 2000, 2005, 2008 and MSDE can also be used with SmartBatch.

A timing problem existed in the Executive Server when processing the midnight event. It was possible in rare situations that the event would occur just before midnight and during processing the clock changed past midnight. This could have led to a situation where processing for the new day was not staged.

Checking role security in the Administrator was causing the Administrator to display an error message and then quit if the user was not authorized to perform an action.

A change was made for recurring time schedules to make sure the next time is processed if an execute on demand was performed while the object was already in the Status.

An object that was disabled would reschedule to its schedule run date and time when executed on demand. If an object is not enabled, it should not be scheduled however it can be executed on demand.

### **May 2008 (Version 5.0.0.129)**

Corrected or enhanced the following:

A change was made to the notification server to allow it to occasionally poll for work to do. In some situations it would wait indefinitely to send out a notification.

A parallel step may not have handled error situations correctly (or reported it correctly) on a dependency

timeout or other Operation timeout.

Fixed a problem with dependencies on a step or job where the dependency timer was not reset after the object was removed from the status.

Changes were made to the Executive Server and Remote Agent to make sure exceptions are handled properly when the exception text contains quote characters. The quote characters would cause generated SQL statements to fail so that Status would not get updated and History would not get inserted.

The Status Detail window has been updated to show more information for the Status of Parallel Steps. A timing problem could occur around the midnight event causing recurring time schedules to continue running past midnight. This might also cause the timer event to occur more than once.

History is now updated for each retry if an Operation fails and has retries configured.

A change was made to the notification server so that it can be configured to poll for notification events. This will make sure that any notification event will be processed in a specified amount of time.

An update was made to the processing of a Job when executed on demand and the schedule was not enabled the job could get scheduled for a later time after the demand request. It was also possible that the request to execute the job had to be made twice before the execute would occur.

This has been corrected. Sql Server integrated security was not working properly for the Remote Agent. This has been fixed.

The Administrator will now use the sbReport users to Sql Server integrated security is being used. Crystal however does not support integrated security with the .NET 1.1 Framework.

### **December 2007 (5.0.0.121)**

Fixed a problem with a Parallel Step that will continue to run the next Step in a Job even if one of the Operations in the Step fails.

Added additional logic to try and capture a situation that has occurred where a recurring time schedule repeats within the same minute.

Fixed a problem with a Step or Job potentially getting stuck in the Status window after a run threshold time expired.

Fixed a problem with Dependencies where a dependency was not being met after midnight.

Fixed a problem with the Remote Agent failing to login under integrated security.

### **July 2007 (Version 5.0.0.119)**

A check is made by the Executive Server for Steps and Jobs to determine if the object is being run before it's start time. This check was previously made for Operations but not Steps or Jobs. Schedule calculation problems can occur if an object runs before its start time and also completes before its start time. It will reschedule to run again at the actual start time and may reschedule for another day that is not accurate. This check is made for Schedules that do not have recurring times within the day.

Additional text for notification text messages is now sent with the message. Previously, the additional text (Operation Properties window) was only sent if html was selected as the message type.

The object id column has been added to this history table to identify uniquely an instance (run) of a Operation, Step or Job.

The Remote Agent on start up sends a message to the Executive Server indicating that the Remote Agent has started. This indicates to the ES to clear information about the Remote Agent such as the Max Operations property.

A change was made to the specific times processing to correct a problem with time calculation that would only occur on a Sunday.

### **April 2007 (Version 5.0.0.118)**

The time buttons on the Schedule properties now retries the time from the Executive Server computer instead of the time on the Administrator computer.

The ability to have a different alert list for start, success and failure notification events is now supported.

The ability to have the application log file attached to the start, success and/or failure notification events is now supported.

The ability to attach any file specified to the start, success and/or failure notification events is now supported.

The ability to rename an Application Group is now supported through a SQL Server stored procedure. The @@Computer and @@AppGroup built-in parameter values are now supported. The @@Computer has the value of the computer where an Operation is run. @@AppGroup provides the name of the application group where an Operation is run.

Fixed a problem with Specific Dates. It was possible for a Specific Date recalculation after an object completed to "lock" the Executive Server. This would occur in situation where no specific date existed for the specific date schedule.

Fixed a problem with notification receiving the CDO message object error in some situations.

### **March 2007 (Version 5.0.0.115)**

Fixed a problem when trying to copy a Schedule that has specific times. Previously, any attempt to copy a Schedule with specific times would fail.

Changed the behavior for setting the completion of a Job when an Operation in a Job errored but was configured to continue on error. Previously, the Job's completion time was not reset in this situation. Now it is reset so that any dependency on the completion of the Job will be satisfied.

Added the ability to Execute an object in the Status that is waiting on a Dependency. The ability to "Execute Ignore Dependency" menu item will cause the object to be processed by the Executive Server but dependencies will be ignored. Any dependencies beneath the a Job that apply to a Step or Operation are not ignored.

The Executive Server will now attempt to determine if a run once or specific time Schedule is trying to run before its start time. It has been observed on virtual machines that the timer events will sometimes fire before the actual scheduled start time for the object. If the object then completes before the intended start time, it gets rescheduled to run again at the start time. The object will then potentially run two or more times. The change detects that the event timer has occurred early and reschedules the object to the intended start time.

An Operation that failed to run due to a CreateProcess failure was not retried and did not send out an alert. This has been changed to retry if configured to retry and send out an alert if configured to send out an alert.

### **January 2007 (Version 5.0.0.112)**

Fixed a problem with the notification sever. It previously would not send out alerts if the app group was set to something other than Default.

Fixed a problem with the sorting of History records. Previously it did not set the sort order for the records provided by the Executive Server which could create a problem when more than the maxrows records existed in the database.

Fixed a problem with the health monitor starting a recurring scheduled object incorrectly.

Added the ability to monitor for an object that remains in the Staged status for more than a specified time. If the object is found in this state and it has a recurring schedule, it will be processed by the Executive Server (i.e., run).

Fixed a problem with disabled Operations or Steps within a Job that would cause a Job to not process fully or in the correct order.

A change was made to the way Role access is made. If the user is an administrator and the check to determine administrator access fails (based on an unexpected exception) other security access was not checked. So the user could have been in a SmartBatch role and was then denied access. The check to determine if the user is an administrator can now fail but further security checks still take place so the user may be provided access.

CreateProcess errors were not being retried and notification was not sent. Now on a CreateProcess error if the Operation is configured to retry it will retry. If the Operation is configured to notify on failure, the notification will be sent.