Batch File Loader Tool

User Documentation

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Overview

Welcome to the AccessNet Batch Loader tool. This tool is used in conjunction with applications deployed with Dynamic Web Import capabilities. Dynamic Web Import capabilities allow user to bulk load data through a standard HTTPS upload. Data is loaded in standard text (ASCII), formatted to the specifications of the end user sending the data. The file specification may be predefined or it can be customized by a user of this tool by visiting the web site where they most likely received a download of this tool or where instructed by the site owner.

This tool can be used to load data to transactional Web sites enabled with Dynamic Web Import capabilities via an interactive graphical user interface or through command line instructions. This documentation will provide details on the installation of the tool and instructions relating to the graphical user interface and command line capabilities.

Batch Loader includes the ability to send transactional data to a host system through its Dynamic Web Import (Bulk Load) capabilities for off line processing. Once a source file is sent to the host system, it will perform processing against the transactions sent. The tool provides an ongoing status indication for your file submission that can be checked at any time including an indication of when the file processing has been completed. When file processing has been completed you have the option to download a results file that will contain the records that were successfully or unsuccessfully loaded. The main features of this tool include:

- File Loading – provides ability to send formatted ASCII text to a host system for off-line processing.
- Status Checking – provides ability for a user of the batch load tool to check on the status of jobs submitted to the host system including a history of past jobs.
- Result Download – ability to download the results of a job submission including successful and unsuccessful jobs. Most host applications will provide unique confirmation of each record successfully processed that can be used for future reference.

If you have difficulties utilizing this tool, please contact the support group operating the host site receiving your bulk files.

Installation

In order to install the Batch Loader you must obtain a copy of the Batch Loader Setup installation file. Normally you will find a copy of this file on the transaction processing web site that has a Dynamic Web Import capability. There should be a help page within the bulk loading pages that will allow you to define your file format and save a copy of your file specification to a configuration file that can be used by this tool to load data in an off line mode. A copy of the setup executable for the batch loader can be found on the bulk loader help screen. You must download and save the setup to a temporary location on your PC.

Prerequisites

The following minimal requirements are needed in order to install and run the Batch Loader Tool:

- Windows 98 or higher
- Microsoft .Net Framework 1.1   - A copy can be obtained through Windows Update www.windowsupdate.com. The .Net Framework 1.1 is free and can be found under the Windows updates section.
- Internet Access – Files are submitted and results are received via HTTPS. Your PC must be connected to a network that allows access to the Internet and specifically the host web site.

Installation

Obtain a copy of the Batch Loader Setup from the host web site Dynamic Web Import or Bulk Loading help pages.   This is a standard windows installation package that will walk you through the installation of the Batch Loader Tool including the installation location.   To start the installation, just double click the installation executable.

! NOTE: You must install the .Net Framework 1.1, before loading the Batch Loader Tool.

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Using Batch Loader

This section provides users with information on how to utilize the Batch Loader's graphical user interface for file submission, job status checking, downloading processing results and other administrative functions.   This tool can also be executed via command line options allowing developers to integrate the file loading, status checking and downloading results through a program. Refer to the Developer section of this document for information on using the command line interface. Even if you choose to utilize the command line option, you can always open the graphical user interface to view past jobs including downloading results.

The following figure shows the main user panel when you first open the Batch Loader tool.
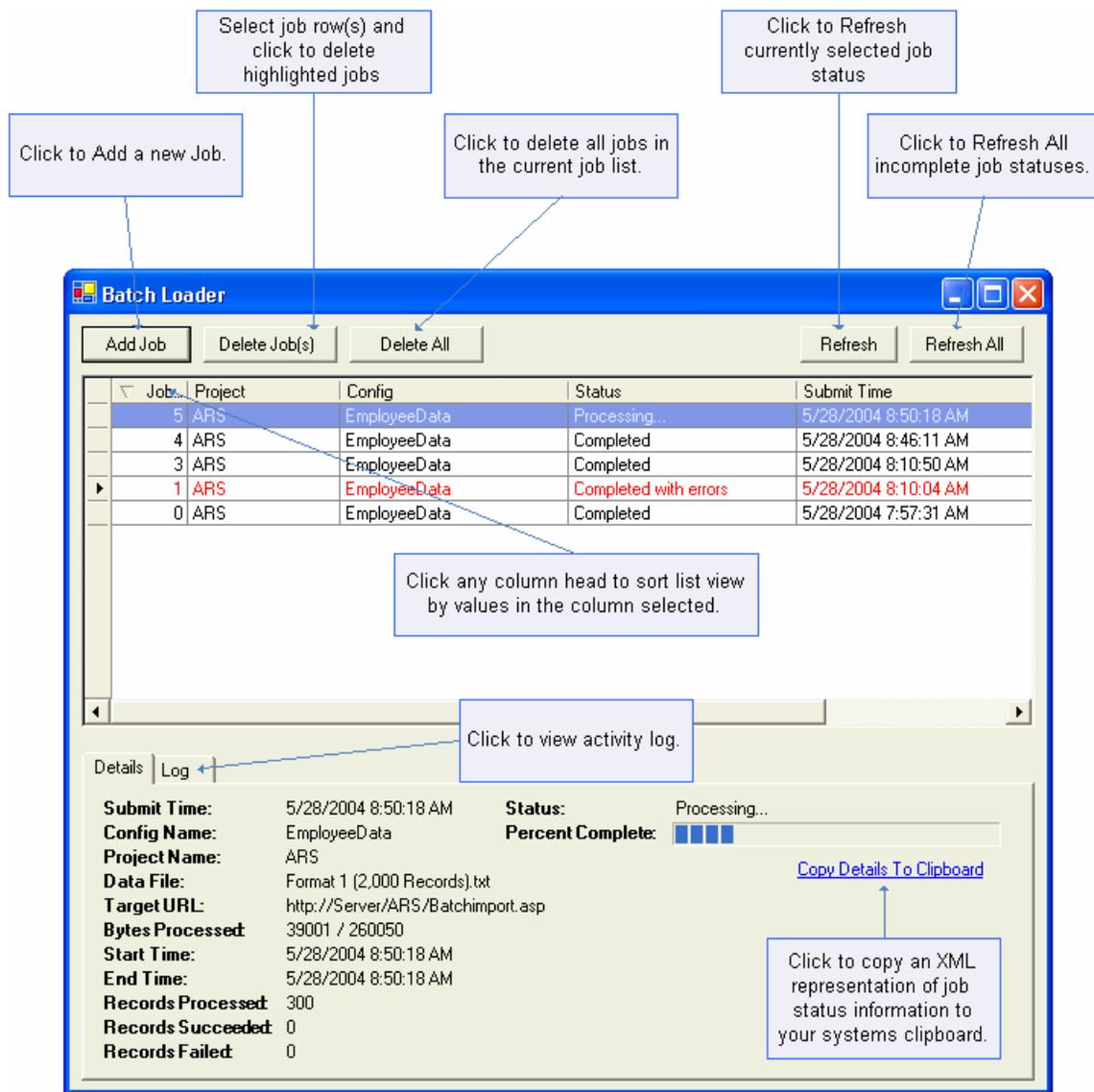
The Batch Loader user interface provides a simple user interface for submitting and managing bulk file submissions. The screen has 4 different regions including Action Buttons (top), Job History (middle), Job Details (bottom left tab) and Logging (bottom right tab).

The following sections provide a detailed explanation of the use of each screen region.

Action Buttons

The action buttons at the top of the screen allow you to submit new batch load jobs, delete historical jobs and refresh the job history view.

If you wish to submit a file to a host system, you must first visit the host site to define your file contents and save these contents to the system running this tool. For details on how to do this, please see the host systems web site.

Add Job

Each job that you add will be tracked by this tool with a unique Job Number. A history of jobs is kept for 30 days. Once a job has been uploaded to the host system, you can exit this tool and return later to check status and/or view the results of the file submission.

The following figure shows the dialog that appears when you select Add Job.
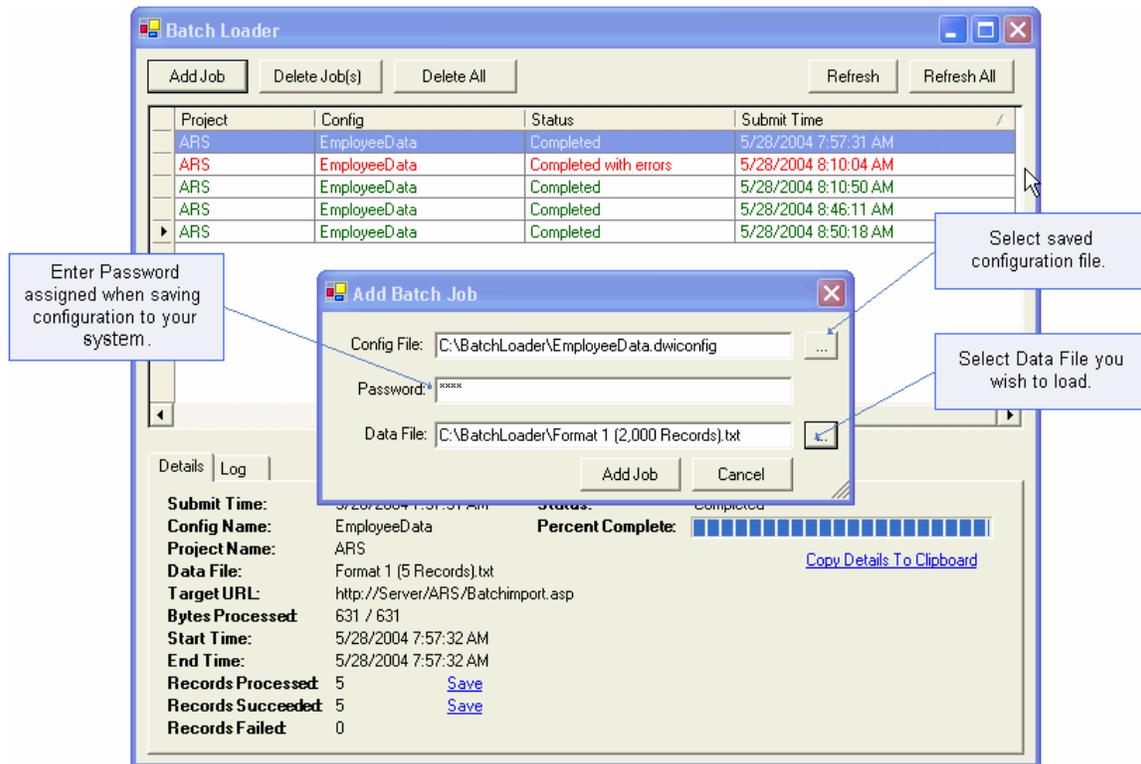
To add a job you need three key pieces of information including:

1. Batch Loader Configuration File – This file is normally obtained through the hosting system's web site Bulk Load options. Depending on the hosting web application, you may have one or more configuration files to choose from. The configuration file contains unique information needed by the Batch Loader to submit transactional files to and from the host system. For security reasons, the contents of the configuration file are encrypted utilizing a 128 Bit AES compliant encryption algorithm.
2. Configuration File Password – In order to submit a file to the host system, you must know the password to the configuration file. This password is normally entered at the time you save your file configuration on the host systems web set.
3. Bulk Data File – Your source file must be selected for submission to the host system. The file that you submit must be preformatted based on the file specification defined by the host system or that you defined utilizing the host system's Dynamic Web Import (Bulk Loading) tool before saving your configuration file.

To submit the job, press the "Add Job" button or press "Cancel" to cancel the process of adding a job before submission. Once you've defined the three inputs for job submission (Conf File, Password and Data File), the tool will remember your settings for each future job submission.

After you press "Add Job," the tool will perform an initial check of the file contents and will then upload the file contents to the host server. The time that it takes to submit your job to the host depends on the size of the file contents and the speed of your Internet connection. In general, your job will be uploaded within several seconds to 5 minutes.

Once the job has been fully loaded to the host system you will see the progress of your file processing in the lower portion of the screen, which includes a percentage complete. You do not need to wait for a job to complete before exiting the tool. The host system will process the file submission and provide a result of the submission anytime in the future that you open this tool. The actual time it takes to process your job can vary depending on the type of data and availability of the host batch processing system.

You may submit as many jobs as you want; however, you should be careful to not submit the same file multiple times.

Delete Job(s)

By default, a history of all job submission is held in the system for a total of 30 days, at which time they are deleted. You can also delete any currently listed jobs in you job list. To delete jobs listed in the Job History, you may use the scroll bar to find the job you wish to delete. Click the row that you want to delete. You should see the row selected is fully highlighted. Click the "Delete Job(s)" button to delete the selected job.

You can delete multiple jobs at a time in one of two ways. To delete jobs consecutively listed you can click the first job, then hold the shift key down and click the last job. You'll see that all the jobs between the first and last job will be highlighted. Click the "Delete Job(s)" button to delete all selected jobs. You may also select multiple jobs randomly by holding the control key down and clicking each job in the list that you wish to delete.

! NOTE: Once you delete a job it is permanently removed from this tool. You will no longer be able to view the status of the job or download file results.

Delete All

The "Delete All" button will allow you to delete all jobs currently listed in the job history view. Once selected, you will receive a warning that all jobs and their contents will be deleted. If accepted, your job listing will be empty upon completion.

! NOTE: Once you delete a job it is permanently removed from this tool. You will no longer be able to view the status of the job or download file results.

Refresh

The "Refresh" button will refresh the status of a job. Click the job row in the Job History listing and click the "Refresh" button.

When performing the refresh the Batch Loader tool will contact the host system for a status check of the job.

Refresh All

The "Refresh All" Button will refresh the contents of all incomplete jobs in the job listing.

When performing the refresh the Batch Loader tool will contact the host system for a status check of each incomplete job.

Job History

A history of jobs is provided in the middle portion of the Batch Load tool's screen. This is a scrollable window, which allows you to scroll up and down as well as right and left to see a quick view of each job that has been submitted in the last 30 days. By default the tool only retains job history for a total of 30 days. Jobs within the list are color coded for easy viewing. Rows showing text in green have completed, Yellow highlighted rows are in progress, and Rows in red indicate a critical failure (error) in processing the job.

The display shows the following details:

Job – this is a unique number assigned by the Batch Loader tool each time a job is submitted to a host system.

Project – This is an indicator of the host systems project or application. In most cases it will contain a three-character representation of the host application. It can be used to distinguish the types of data being submitted in cases where you are sending bulk-loaded files to multiple host applications.

Config – shows the name of the configuration file you selected when submitting the job. In many cases this will be the same file for like projects.

Status – Shows the current status of the job. If a job is still being processed by the host system the status will show "Processing". If your job has been fully processed by the host system without any errors it will show up as "Complete". If your job has been fully processed by the host system but had one or more errors in the processing of its contents the status will display "Complete with errors". In this situation the error message displayed in the Details panel at the bottom of the screen should provide details as well as saving and viewing failed results.

If the system has a problem communicating or transmitting your file to the host system you'll receive a status of "Error". If this occurs you must re-submit the job. There are a variety of reasons that you could receive an error including improper file contents, missing data file, incorrect password, host system is down and can't receive your file, or your internet connection is not available which means the file can't be sent.

Submit Time – Shows the time that a job was added to the system.

! NOTE: You may sort the contents of the Job History view by clicking any column heading. Clicking it once will produce a little down arrow next to the column title indicating the direction (descending) of the sort. Clicking the column again will switch the direction (ascending) of the sort.

Job Details

The Job detail panel provides availability to all jobs processing information including the ability to request a download of results in a variety of ways. The following provides a description of each piece of information provided about a job and its status. The details panel displays only details of the currently selected job in the Job History list. To view details of a specific job you must select the job in the job list by clicking on the row of the job.

Job Detail Data

The following data is provided for the currently selected job.

Submit Time – This is the date and time that the job was submitted to the host system.

Config Name – shows the name of the configuration file you selected when submitting the job. In many cases this will be the same file for like projects.

Project Name – This is an indicator of the host systems project or application. In most cases it will contain a three-character representation of the host application. It can be used to distinguish the types of data being submitted in cases where you are sending bulk-loaded files to multiple host applications.

Data File – Name and location of the data file loaded from your local system.

Target URL – Shows the batch loading URL of the host system where contents are being transferred.

Bytes Processed – Shows the Bytes Processed / Total Byte size of the file being submitted.

Start Time – Shows the time that the host started processing the contents of the job.

End Time – Shows the time that the job completed its processing of the contents of the job. This end time is only accurate to the last status check against the host. This means that it can't be used as an exact duration. It represents the last time the job status was checked and received a completion result.

Records Processed – Shows total number of records processed by the host system. This number should be the total of the Records Succeeded and Records Failed.

Records Succeeded – Shows the number of records successfully processes by the host system.

Records Failed – Shows the number of records which were processed by the host system that failed to process successfully for some reason.

Status - Shows the current status of the job. If a job is still being processed by the host system the status will show "Processing". If your job has been fully processed by the host system without any errors it will show up as "Complete". If your job has been fully processed by the host system but had one or more errors in the processing of its contents the status will display "Complete with errors". In this situation the error message displayed in the Details panel at the bottom of the screen should provide details as well as saving and viewing failed results.

Percent Complete – As the file is loading the percent complete displays a progress board that depicts how far through the host is with processing the contents of your file.

Error Messages - If any errors occur during the processing of a job, an error message will display in red color showing the source of the error(s).

Job Detail Links

Depending on the state of a job you will see one or more links available in the Job Detail panel. Links are shown in a blue color and are underlined. You can click on these links to execute specific actions against the currently selected job. Below is a list of the links you may see and how to utilize them.

There are several options for saving the results to a file of the job processing by the host. These save options do not appear until the job has been fully processed by the host. For most projects the data that is saved as a result of pressing one of these links is a complete record listing of the data sent in the original job with one additional data element attached to the start of each record providing a result. The result may contain data like unique confirmation numbers for each record or a message indicating that why a specific record was rejected. In all cases when you select a link you are provided with a dialog that allows you to name the results and save the contents to a local file on you system.

! NOTE: When requesting to save results, the Batch Loader tool will contact the host system and download contents. As a result depending on the size of your job, this may take anywhere from a few seconds to several minutes.

Records Processed – This saves the result and original data content of each record sent in the job for every record sent and processed by the host regardless of the result.

Records Succeeded – This saves the result and original data contents of each record of within the job submission that was successfully processed by the host.

Failed Records – This saves the result and original data contents of each record of within the job submission that was rejected during processing by the host.

Save Failed Only – This saves only the original data contents of each record within the job submission that was rejected during processing by the host. This is useful if you want to do some form of processing on your system against the original records that were submitted without the result information sent from the host system on the front of each record.

Copy Details to Clipboard – If you are using the command line functions of the Batch Loader tool outlined in the Development section this link, may be helpful in quickly obtaining results in an XML document. When you select Copy Details to Clipboard the currently selected jobs details will be packaged into an XML document that can be pasted into another other tool for processing.

Logging

The logging tab provides more detailed audit logging of the activity that has taken place since you opened the Batch Loader Tool.   If you are having difficulty submitting files you may find it helpful to view the logging tab to review current processing activity and error messages that may be occurring.

Developer Guide

Batch Loader has a command line interface and other features that can be integrated by developers on a Windows Platform to fully automate the process of sending files to the host system. Prior to reading this section you may want to review the documentation section on Using Batch Loader to get a better understanding of how Batch Loader works. This section provides details on utilizing command line options with the batchloader.exe as well as details on files available for further automating batch job submission and management.

Command Line Options

The following command line options are available for automating the process of submitting new files, checking status, and downloading results. The command line options to the batchloader.exe are shown below. After each execution of batchloader.exe with command line options, the tool will automatically create a result.log file that provides standardized results that can be checked programmatically if needed. Also, the executable returns standard exit codes that can be detected programmatically. These are also documented below.

HELP

Command: -?

Result: Produces a help dialog that shows all command line options available.

Example: batchloader.exe -?

ADD JOB

Command: -aj "[Config File]" "[password]" "[Data File]"

Result: Submits job to host system.

Example: batchloader -aj "c:\documents and settings\desktop\sample.dwiconfig" "password" "c:\documents and settings\desktop\SampleDate.txt"

After adding a job through Batch Loader, by default, an output file is created that provides details of the results of the execution. By default the file is located in the root of the BatchLoader installation directory and is called result.log. You can change the name and location of this result log by using the –Output option at the end of your command line. The first line of the result log will show "Job Added (?)" where ? will contain a numeric number representing the job number. This number can be used with the –sr command line option.

! NOTE: You can always open the batch loader graphical user interface to view jobs submitted through the command line.

Check Status

Command: -cs ['ALL' or Job #]

Example: batchloader –cs ALL

Result: Sends request to host system to check status of all incomplete jobs.

After issuing a Check Status on a single job or all jobs, an output file is created that provides details on the results of the execution. By default the file is located in the root of the BatchLoader installation directory and is called result.log. You can change the name and location of this result log by using the –Output option at the end of your command line. The first line of the result log will show "Check Status (?)" where ? will contain a numeric number representing the job number or the word ALL.   The next line will show a SUCCESS or ERROR result. SUCCESS means the command was accepted and executed properly by batchloader and the host system.

To view the result details of specific job, you can access an XML file that is created each time a status request is made through the command line or the graphical user interface. You will find a "Job" directory located under the root of the BatchLoader installation directory. This directory contains a single XML file of each job. The XML file is updated any time a status check is requested through the command line. The standard naming convention for these XML files is a six-digit job number (zero filled) with an extension of .XML. For example results for job 1 would be named 000001.XML.

Save Results

Command: -sr [job#] [ResultCode] "[filename]"
                        Valid Result Codes:
                        -1 All Records Processed
                        0 Successful Records Only
                        1 Failed records only
                        2 Failures records without host result data included
Result: Saves a file of results from host processor to location and file name specified.

Example: batchloader -sr 10 0 "c:\resultdata\results.txt"

Before job results can be downloaded from the host system via this command line. the job must be complete. See the Status Check command line for how to check if a file download is complete.

After saving results for a job, an output file is created that provides details on the results of the execution. By default the file is located in the root of the BatchLoader installation directory and is called result.log. You can change the name and location of this result log by using the –Output option at the end of your command line. The first line of the result log will show "Job Added (?)" where ? will contain the job number. If the job is not complete, the log will

indicate "ERROR" with an explanation "Error reading job records: Job is not completed yet".

Redirect Result.log

Command: -output "[filename]"

Result: This command can be added to the end of any of the command line options identified above to redirect the standardized command result.log to a different file location and name.

Example: batchloader -sr 10 0 "c:\resultdata\results.txt" –output "c:\logging\result.log"

IMPORTANT: You can only run one version of the batchloader.exe at a time. If you have the Graphical User Interface open and attempt to run it in command line mode or attempt to run two different command line executions at the same time the execution of the section instance of batch loader will be stopped without any logging event or warning.