Queue and Business Processes Guide

11/14/2014 Blackbaud CRM 4.0 Queue and Business Processes US

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Queue

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Queues are used to set up a series of processes to run automatically and unattended. You can set up and run queues when you have large amounts of data to query, export, commit, import, or send as email. Because you create queues to work with large amounts of data, you can schedule the queue to run during a break in the day or when all your volunteers and employees have left for the day. For your convenience, you can create the queue and schedule a specific date and time to run it. You can also generate Windows Scripting files for use in scripts or with other task automation software.

A typical workflow could include setting up individual processes to refresh your segments and your mailings. These processes can then be implemented as a queue so that the segments are refreshed, then the mailings that use the segments are refreshed. The system administrator builds the processes and updates the system to make them available. If you choose to perform a time and resource intensive process, you may want to run the process when your office is closed for the day. With Queue, you can add all the necessary processes into a single queue, in a logical order of progression, and run them at off-peak dates and times.

Access Queue

Queue is located on the *Administration* page. From here you can manage queues, create job schedules, and generate Windows Scripting Files.

The Queue Page

The Queue page is where you manage the queue processes on your system. The **Queue processes** grid displays the existing queues on the system. Depending on your security rights and system role, you perform functions to manage the queue processes. For example, you can create a new queue of business processes, edit an existing queue, start a queue manually, view detailed information about a queue process, or delete an existing queue.

Add a New Queue

To create a queue, select a number of processes to be executed unattended. Each process is a step within the queue, and each step is executed in order.

Add a queue process

1. On the Queue page, click **Add**. The Add queue process screen appears.

Name:					
Description:					
Steps:			0	Add step 🗡 Delete step	1
	Step	Parameter set	Business process type	On failure	

- 2. Enter a name and a description for the queue.
- 3. You can restrict the use of the process to a specific site in your organization. When you select a site, only users associated with the site can access the process. To allow users of all sites to access the process, select "All sites."
- 4. Click Add step. The Business Process Parameter Set Search screen appears.
- 5. Select a process and click **Select** to add it to the queue and return to the Add queue process screen.
- 6. You can change the order that processes in the queue are run by selecting the process and using the arrows to change its position.

Note: You can modify the Queue's behavior in the event a process fails. For each step, you click in the **On Failure** column to have the queue continue or stop processing if a step fails to complete.

7. Click Save. You return to the Queue page.

Edit an Existing Queue Process

You can edit an existing queue and change its operational settings. On Queue page, select a queue and click **Edit**. You can add or delete processes from the queue. You can also change the order in which the steps are processed.

Run a Queue Process

You can start an existing queue process manually if you need to run it before a scheduled run time or if you need a queue process to run without being scheduled.

For more information about viewing the queue's status, see View a Queue Process Status Page on page 3.

View a Queue Process Status Page

You can view the status of a queue process. This page contains the Recent Status, History, and Job Schedules tabs. When you run a queue process, the status page appears automatically. You can also view the status page without running the process. On the Queue page, click the name of a process to access the queue status page. For more information, see Tabs of a Process Status Page on page 7.

Automatically Download and Process Web Transactions

With Queue, you can create a process to automatically download your website transactions into batches and then commit those batches to your database to help save time and effort. Create a new queue process that includes each of the Blackbaud Internet Solutions Download processes and the new commit multiple batches process. When you create the queue process, set its job schedule to run on a regular basis.

For more information, see the Web Transactions Guide.

Business Processes

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On the Business Processes page in *Administration*, you can work with business process ownership, view business process activity, and work with job schedules for business processes.

On the Business Processes tab, you can view and edit business process owners.

The History tab displays all business process activity executed in the program. For example, if a user generates a KPI instance value, makes a general ledger post, or processes acknowledgment letters, a record of the processing appears on the History tab.

On the Job Schedules tab, you can view, edit, and delete job schedules created in the program.

View Business Processes

The Business Processes tab displays a list of business processes and their owners. You can view details such as process name and type, security folder, and creation date.

🖗 Business Processes				
Business Processes History Job Schedu	les			
Business processes (175) Y Filters	× 🖾 🚧			
Process type:	Owner:	Y Apply Reset		
Network (6)				
Process name	Process type	Owner	Security folder	Created on
Acknowledge Donation Payments	Acknowledgement Process	InfUser2	Revenue\Business Process\Ackno	5/1/2012
Address Validation Process	Address Validation Process	InfUser3	Data Tune-Up\Address Managem	6/12/2012
Address Validation Process	Address Validation Process	InfUser3	Data Tune-Up\Address Managem	9/12/2012
🕑 🛞 AddressFinder Submit Process	AddressFinder Submit Process	InfUser2	Data Tune-Up\Address Managem	5/9/2012
🔲 🛞 AddressFinder Submit Process	AddressFinder Submit Process	InfUser3	Data Tune-Up\Address Managem	10/4/2012
🗷 🛞 Admin All	Generate Direct Debit File Process	InfUser2	Revenue\Business Process\Genera	7/12/2012
🗵 🛞 Admin Import Auction Items	Import Process	InfUser2	Batch\Import	11/12/2012
🗹 🛞 Admin Post	Post To GL Process For Basic GL	InfUser2	Revenue\Business Process\Post to	4/12/2012
🗷 🛞 Anniversary Tribute	Tribute Acknowledgement Process	InfUser2	Revenue\Business Process\Tribut	5/1/2012
🔲 🛞 asfa	Generate Step Update Batch Busin	InfUser10	Stewardship\Business Process\Ge	2/1/2012
🔲 🛞 Assign Formated Extened	Assign Letters Process	InfUser2	Revenue\Business Process\Assign	5/1/2012
🗐 🛞 Assign Planned Gift Letter	Assign Planned Gift Letters Process	InfUser2	Revenue\Business Process\Assign	5/7/2012
Assign Pledge Acknowledgements	Assign Letters Process	InfUser2	Revenue\Business Process\Assign	5/1/2012
🗐 🛞 Assign Standard Acknowledgement	Assign Letters Process	InfUser2	Revenue\Business Process\Assign	5/1/2012
🔲 🛞 assign test	Assign Letters Process	InfUser3	Revenue\Business Process\Assign	5/1/2012
🔲 🛞 Assign Thanks	Assign Letters Process	InfUser1	Revenue\Business Process\Assign	12/6/2011
🔲 🛞 auction item write-off	Global Change Process	InfUser10	Configuration\Global Changes	2/2/2012
2150	Add Prospect Plans Process	Infinity User 30	Prospect Management\Prospects	7/3/2012
🔲 🛞 Assign Pledge Acknowledgements	Assign Letters Process	InfUser2	Batch\Import	8/7/2012
Test	Generate Direct Debit File Process	InfUser10	Revenue\Business Process\Genera	1/4/2012

6 CHAPTER 2

To filter by process type, select a process in the **Process type** field. Use the **Owner** field to select the business process owner you want to display. The business process owner is the application user who owns the process. An application user becomes a business process owner in one of two ways: an application user creates a business process or an administrator assigns business process ownership to an application user.

Note: Not all application users in the program are listed as selections in the **Owner** field. This field only displays application users who own at least one business process listed in the grid.

After you enter filter criteria, click **Apply**. Business processes that match your criteria appear in the grid. To view all business processes, click **Reset**.

To access an application user's record, click the user name in the grid.

From this tab, you can also change the owner of a business process. You may find it necessary to edit a business process owner, for example, when a change in staff occurs at your organization. You can edit business process ownership in several ways:

- To edit the owner for a single business process, select the business process in the grid and click **Edit owner** under the business process.
- To edit the owner for multiple business processes at one time, select each process and click **Edit owner** above the grid.
- To edit the owner for all business processes at one time, select the checkbox next to the column names at the top of the grid, and click **Edit owner**.

View and edit business process owner

- 1. From *Administration*, click **Business processes**. The Business Processes page appears.
- 2. On the Business Processes tab, to edit the owner for a single business process, select a process in the grid and click **Edit owner** under the business process.

To edit multiple processes at one time, select each process and click **Edit owner** above the grid. Or, to edit all processes at one time, select the checkbox next to the column names at the top of the grid, and click **Edit owner**.

The Edit business process owner screen appears.

Process name	Current owner
Pledge Acknowledgements	Pat Phoenix

3. The business processes you previously selected appear in the grid. In the **Select a new owner for these business processes** field, click the search button and use the Application User Search screen to search for a different owner.

Warning: The new business owner you select is applied to all business processes that display on the Edit screen. A business process may have only one owner at a time. Note that security permissions for the business process owner may determine which records are processed when a business process runs.

4. After you select an application user as the new business process owner, click **Save**. You return to the Business Processes tab.

View Business Process History

You can view all business process activity executed through the program on the History tab. You can filter the list of processes, such as by process type or status.

Tabs of a Process Status Page

Each business process in the database has a status page. The process status page contains information specific to the process. You enter this information when you add the process to the database. Each process status page also includes information about the most recent instance of the process and historical data about the process. On some process status pages, you can manage the job schedules of the process. To help manage this information, each process status page contains multiple tabs.

Recent Status Tab

On the Recent status tab, you view the details of the most recent instance of the process. These details include the status of the process; the start time, end time, and duration of the process; the person who last started the process; the name of the server most recently used to run the process; the total number of records processed; and how many of those records processed successfully and how many were exceptions.

History Tab

Each time you run a business process, the program generates a status record of the instance. On the History tab, you view historical status record information about each instance of the process. The information in the grid includes the status and date of the instance.

On the History tab, you can limit the status records that appear in the grid. You can filter by the process status. If you filter the records that appear in the grid, it can reduce the amount of time it takes to find a process instance. For example, if you search for an instance that did not finish its operation, you can select to view only status records with a **Status** of "Did not finish." To filter the records that appear in the grid, click **Filters**. The **Status** field and **Apply** button appear so you can select the status of the instances to appear in the grid. To update the information that appears, click **Refresh**.

Depending on your security rights and system role, you can delete a status record from the grid on the History tab.

Delete a Status Record from the History Tab of a Process Status Page

On the History tab of a process status page, you can delete a specific status record of the process. When you delete a status record, you delete the specific instance and all of its history. To delete a status record, select it and and click **Delete**.

Job Schedules Tab (Not Available on All Process Pages)

On the Job schedules tab, you can view the job schedules of the process in the database. The details in this grid include the name, whether a job schedule is enabled, the frequency of the job schedule, the start date and time and end date and time, and the date the job schedule was added and last changed in the database. You enter this information when you set the job schedule of the process.

Depending on your security rights and system role, you can add, edit, and delete job schedules that appear on the Job schedules tab. To update the information that appears, click **Refresh**.

Schedule Process Jobs

You can create a job schedule to automatically run a business process. When you create a schedule for a process, the program exports and runs the process at the scheduled instance or interval. For example, you can schedule a process to run at a time convenient for your organization, such as overnight.

Note: To create a job schedule from any tab of the process status page, click **Create job schedule** under **Tasks**.

• Create a job schedule

1. On the Job schedules tab of the process, click **Add**. The Create job screen appears.

Details			
Job name:			
Schedule type:	One time		~
	I Enabled		
One-time occurren	ce		
Date:	5/15/2014	Time:	4:38:43 PM
Pine and a second second			
Occurs every:	1 day(s)		
Occurs every: Daily frequency	day(s)		
Occurs every: Daily frequency Occurs once at:	1 day(s) 4:36:43 PM		
Daily frequency Occurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 4:36:43 PM 1 Minutes	Starting at:	4:36:43 PM
Occurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 43843 PM 1 Minutes V	Starting at: Ending at:	4:36:43 PM 4:38:44 PM
Daily frequency Daily frequency Occurs every: Occurs once at: Occurs every: Duration	1 day(s) 4:38:43 PM 1 Minutes V	Starting at: Ending at:	4/38/43 PM 4/38/44 PM
Daily frequency Occurs every: Occurs once at: Occurs every: Duration Starting at:	1 day(s) 4:38:43 PM 1 Minutes V 5/15/2014	Starting at: Ending at: End date:	43843 PM 43844 PM 5/15/2014

- 2. In the **Job name** field, enter a name for the scheduled process.
- 3. By default, the schedule is active. To suspend it, clear the **Enabled** checkbox.

- 4. In the **Schedule type** field, select how often to run the process. You can run a process once; on a daily, weekly, or monthly basis; whenever *SQL Server Agent* service starts; or whenever the computer is idle according to *SQL Server Agent*. Your selection determines which other fields are enabled.
 - a. For a process that runs once, select the date and time to run it.
 - b. For a process that runs on a daily, weekly, or monthly basis, select the number of days, weeks, or months between instances in the **Occurs every** field. For a weekly process, select the day of the week to run it. For a monthly process, select the day of the month to run it. For a process that runs on a daily, weekly, or monthly basis, select whether to run it a single time or at regular intervals on the days when it runs.
 - c. For a process that runs on a daily, weekly, or monthly basis, select a start date and, if necessary, an end date. To run the process indefinitely, select **No end date**.
- 5. Click **Save**. You return to the Job schedules tab.

Exception Report

When you run a process, the process status page appears and displays the number of records that did and did not process. Records that fail to process are called exceptions. When there are exceptions, you can view the Exception Report for the generated process. This report lists the expectations generated and explains why each did not process properly. You can view the most recent Exception Report from the Recent status tab of the process page. If you want to view an older report, you can do so from the History tab of the process page.

Process Status Report

When you execute a process, the process generates a status report which is housed on the Recent status tab of the process page. For example, if you execute a sponsorship transfer process, the Transfer Report appears on the Recent status tab which lists details about the transfer, such as all sponsors included in the transfer, the original sponsorships, and the new sponsorships. A link to this report also appears on the History tab of the process page. From this tab you can view any archived status reports.

Generate Windows Scripting File

A Windows Scripting File (*.wsf) is an executable script file format for Windows that can incorporate VBScript (*.vbs) routines and include XML elements. To create a scripting file, click **Generate WSF** under **Tasks**. Your browser prompts you to open or save the file.

Generate a Header File

To personalize a communication with information specific to its topic or recipient, you can use merge fields in your Microsoft *Word* (.docx) document. To specify the merge data to include in the document, you must generate a header file that includes the merge fields. When you generate a header file, you create a comma-separated values (*.csv) file based on an output format, with fields defined by the program, or an export definition, with fields you define. In *Word*, you can use this header file to merge the data with your document. To generate a header file for a communication, click **Generate header file** under **Tasks**. The Generate header file screen appears.

Output type:	Output format	~
Output format:		~

In the **Output type** field, select whether to use fields from a standard output format or an export definition.

- If you select Output format, select the output format that contains the merge fields to include.
- If you select Export definition, search for and select the export definition that includes the merge fields to include. For information about how to set up an export definition, see the *Query and Export Guide*.

When you click **OK**, the browser downloads the header file, based on the selected output format or export definition, for use in *Word*.