



## About us

**Semper Technology, Inc. (STI)** is dedicated to helping you maximize your Blackbaud investment. Since 1998, STI has been privilege to work with nonprofit organizations that push the envelope with Blackbaud products, especially The Raiser's Edge.

The following customization examples were created in the interest of extending existing Blackbaud functionality. They demonstrate our unique and innovative capabilities, and while the following may be for specific Blackbaud products, the technologies can easily be extended to other Blackbaud products that have similar functionality.

## Auto-mation

### Solicitor Assignment

**The Challenge:** Assigning the right solicitor to a constituent can be a daunting task, depending on the complexity of the associated business rules. In this particular case, the default solicitor is assigned by county, state, and country. Due to the amount of time it would take a staff member to manually assign the solicitor, as well as the possibility for error, it was decided to automate the process.

**The Solution:** When a change is detected in the constituent's preferred address, the solicitor is automatically assigned by utilizing a supplementary database that contains the business rules.

#### **The Benefits:**

- **Speed:** No need for manual lookup since the assignment occurs when the record is saved.
- **Accuracy:** Since the business rules are built into the system, there are no manual decisions to make and no associated errors.
- **No special training:** Since the solicitor is automatically assigned, staff training isn't required.
- **Efficient use of staff:** The automation allows staff to focus on other tasks while management has peace of mind, knowing that policy is being met.

**The Technologies:** RE:VBA and ODBC

### Donor Type Assignment

**The Challenge:** The use of constituency codes to keep track of donor types is a critical business rule for some nonprofits. However, this business rule can be difficult to implement depending on the complexity of the donor categorization. For example, donor type may be determined by giving-history and the order that the gifts were received. Considering the amount of time it would take a staff member to manually assign the donor type, as well as the potential for mistakes, automation is preferred.

**The Solution:** When a gift is entered directly or through Batch, the donor type is automatically assigned by applying the business rule, which in this particular case was calculated using giving-history.

#### **The Benefits:**

- **Speed:** No need for manual lookup since the assignment occurs when the gift record is saved. This is particularly beneficial when processing a large volume of gifts.



- Accuracy: Since the business rules are built into the system, there are no manual decisions to make, and no associated errors to address.
- No special training: Since the donor type is automatically assigned, staff training is not required.
- Efficient use of staff: The automation allows staff to focus on other tasks while management has peace of mind, knowing that policy is being met.

**The Technologies:** RE:VBA

### **Gift Status Assignment**

**The Challenge:** For efficient workflow, certain gift status flags, such as the Receipt and Acknowledge flags should be set at gift entry time. These flags may be dependent on the particular type of gift as well as other parameters, such as constituent status. Automating this process would be ideal since it would alleviate staff from this tedious task.

**The Solution:** When a gift is entered directly or through Batch, gift status is automatically assigned by applying the appropriate business rules.

**The Benefits:**

- Speed: No need for manual lookup since the assignment occurs when the gift is saved.
- Accuracy: Since the business rules are built into the system, there are no manual decisions to make, and no associated errors to address.
- No special training: Since the donor type is automatically assigned, staff training is not required.
- Efficient use of staff: The automation allows staff to focus on other tasks while management has peace of mind, knowing that policy is being met.

**The Technologies:** RE:VBA

### **Award Program**

**The Challenge:** For an organization that rewards constituents based on donations, automatic award creation would be a useful tool. In organizations with a complex award structure and workflow, automatic award creation is preferred. Along with expedited processing, human error is eliminated.

**The Solution:** When a gift is added to a constituent's record, the giving status and award standing of the constituent is reviewed and the appropriate awards are created. In addition, staff is notified and reminders are established.

**The Benefits:**

- Speed: No need for manual lookup since awards are created when gifts are saved. This is a significant benefit when processing a large amount of gifts.
- Accuracy: Since the business rules are built into the system, there are no manual decisions to make and no associated errors to deal with.
- No special training: Since awards are automatically created, no staff training is required.
- Efficient use of staff: The automation allows staff to focus on other tasks while management has peace of mind, knowing that policy is being met.



- Enhanced Workflow: Staff members are notified in a timely manner, enhancing workflow efficiency.

**The Technologies:** RE:VBA, RE:RODBA, and ODBC

## **Automated Letter System**

**The Challenge:** Nothing makes a constituent feel more appreciated than a personal gift acknowledgement letter. However, this becomes a challenge when dealing with a large volume of gifts in a compressed timeframe. Unfortunately, the Raiser's Edge mail merge personalization options quickly fall short when attempting to recognize multiple gifts in a certain time period, or during periods of increased giving.

**The Solution:** An Automated Letter System was built to meet this challenge. The system combines an organization's unique letter-writing business rules, letter content, and letter formulas to dynamically produce a very personalized-looking letter at the push of a button, accurately and efficiently handling hundreds to thousands of letters a day.

### **The Benefits:**

- Speed: High-volume personalized letter capability is now possible.
- Accuracy: Since the business rules are built into the system, there are no manual decisions to make and no associated errors to deal with.
- Efficient use of staff: Due to the level of this automation, from the top down, staff involvement is kept to a minimum, freeing them to undertake other tasks.
- Flexibility and Extendibility: The automated letter system, designed to handle gift acknowledgement letters and other correspondence, allows easy changes to letter content.

**The Technologies:** RE: API, RE:Open, and ODBC. Note that RE:VBA could be substituted for RE:API with minimal impact.

## **Batch Entry Automation**

**The Challenge:** During batch entry of constituents or gifts, efficiency would be increased if certain business processes could occur automatically, alleviating the human resource task load.

**The Solution:** If a particular business process has a consistent set of business rules, there is a good chance that the process can be automated. Any number of processes can be executed for consistent workflow execution.

### **The Benefits:**

- Speed: Business rules are applied automatically as each record is committed – resulting in a far quicker process. Even more workflow streamlining can be gained when utilizing the Automated Batch System (mentioned below).
- Accuracy: Since the business rules are built into the system, there are no manual decisions to make and no associated errors.
- No special training: Since procedures are automatically executed, no staff training is required.
- Efficient use of staff: The automation allows staff to focus on other tasks while management has peace of mind, knowing that policy is being met.
- Effective Workflow: Multiple business rules are applied and workflow efficiency is



maximized.

**The Technologies:** RE:VBA and other technologies as required

### **Automated Batch System**

**The Challenge:** It is not uncommon for an organization to exchange information with other organizations, such as business partners, financial institutions, and affiliations. It can become a time-consuming task to manually enter large amounts of data, like gifts, constituent records, and address corrections via the Raiser's Edge Batch interface. If the information is electronic in nature, one can use the Raiser's Edge import function, however, the import function is designed for use by a database administrator. It also lacks flexibility, and cannot be integrated with other workflow-related activities.

**The Solution:** The Automated Batch System is designed to handle a wide variety of electronic files destined for The Raiser's Edge. It can process large amounts of information, while allowing the operator to research missing or incomplete data, and review the batch contents before committing the records to The Raiser's Edge.

**The Benefits:**

- Speed: High-volume data import capability is now possible. Even more streamlining can be gained when combined with the Batch Entry Automation (mentioned above).
- Accuracy: Since manual entry is eliminated, data entry errors are eliminated.
- Efficient use of staff: Due to the level of this automation, staff involvement is kept to a minimum.
- Integrated Workflow: Since this application communicates directly with The Raiser's Edge (and potentially other systems), additional work can be performed (like solicitor assignment, gift status assignment, awards, etc.), facilitating additional automation.
- Expanded Interface Potential: Electronic files from your financial institution, such as lockbox data (as well as the data from your response device/check scanner) could easily be handled by the Automated Batch System with minor modifications.

**The Technologies:** RE:API, RE:Open, and ODBC. Note that RE:VBA could be substituted for RE:API with minimal impact.

### **The Raiser's Edge Synchronization System**

**The Challenge:** Simplicity of data entry is vital for an organization that shares information with trusted business partners as well as its constituency. Given that it is impractical to expose the Raiser's Edge interface to these third parties, it can be difficult to achieve any level of automation.

For example, if an organization wishes to collect address changes via its Web site in the hope of staying in touch with its constituency, it is currently not possible to push that information back into The Raiser's Edge without human intervention. Or for instance, when a business partner needs to perform updates to contact information on a daily basis, valuable resources could be tied up managing this process which may include a cycle of daily imports.

**The Solution:** The Raiser's Edge Synchronization System facilitates the automatic update of Raiser's Edge information from trusted sources. Whether it is a secure area on the organization's Web site, or originating from a business partner, the Synchronization System can update The Raiser's Edge in real-time, removing any chance of latency-induced issues that can occur when data



is not updated in a timely manner. Please see our *Blackbaud Raiser's Edge Case Study* white paper for more details.

**The Benefits:**

- Speed: Information is updated in The Raiser's Edge in real-time from multiple sources. Additionally, biographical information, gifts (cash and pledge), and memberships can be added and updated quickly.
- Accuracy: Manual manipulation of the information is unnecessary, so data entry errors are eliminated.
- Data Backup: All data changes are efficiently stored for quick recall if the need should arise.
- Efficient use of staff: Staff involvement is kept to a minimum, saving countless hours of data entry and verification, and allowing them to perform other tasks.

**The Technologies:** RE:API and ODBC. Note that RE:VBA could be substituted for RE:API with minimal impact.

### **Email Broadcast Utility**

**The Challenge:** A much-desired capability would be to compose and broadcast email messages after business hours to certain constituencies. This feature would permit trusted agents of the organization (such as board members) to broadcast emails to constituents via a Web interface.

**The Solution:** The Email Broadcast Utility addresses these requirement, by functioning with an organization's Web server (internal or external), email server, a message database, and The Raiser's Edge to bring high-speed, flexible email broadcasting through an interface that is simple to understand and operate.

**The Benefits:**

- Speed: A large volume of emails can be sent quickly.
- Resource-efficient: Since emails can be sent after business hours, both server and network resources are optimized.
- Efficient use of staff: The interface is easy to use, resulting in less training time.
- Extendible: An organization can offer this service to trusted non-staff members, further increasing the effectiveness of staff.

**The Technologies:** RE:Open, ODBC, and ASP.

### **Enhanced Copy Preferred Address to Alternate (Address)**

**The Challenge:** When RE7 was first introduced, the Copy Preferred Address to Alternate feature that was present in RE6 had been omitted. This feature provided a means of easily preserving historical addresses (which would be a time-consuming and potentially error-prone manual process).

**The Solution:** This functionality was not only recreated, but also enhanced by using RE:VBA. The enhancement was simply adding an "x-" in front of the address type for ease of tracking and sorting historical addresses to prevent confusion with current addresses. While the latest version of The Raiser's Edge again incorporates the standard functionality, this enhancement still makes this customization a useful add-on.



**The Benefits:**

- **Speed:** While the built-in feature was unavailable, this customization provided the missing functionality so that manual execution was not necessary.
- **Accuracy:** Since manual data manipulation was unnecessary, missing or erroneous data issues were avoided.
- **No special training:** The automated procedures reduced the need for staff training.
- **Efficient use of staff:** This automation makes manual procedure execution unnecessary, so staff can focus on other tasks.
- **Enhanced Processing:** By replicating the built-in functionality, one can then add additional processing to enhance functionality.

**The Technologies:** RE:VBA

**Business  
Rules**

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**Last Name Check**

**The Challenge:** The last name of an individual is a very important piece of constituent information, so its accuracy is crucial. Occasionally, the last name is altered in error, or worse, it is accidentally replaced with a space, rendering the required-field-business-rule ineffective. Once the individual's last name is modified and saved, it becomes very difficult to return it to the correct state. To avoid these issues, it is desired that the system alert the user of a change when saving the constituent.

**The Solution:** When a last name change is detected, the user is alerted, and provided an opportunity to accept or cancel the change.

**The Benefit:** Accuracy: This simple, yet effective customization guarantees that any change to the last name can be reviewed for correctness.

**The Technologies:** RE:VBA

**Gender Check**

**The Challenge:** Information is empowering. More information increases the effectiveness of fund-raising. Titles and suffixes alone may not indicate gender. If the gender of an individual is known, it ought to be entered. Since a valid gender value is "unknown", the required field business rule cannot be used to remind staff to enter the gender (if known).

**The Solution:** If the gender is "unknown" when saving a constituent, the user is prompted to select the gender before exiting the record.

**The Benefits:** Completeness and accuracy: This simple customization is an effective way of enforcing organizational business rules, assuring accurate constituent information.

**The Technologies:** RE:VBA

**Mail Code Verification**

**The Challenge:** Tracking a constituent's preference for the many variations of mail offered by some organizations can become cumbersome and error-prone if the rules are not strictly followed. These issues can lead to incorrect data, and even worse, upset constituents.



**The Solution:** Mail code business rules can be built into an RE:VBA macro that executes on saving a constituent's record. If a rule is violated, the user is alerted to the situation so that corrective action can take place.

**The Benefits:** Accuracy: By automatically enforcing this business rule, informational accuracy is enhanced, and management has the peace of mind knowing that business rules are being met.

**The Technologies:** RE:VBA

## **Enhanced Security**

**The Challenge:** While the Raiser's Edge security is comprehensive, some organizations require a more refined security model to protect sensitive information, enforce business rules, and aid the efficiency of the staff.

**The Solution:** By employing RE:VBA along with specific business rules, security can easily be enhanced, for instance, to prevent unauthorized personnel from modifying the deceased status of an individual. In addition, the DBA can be alerted via email of unsuitable behavior so appropriate action can be taken, such as retraining.

**The Benefits:**

- Enhanced protection: of sensitive information.
- Accuracy: Since the business rules are built into the system, there are no manual decisions to make and no associated errors.
- Efficient use of staff: by preventing access to information that does not pertain to certain staff.

**The Technologies:** RE:VBA and other technologies as required

## **Database admin and reporting**

### **Enhanced Queries**

**The Challenge:** While the global change facility in The Raiser's Edge is powerful, it sometimes cannot attain the level of decision-tree assignments required by some Database Administration activities.

**The Solution:** By assigning a VBA macro to a query, additional decision-making and related data processing activities can occur that are not easily attainable or even possible by using the built-in global change facility. An example of this would be the resorting of constituency codes.

**The Benefits:**

- Speed: By associating a VBA macro with a query, one can accomplish a task much quicker than executing several passes through the global change facility or manual changes that are too complex for the global change facility.
- Accuracy: Since manual manipulation of data is avoided, so are human-induced errors. Given that the business rules are built into the VBA macro, they can be tested, executed,



and repeated. Plus, the macro itself provides documentation concerning the purpose of the macro.

- Efficient use of staff: Since this tool eliminates manual manipulation of data, staff can focus on other tasks.

**The Technologies:** RE:VBA

### **Custom Reports**

**The Challenge:** Blackbaud programs have many useful built-in reports, however, special reports are often needed that the built-in and custom report interface can not provide. Examples might include special financial, event, and membership reports.

**The Solution:** By utilizing any one of or a combination of VBA, API, or ODBC, data can be extracted, processed, and presented in accordance with the specific reporting requirements.

**The Benefits:**

- Quick reports with information uniquely presented for maximum effectiveness.
- Efficient use of staff: by eliminating the need to modify and format exported data to meet the specific reporting requirements.

**The Technologies:** Any one of or a combination of VBA, API, or ODBC and other technologies as required

## **In Summary**

**Customization Examples:** These are just a few examples of how Blackbaud products can be extended and enhanced through tools, techniques, and innovative solutions. Perhaps a few of these customizations can enhance your organization's business processes or perhaps they will serve as a catalyst for potential solutions that will increase effectiveness at your organization. We encourage you to discuss your ideas with STI, as a solution may be possible that will bring immediate benefits, and further leveraging your Blackbaud investment.

**Repeated Benefits:** You will notice that many of the benefits are repeated – a natural advantage of automation. Speed, accuracy, business rule enforcement, and efficient use of staff all contribute to time savings, cost-savings, as well as the best data possible. The result is a more effective organization that can reach new fund-raising heights.

**Additional Information:** Please contact STI for additional information regarding our customizations. We will be happy to discuss your needs and provide you with solutions that meet or exceed your requirements while maintaining cost-effectiveness.

## **How to contact us**

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