Exchange Integration Guide

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Exchange Servers

Manage Exchange Servers		1

Microsoft *Exchange* integration allows you to send constituent information from your database to *Exchange* to create contact records, calendar items, and to capture emails between your users and constituents.

Note: For a full list of *Exchange* versions this integration supports, refer to the <u>System Requirements</u>.

The system administrator sets up the *Exchange* server and provides credentials for *Blackbaud CRM* to access it. The administrator then maps the program to the server and designates application users by using a cross-domain environment (SMTP) or by using the same domain as the server. Next, the administrator configures the synchronization processes and the download process. To run the processes at scheduled intervals, the administrator creates job schedules.

Manage Exchange Servers

Before you can integrate with an *Exchange* server, you must set up the server and provide credentials so the program can access it. After you do this, you can map the program to the *Exchange* server on the Manage Exchange Servers page. On this page, you add *Exchange* servers and access the user list for each server.

From *Administration*, click **Exchange integration**. The Exchange integration page appears. On this page, click **Manage Exchange servers**. The Manage Exchange Servers page appears.

Exchange servers (1)	Add 😨 More 🕶		
Domain	URL	Default server	
S MKT	https://11.23.4.135/ews	0	

This page displays the domain and URL for *Exchange* servers mapped to the program. The **Default Server** column displays a green check mark beside the default *Exchange* server. To make sure the latest information displays on the page, click **Refresh**.

Add Exchange Servers

To set up *Exchange* server integration, the system administrator maps the program to an *Exchange* server. If necessary, the program can support multiple servers. After you add a server, the program sends information to an *Exchange* mailbox to create contact records and calendar items in *Outlook*.

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Add an Exchange server

- 1. From Administration, click Exchange integration. The Exchange integration page appears.
- 2. Click Manage Exchange servers. The Manage Exchange Servers page appears.
- 3. Click Add. The Add Exchange server screen appears.

Jser name:		
assword:		
Domain:		
JRL:		
	Use Exchange impersonation	
	Default server	
	Test login	

- 4. In the **User name** and **Password** fields, enter the *Exchange* credentials to provide access to the *Exchange* mailbox.
- 5. In the Domain and URL fields, enter the Exchange server domain and URL.
- 6. To allow the program to use the *Exchange* permissions associated with the users on the server and access their *Exchange* mailboxes, select **Use Exchange** impersonation. We recommend you always select this checkbox. When you clear it, the program can access only the *Exchange* mailbox for the user in the **User** name field.
- 7. To designate the server as the default, select **Default server**. When you do this, the server is used unless an application user is specifically assigned to a different server.
- 8. To make sure the user name, password, domain, and URL are correct, click **Test login**. If the credentials are authenticated, a confirmation message appears. Otherwise, a failure message appears.
- 9. Click Save. You return to the Manage Exchange Servers page and the server appears in the grid.

Go to User List

After you map the program to an *Exchange* server, you can include application users that have *Exchange* mailboxes on the server in *Exchange* server integration. On the Manage Exchange Servers page, click the domain name for a server in the grid. The Exchange Server Application Users page appears. On this page, you can search for application users with *Exchange* mailboxes and manage the user list.

For information about the Exchange Server Application Users page, see Exchange Server Application Users on page 3.

Reset User Watermarks

Exchange uses digital watermarks as time stamps to provide points of reference during synchronization. For *Exchange* server integration, watermarks identify each application user you add to the *Exchange* server.

If the *Exchange* server cannot find a watermark for a user, the synchronization process cannot pull the user's data from *Outlook* into the program. When this happens, on the Manage Exchange Servers page, click the double arrows beside the server name to expand the row and click **Reset user watermarks**. This removes the digital watermarks for all application users associated with the server and creates new watermarks so you can resume downloading the user's data.

Warning: When the next instance of the *Exchange* synchronization processes after you reset watermarks, the program cannot include changes made to user data since the previous instance of the synchronization process.

Exchange Server Application Users

Exchange server integration is available only for application users with *Exchange* mailboxes. After you map the program to an *Exchange* server, you can include application users. On the Exchange Server Application Users page, you manage the user list. To access this page, click the domain name for a server in the grid. The Exchange Server Application Users page appears.

Exchange Ser	ver Application Users
Application users (2)	🕃 Add 🛛 🗐 🖌 More 🕶
Application user	Identifier type
🛞 BetU	Network SID
O	Network SID

The grid displays the users you add to the server and the domain method used to map them. To search for all application users with *Exchange* mailboxes on the server, under **Tasks**, click **Auto-find application users**. To update the information on this page, click **Refresh**.

Note: For more information about how to find all application users with *Exchange* mailboxes, see Find Exchange server application users on page 4.

Add Application Users

In *Security*, the system administrator creates application users. Before the system administrator can add users to an *Exchange* server, the administrator must create *Exchange* mailboxes for them.

For information about application users, refer to the Security Guide.

Add an Exchange server application user

- 1. From Administration, click Exchange integration. The Exchange integration page appears.
- 2. Click Manage Exchange servers. The Manage Exchange Servers page appears.
- 3. In the grid, click the domain name for a server. The Exchange Server Application Users page appears.
- 4. Click Add. The Add Exchange server application user screen appears.

Application user:		AL AL
Identifier type:	Network SID	~
SMTP address:		

- 5. In the **Application user** field, enter an application user. To search for a user, click the binoculars. A search screen appears.
- 6. In the **Identifier type** field, select the method to map the application user to the *Exchange* server.
 - If the *Exchange* server and the program are on the same domain, select "Network SID". Security identifier (SID) is a unique alphanumeric string that identifies the user.
 - If the *Exchange* server and the program are on different domains, select "SMTP address". Simple Mail Transfer Protocol (SMTP) is a protocol used to send email messages between servers.
- 7. In the **SMTP address** field, enter the SMTP address to map the application user to the *Exchange* server. This field enables when you select "SMTP address" in the **Identifier type** field.
- 8. Click **Save**. You return to the Exchange Server Application Users page and the application user appears in the grid.

Find Exchange Server Application Users

On the Find Exchange server application users screen, you can search for all application users with *Exchange* mailboxes and map them from the program to the *Exchange* server at the same time.

- Find Exchange server application users
 - 1. From Administration, click Exchange integration. The Exchange integration page appears.
 - 2. Click Manage Exchange servers. The Manage Exchange Servers page appears.
 - 3. In the grid, click the domain name for a server. The Exchange Server Application Users page appears.
 - 4. Under **Tasks**, click **Auto-find application users**. The Find Exchange server application users screen appears.

User name:	
Application user	Email address

- 5. In the **User name** and **Password** fields, enter your *Exchange* user name and password to authenticate the account with the *Exchange* server.
- 6. To search for application users with *Exchange* mailboxes, click **Find users**. The program compares application users to the address book in *Exchange* mailboxes.

After the search is complete, the **Application user** column displays users with *Exchange* mailboxes on the server and the **Email address** column displays email addresses for the *Exchange* mailboxes. The list is read-only so you cannot select, edit, or clear rows.

7. To map all of the application users to the *Exchange* server, click **Save**. You return to the Exchange Server Application Users page and the application users appear in the grid.

Warning: If you do not want to map every user in the list to the *Exchange* server, click **Cancel**.

Exchange Contacts

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With Microsoft Exchange server integration, you use constituent information from your database to create contact records in Microsoft *Outlook*. The system administrator configures the contact synchronization process to create and update contact records so no burden exists for the *Outlook* user. The administrator also selects the constituents and application users to include, and the contact synchronization process creates contact records in *Outlook*. When a contact synchronization process runs, it creates or updates contact records in *Outlook* with data from constituent records.

Note: You can also download contact changes from *Outlook* to constituent records. To do this, configure the download *Exchange* data process. The process downloads contact changes into batches. The process also downloads email messages to the contacts from the contact synchronization process. The batch owner reviews the changes from *Outlook* and decides whether to commit them to your database. For more information about the download *Exchange* data process, see Exchange Downloads on page 27.

Create Exchange Contacts

With *Exchange* server integration, *Outlook* users can access constituent information from the program. To create contacts, the system administrator configures the contact synchronization process. On the Create Exchange Contacts page, you can manage contact synchronization processes.

From *Administration*, click **Exchange integration**. The Exchange integration page appears. On this page, click **Create Exchange contacts**. The Create Exchange Contacts page appears.

Create Exchange contac	cts (1) 🔂 Add 🗵 More 🗸		
Name	Description	Category 🔺	Last run on
None>			
Prospects			

This page displays the name, description, and category of each contact synchronization process, as well as the last date each process ran. To make sure the latest information displays on the page, click **Refresh**.

Note: To include addresses, email addresses, and phone numbers in the contact synchronization process, the system administrator maps the information to corresponding fields in *Outlook*. For information about how to map fields, see Exchange Field Mappings on page 11.

Add Contact Synchronization

The contact synchronization process allows *Outlook* users to access constituent information from the program. The administrator selects constituents to include and the *Outlook* users to receive contact records. The contact records created in *Outlook* include names and personal information from constituent records in the program, as well as any addresses, email addresses, or phone numbers you map to *Outlook* on the Exchange Field Mappings page. The process can also update contact records when constituent records change.

Note: You can also download changes to contact records. To download changes from *Outlook*, you configure the download *Exchange* data process. For information about the process, refer to Exchange Downloads on page 27.

Add a contact synchronization process

- 1. From Administration, click Exchange integration. The Exchange integration page appears.
- 2. Click Create Exchange contacts. The Create Exchange Contacts page appears.

General —	
Name:	
Description:	
Category:	·
Add link to:	×
Add these con	stituents as contacts
Selection:	# /
Create contac	ts for these users
Apply to:	All users 🗸
Selection:	
	Create contacts based on prospect planned step or planned interaction ownership

3. Click Add. The Add contact synchronization screen appears.

- 4. Under General, enter a name and description for the synchronization process.
 - a. In the **Category** field, select an *Exchange* contact category. The category is useful for sorting purposes and appears on the contact record. You add *Exchange* contact categories from **Code tables** under **Data** in *Administration*. For more information about code tables, refer to the *Administration Guide*.
 - b. In the **Add link to** field, select a page in the program to include as a link in the contact record. When a user clicks the link in *Outlook*, the program opens to the selected page. For example, you can select the Constituent Profile Page.

- 5. Under Add these constituents as contacts, select a dynamic query of individual constituents to add as contacts in *Outlook*. For information about how to create a query, refer to the *Query and Export Guide*.
- 6. Under **Create contacts for these users**, select the application users you want to receive constituent data in *Outlook*.
 - a. In the **Apply to** field, select the application users to include in the synchronization process. You can include all application users, a query of users, or a single user. The process creates contact records for these users in *Outlook*.

When you select "Selected users" in the **Apply to** field, the **Selection** field enables. In this field, select a query of application users to include in the contact synchronization process. To search for a query, click the binoculars. A search screen appears.

When you select "Specific user" in the **Apply to** field, the **User** field appears. Enter the application user to include in the synchronization process. To search for a user, click the binoculars. A search screen appears.

- b. To create contacts for application users only when they are owners of planned steps or interactions for constituents, select **Create contacts based on prospect planned step or planned interaction ownership**. This limits the number of contact records created. All constituents from the constituent query are available for contact synchronization, but contact records are created in *Outlook* only for application users who are owners of prospect planned steps or planned interactions for the constituents.
- 7. Click **Save**. You return to the Create Exchange Contacts page and the synchronization process appears in the grid.

Assign Permissions

To restrict users who can access a contact synchronization process, you can assign rights to system roles. When a user goes to the Create Exchange Contacts page, the process appears only if the user belongs to a system role that is granted access. Users with permission to access a contact synchronization process can start, edit, and delete the process.

Note: If a user has multiple roles and one role is granted access to a contact synchronization process but another is denied, the user cannot access the process. If one role is granted access and another is unspecified, the user can access the process. For information about system roles and security, refer to the *Security Guide*.

Assign user permissions for a contact synchronization process

1. On the Create Exchange Contacts page, select a synchronization process and click **Assign permissions**. The Assign permissions screen appears.

xchange Contact Synchronization Proces	s
his feature is available for:	
All roles	
Selected roles	
Clear all	🧭 Grant 🔂 Deny 🗡 Clear
Syst	tem roles
📂 Annual Fund Manager	
Httribute Categories	
Billing clerk	
Blackbaud Built-In AppFx System Use	r Role
📂 Board Member	
👑Code Tables	
Constituent View Only	
48.1.	

- 2. To grant permission to all roles in the system, select All roles.
- 3. To grant or deny permission to system roles, select Selected roles.
 - To grant access, select a system role and click Grant.
 - To deny access, select a system role and click **Deny**. Users in that system role cannot access the process even if they belong to other system roles that have access.
 - To remove an assignment, select a system role and click **Clear**. To remove all assignments, click **Clear** all.
- 4. Click **Save**. You return to the Create Exchange Contacts page. The program applies the system role permissions to the contact synchronization process.

Go to Contact Synchronization Process Page

To view the process history and create job schedules for a contact synchronization process, select a process and click **Go to process**. The contact synchronization process page appears. On this page, you can start or edit the process, view the status of the most recent instance and details about past instances, and create job schedules.

For more information about the contact synchronization process page, see Contact Synchronization Process Page on page 15.

Create Contacts

You can manually start a contact synchronization process independent of a job schedule. On the Create Exchange Contacts page, click the double arrows beside the process to expand the row and then click **Create contacts**. The contact synchronization process page appears. The process creates and updates contact records in *Outlook*, and the Recent status tab displays information about its progress.

For information about the contact synchronization process page, see Contact Synchronization Process Page on page 15.

Reset Last Run on Date

When a contact synchronization process runs, it updates contact records only if the corresponding constituent records have been modified. To update contact records when the constituent information is unchanged, you can clear the date when the process was last run.

On the Create Exchange Contacts page, click the double arrows beside the process to expand the row and then click **Reset last run on date**. When you reset this date, the next instance of the process updates contact records even if the constituent records are unchanged.

Tip: As a general rule, only click **Reset last run on date** to restore deleted contact records or to overwrite changes in *Outlook*. Typically, you do not want to reset the last run on date because it unnecessarily resends information from the program to *Outlook*.

Exchange Field Mappings

When a contact synchronization process creates contact records, some constituent information is automatically mapped to the corresponding fields in *Outlook*. However, the system administrator must map addresses, email addresses, and phone numbers from the program to corresponding fields in *Outlook*.

To select fields in *Outlook* to map to constituent addresses, email addresses, phone numbers in the program, click **Manage field mappings** under **Tasks** on the Create Exchange Contacts page. The Exchange Field Mappings page appears so you can manage field mapping information.

Address Types Tab

On the Address Types tab, you manage address type mapping for contact records. This page displays mapped address types in the program and the corresponding address types in *Outlook*.



In the **Address type** column, address types in the program that you include in the synchronization process appear. In the **Exchange type** column, the corresponding fields in *Outlook* appear. To make sure the latest information displays on the tab, click **Refresh**.

Add an Address Type Mapping

Outlook contains three address types for contacts: Business, Home, and Other. On the Address Types tab, you can map three address types from the program to these three address types in *Outlook*. If the primary address type on the constituent record is not mapped to an address type in *Outlook*, it maps to the "Other" address type by default. If the primary address type in the program changes, the new primary address adds to the contact record.

If you do not have an applicable address type to map to an Outlook address type, you can create one from

12 CHAPTER 2

Administration, Data, Code tables. For more information about code tables, refer to the Administration Guide.

Add an address type mapping

- 1. From *Administration*, click **Exchange integration**. The Exchange integration page appears.
- 2. Click Create Exchange contacts. The Create Exchange Contacts page appears.
- 3. Under Tasks, click Manage field mappings. The Exchange Field Mappings page appears.
- 4. On the Address Types tab, click Add. The Add address type mapping screen appears.

Address type:	Business	~
Exchange type:	Business	~

5. In the **Address type** field, select an address type from the program to map to an address type in *Outlook*. The contact synchronization process adds constituent addresses with this type to contact records in *Outlook*.

Note: You cannot map an address type in the program to multiple address types in Outlook

- 6. In the **Exchange type** field, select the corresponding address type in *Outlook*. The process maps data from the program to this field in *Outlook*.
- 7. Click Save. You return to the Address Types tab and the mapping appears in the grid.

Email Address Types Tab

On the Email Address Types tab, you manage email address type mapping for contact records. This tab displays mapped email address types in the program and the corresponding email address types in Microsoft *Outlook*.



In the **Email address type** column, email address types in the program that you include in the synchronization process appear. In the **Exchange type** column, the corresponding fields in *Outlook* appear. To make sure the latest information displays on the tab, click **Refresh**.

Add an Email Address Type Mapping

If you do not have an applicable email address type to map to an *Outlook* email type, you can create one from *Administration, Data, Code tables.* For more information about code tables, refer to the *Administration Guide*.

Add an email address type mapping

- 1. From *Administration*, click **Exchange integration**. The Exchange integration page appears.
- 2. Click Create Exchange contacts. The Create Exchange Contacts page appears.
- 3. Under Tasks, click Manage field mappings. The Exchange Field Mappings page appears.
- 4. On the Email Address Types tab, click. The Add email address type mapping screen appears.

Email address type:	Email	1
Exchange type:	Email	

5. In the **Email address type** field, select an email address type from the program to map to an email address type in *Outlook*. The contact synchronization process adds email addresses with this type to contact records in *Outlook*.

Note: You cannot map an email address type in the program to multiple address types in Outlook

- 6. In the **Exchange type** field, select the corresponding email address type in *Outlook*. The process maps data from the program to this field in *Outlook*.
- 7. Click **Save**. You return to the Email Address Types tab and the mapping appears in the grid.

Phone Types Tab

On the Phone Types tab, you manage phone type mapping for contact records. This tab displays mapped phone types in the program and the corresponding phone types in *Outlook*.



In the **Phone types** column, phone types in the program that you include in the synchronization process appear. In the **Exchange type** column, the corresponding fields in *Outlook* appear. To make sure the latest information displays on the tab, click **Refresh**.

Add a Phone Type Mapping

When the primary phone type on the constituent record is not mapped to a phone type in *Outlook*, it maps to the Other phone type in *Outlook* by default.

If you do not have an applicable phone type to map to an *Outlook* phone type, you can create one from *Administration, Data, Code tables.* For more information about code tables, refer to the *Administration Guide*.

Add a phone type mapping

- 1. From *Administration*, click **Exchange integration**. The Exchange integration page appears.
- 2. Click Create Exchange contacts. The Create Exchange Contacts page appears.
- 3. Under Tasks, click Manage field mappings. The Exchange Field Mappings page appears.
- 4. On the Phone Types tab, click **Add**. The Add phone type mapping screen appears.

Phone type:	Business	
Exchange type:	Business	

5. In the **Phone type** field, select a phone type from the program to map to a phone type in *Outlook*. The contact synchronization process adds constituent phone numbers with this type to contact records in *Outlook*.

Note: You cannot map a phone type in the program to multiple address types in *Outlook*

- 6. In the **Exchange type** field, select the corresponding phone type in *Outlook*. The process maps data from the program to this field in *Outlook*.
- 7. Click Save. You return to the Phone Types tab and the mapping appears in the grid.

Default Field Mapping

The system administrator manually maps addresses, email addresses, and phone numbers to corresponding fields in *Outlook*. The program maps other biographical information by default to corresponding fields in the contact records. The following table describes the fields in *Outlook* that are automatically populated with information from your database.

Outlook field	Description
Full name	The first name and last name on the constituent record are combined in this field on the contact record.
Company	The primary business on the constituent record appears in this field on the contact record. You enter the primary business on the constituent's Relationships page. The contact synchronization process does not update the program when you edit this field on the contact record.
Web page address	The website on the Personal tab of the constituent record appears in this field on the contact record.
Nickname	The nickname on the Personal tab of the constituent record appears in this field on the contact record.
Title	The title on the Personal tab of the constituent record appears in this field on the contact record.
Suffix	The suffix on the Personal tab of the constituent record appears in this field on the contact record.

Default Field Mapping

Outlook field	Description
Spouse's name	The first name and last name of the spouse on the constituent record are combined in this field on the contact record. You enter the spouse's name on the constituent's Relationships page. The contact synchronization process does not update the program when you edit this field on the contact record.
Birthday	The birth date on the Personal tab of the constituent record appears in this field on the contact record.

Contact Synchronization Process Page

To view the process history and create job schedules for a contact synchronization process, click the process name in the **Create Exchange contacts** grid. The contact synchronization process page appears. On this page, you can start or edit the process, view the status of the most recent instance, view details about past instances, and create job schedules.

Start Contact Synchronization Process

On the contact synchronization process page, you can manually start the process independent of a job schedule. Under **Tasks**, click **Start process**. The process creates and updates contact records in *Outlook*. The Recent status tab displays information about its progress.

For information about the contact synchronization process, see Create Exchange Contacts on page 7.

Generate WSF

A Windows Scripting File (.wsf) is an executable script file format for Windows that can incorporate JScript (.js) or VBScript (.vbs) routines and include XML elements. On the contact synchronization process page, you can select an export process and use either JScript or VBScript language to generate a .wsf file of the process to use with another application. You can use Windows Task Scheduler to schedule tasks to run the exported Windows Scripting File through the other application at a time that is most convenient to your organization.

Generate a Windows Scripting File

- 1. On the process that requires a Windows Scripting File, click Generate WSF under Tasks.
- 2. Your browser prompts you to open or save the file. To save the file, choose the file location.

Note: The download process varies according to the browser you use.

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.

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.

To print a report, click the **Print** button on the toolbar of the report. You can also set up the page format for the print job to determine how the printed report looks. You can also use the report information in another software application or save the report in another file format, such as to share the data with someone who cannot access the program. When you click the **Export** button on the toolbar, you can export the information into a shared application, such as Microsoft *Excel*, or save the report into an easily shared format, such as Adobe *Acrobat* (*.pdf) or a Web archive (*.mhtml).

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 include 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 a 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 the funnel in the action bar. 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 List** on the action bar.

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

Delete a Contact Synchronization Process History

On the History tab, you can delete instances of a contact synchronization process. For example, if an instance does not create or update any contact records, you can delete it from the process history.

On the contact synchronization process page, select an instance of the process on the History tab and click **Delete**. On the confirmation message that appears, click **Yes**. You return to the History tab, and the instance no longer appears in the grid.

Job Schedules Tab (Not Available on all Process Pages)

On the Job schedules tab, you view the job schedules of the process in the database. The details in this grid include the name of the job, whether a job schedule is enabled, the frequency of the job schedule, the start date and time and end date and time of the scheduled jobs, and the dates the job schedule is 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 List** on the action bar.

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		*
	Enabled		
One-time occurren	nce		
Date:	5/15/2014	Time:	4:38:43 PM
		to the second	
Frequency Occurs every:	1 day(s)		
Frequency Occurs every: Daily frequency Occurs once at:	1 day(s) 4:38:43 PM		
Frequency Occurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 4:38:43 PM	Starting at:	4:38:43 PM
Frequency Occurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 4:38:43 PM 1 Minutes	Starting at:	4:38:43 PM 4:38:44 PM
Frequency Occurs every: Daily frequency Occurs once at: Occurs every: Duration	1 day(s) 4:38:43 PM 1 Minutes	Starting at:	4:38:43 PM 4:38:44 PM
Frequency Occurs every: Daily frequency Occurs once at: Occurs every: Duration Starting at:	1 day(s) 4:38:43 PM 1 Minutes	Starting at: [Ending at: [4:38:43 PM 4:38:44 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. To return to the Job schedules tab, click **Save**.

Create Job Screen

Screen Item	Description
Job name	Enter a name for the job schedule.
Schedule type	Select how often to run the job schedule. 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.
Enabled	By default, the scheduled process is active. To suspend the process, clear this checkbox.
One-time occurrence	For a process that runs once, select the date and time to run it.
Frequency	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.
Daily frequency	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. To run a process once, select Occurs once at and enter the start time. To run a process at intervals, select Occurs every and enter the time between instances, as well as a start time and end time.
Start date	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 .

blackbaud chapter 3

Exchange Calendar Items

Create Exchange Calendar Items	
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With Microsoft Exchange server integration, you can use pending constituent interactions, prospect plan steps, or pending stewardship steps from your database to create calendar items in Microsoft *Outlook*. The system administrator configures the calendar item synchronization process to create and update calendar items. This includes the type of records and the application users to include in the calendar item synchronization processes at regular intervals, the administrator creates job schedules. When the calendar item synchronization process runs, it creates or updates calendar items in *Outlook* with data from pending constituent interactions, prospect plan steps, or pending stewardship steps.

Note: You can also download changes to calendar items that the process creates. To download changes from *Outlook*, you configure the download *Exchange* data process. The process downloads changes to calendar items into batches. A designated batch owner reviews the changes from *Outlook* and decides whether to commit them to the database. For more information about the download *Exchange* data process, see Exchange Downloads on page 27.

Create Exchange Calendar Items

With *Exchange* server integration, *Outlook* users can access constituent information from the program. To create calendar items, the system administrator configures the calendar item synchronization process. On the Create Exchange Calendar Items page, you can manage calendar item synchronization processes.

From *Administration*, click **Exchange integration**. The Exchange integration page appears. On this page, click **Create Exchange calendar items**. The Create Exchange Calendar Items page appears.

reate Exchange calenda	ar items (2) 🛛 Add 📴 More	•
Name	Description	Last run on
S Constituent interactions	Constituent interaction sy	nch
Prospect plans	Prospect plan synch	

This page displays the name and description for each calendar item synchronization process, as well as the last date each process ran. To update the information on this page, click **Refresh**.

Add Calendar Item Synchronization

The calendar item synchronization process allows *Outlook* users to access pending constituent interactions, prospect plan steps, or pending stewardship steps from the program. The system administrator selects the types of records to include and the *Outlook* users to receive the calendar items. The process can also update calendar items if the information in the program changes.

Note: To create calendar items in *Outlook* for an application user, the user must be linked to a constituent record. Calendar items are created only when the linked constituent is the owner of pending constituent interactions, prospect plan steps, or pending stewardship steps. For more information about application users, refer to the *Security Guide*.

Add a calendar item synchronization process

- 1. From Administration, click Exchange integration. The Exchange integration page appears.
- 2. Click Create Exchange calendar items. The Create Exchange Calendar Items page appears.
- 3. Click Add. The Add calendar item synchronization screen appears.

Name:	All plan steps	Ť
Description:		
Create for:	Pending constituent interactions	
	Prospect plan steps	
	Pending stewardship steps	
Add link to:	Prospect Page	~
Reminder:	15 minutes	
Date range:	All future items	
	Items within a specific range	
	One month from the current date	V
reate calenda	ar items for these users	
Apply to:	All users	~
Selection:	44	1

- 4. Under General, enter a name and description for the process
 - a. Beside **Create for**, select whether to create calendar items in *Outlook* for pending constituent interactions, prospect plan steps, or pending stewardship steps.
 - b. In the **Add link to** field, select a page in the program to include as a link in the calendar item. When a user clicks the link in *Outlook*, the program opens to the selected page. For example, you can select the Constituent Profile Page.

- c. In the **Reminder** field, select the time to set a reminder in *Outlook*.
- 5. Beside **Date range**, select the date to determine how far in advance you want to create the calendar items.
 - To create calendar items regardless of when they are scheduled, select All future items.
 - To create calendar items for items within a designated period of time, select **Items within a specific range**. In the field below, select how far in advance to create calendar items. For example, you can select to create calendar items one month from today's date.

Note: Each time the synchronization process runs, the date range resets. For example, if you select "One month from current date," items are not created for a pending constituent interaction that is more than a month away. When you run the process again and the item is less than a month away, a calendar item creates.

- 6. Under **Create calendar items for these users**, select the application users to include in the calendar item synchronization process.
 - a. In the **Apply to** field, you can include all application users, a query of users, or a single user. The process creates calendar items for these users in *Outlook*.

When you select "Selected users" in the **Apply to** field, the **Selection** field enables. In this field, select a query of application users to include in the calendar item synchronization process. To search for a query, click the binoculars. A search screen appears.

When you select "Specific user" in the **Apply to** field, the **User** field appears. Enter the application user to include in the calendar item synchronization process. To search for a user, click the binoculars. A search screen appears.

7. Click Save. You return to the Create Exchange Calendar Items page and the process appears in the grid.

Assign Permissions

To restrict the users who can access a calendar item synchronization process, you can assign rights to system roles. When a user goes to the Create Exchange Calendar Items page, the process appears only if the user belongs to a system role that is granted access. Users with permission to access a calendar item synchronization process can start, edit, and delete the process.

Note: If a user has multiple roles and one role is granted access to a calendar item synchronization process but another is denied, the user cannot access the process. If one role is granted access and another is unspecified, the user can access the process. For information about system roles and security, refer to the *Security Guide*.

Assign user permissions for a calendar item synchronization process

1. On the Create Exchange Calendar Items page, select a synchronization process and click **Assign permissions**. The Assign permissions screen appears.

kchange Calendar Synchronization Pro	cess
his feature is available for:	
All roles	
Selected roles	
Clear all	🧭 Grant 🚠 Deny 🗡 Clear
Sj	ystem roles
Manager	
🖄 Annual Fund Manager	
👸 Attribute Categories	
Billing clerk	
Blackbaud Built-In AppFx System U	ser Role
💋 Board Member	
避Code Tables	
Constituent View Only	
46.1.	

- 2. To grant permission to all roles in the system, select All roles.
- 3. To grant or deny permission to system roles, select Selected roles.
 - To grant access, select a system role and click Grant.
 - To deny access, select a system role and click **Deny**. Users in that system role cannot access the
 process even if they belong to other system roles that have access.
 - To remove an assignment, select a system role and click Clear. To remove all assignments, click Clear all.
- 4. Click **Save**. You return to the Create Exchange Calendar Items page. The program applies the system role permissions to the calendar item synchronization process.

Go to Calendar Item Synchronization Process Page

To view the process history and create job schedules for a calendar item synchronization process, click the process name in the **Create Exchange calendar items** grid. The calendar item synchronization process page appears. On this page, you can start or edit the process, view the status of the most recent instance and details about past instances, and create job schedules.

For more information about the calendar item synchronization process page, see Calendar Item Synchronization Process Page on page 23.

Create Calendar Items

You can manually start a calendar item synchronization process independent of a job schedule. On the Create Exchange Calendar Items page, click the double arrows beside the process to expand the row and then click **Create calendar items**. The calendar item synchronization process appears. The process creates and updates calendar items in *Outlook*, and the Recent status tab displays information about its progress.

For information about the calendar item synchronization page, see Calendar Item Synchronization Process Page on page 23.

Reset Last Run on Date

When a calendar item synchronization process runs, it updates calendar items only if the corresponding pending constituent interactions, prospect plan steps, or pending stewardship steps have been modified. To update calendar items when this information is unchanged, you can clear the date when the process was last run. On the Create Exchange Calendar Items page, click the double arrows beside the process to expand the row and then click **Reset last run on date**. When you reset this date, the next instance of the process updates calendar items even if the pending constituent interactions, prospect plan steps, or pending stewardship steps are unchanged.

Tip: As a general rule, only click **Reset last run on date** to restore deleted calendar items or to overwrite changes in *Outlook*. Typically, you do not want to reset the last run on date because it unnecessarily resends information from the program to *Outlook*.

Calendar Item Synchronization Process Page

To view the process history and create job schedules for a calendar item synchronization process, click the process name in the **Create Exchange calendar items** grid. The calendar item synchronization process page appears. On this page, you can start or edit the process, view the status of the most recent instance, view details about past instances, and create job schedules.

Start Calendar Item Synchronization Process

On the calendar item synchronization process page, you can manually start the process independent of a job schedule. Under **Tasks**, click **Start process**. The process creates and updates calendar items in *Outlook*. The Recent status tab displays information about its progress.

For information about the calendar item synchronization process, see Create Exchange Calendar Items on page 19.

Generate WSF

A Windows Scripting File (.wsf) is an executable script file format for Windows that can incorporate JScript (.js) or VBScript (.vbs) routines and include XML elements. On the calendar item synchronization process page, you can select an export process and use either JScript or VBScript language to generate a .wsf file of the process to use with another application. You can use Windows Task Scheduler to schedule tasks to run the exported Windows Scripting File through the other application at a time that is most convenient to your organization.

Generate a Windows Scripting File

- 1. On the process that requires a Windows Scripting File, click Generate WSF under Tasks.
- 2. Your browser prompts you to open or save the file. To save the file, choose the file location.

Note: The download process varies according to the browser you use.

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.

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.

To print a report, click the **Print** button on the toolbar of the report. You can also set up the page format for the print job to determine how the printed report looks. You can also use the report information in another software application or save the report in another file format, such as to share the data with someone who cannot access the program. When you click the **Export** button on the toolbar, you can export the information into a shared application, such as Microsoft *Excel*, or save the report into an easily shared format, such as Adobe *Acrobat* (*.pdf) or a Web archive (*.mhtml).

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 include 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 a 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 the funnel in the action bar. 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 List** on the action bar.

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

Delete Calendar Item Synchronization Process History

On the History tab, you can delete instances of a calendar item synchronization process. For example, if an instance does not create or update any calendar items, you can delete it from the process history.

On the calendar item synchronization process page, select an instance of the process on the History tab and click **Delete**. On the confirmation message that appears, click **Yes**. You return to the History tab, and instance no longer appears in the grid.

Job Schedules Tab (Not Available on all Process Pages)

On the Job schedules tab, you view the job schedules of the process in the database. The details in this grid include the name of the job, whether a job schedule is enabled, the frequency of the job schedule, the start date and time and end date and time of the scheduled jobs, and the dates the job schedule is 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 List** on the action bar.

Schedule a Process Job

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 to run a process at a time convenient for your organization, such as overnight. You can create a job schedule from the Job schedules tab of the process status page. On the action bar, click **Add**. The Create job screen appears.

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.

Detalls			
lob name:			
Schedule type:	One time		×
	Enabled		
One-time occurren	ce		
Date:	5/15/2014	Time:	4:38:43 PM
Frequency			
Occurs every:	1 day(s)		~
Decurs every: Daily frequency Occurs once at:	1 day(s)		
Decurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 4:38:43 PM	✓ Starting at:	4:38:43 PM
Decurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 4:38:43 PM 1 Minutes	 Starting at: Ending at: 	4:38:43 PM 4:38:44 PM
Decurs every: Daily frequency Occurs once at: Occurs every: Duration	1 day(s) 4:38:43 PM 1 Minutes	 Starting at: Ending at: 	4:38:43 PM 4:38:44 PM
Decurs every: Daily frequency Occurs once at: Occurs every: Duration Starting at:	1 day(s) 4:38:43 PM 1 Minutes	 Starting at: Ending at: End date: 	4:38:43 PM 4:38:44 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. To return to the Job schedules tab, click Save.

Create Job Screen

Screen Item	Description
Job name	Enter a name for the job schedule.
Schedule type	Select how often to run the job schedule. 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.
Enabled	By default, the scheduled process is active. To suspend the process, clear this checkbox.
One-time occurrence	For a process that runs once, select the date and time to run it.
Frequency	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.
Daily frequency	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. To run a process once, select Occurs once at and enter the start time. To run a process at intervals, select Occurs every and enter the time between instances, as well as a start time and end time.
Start date	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 .

Exchange Downloads

Download Exchange Data	
Download Exchange Data Process Page	32
Exchange Server Integration Batch Entry Tasks	

With Microsoft Exchange server integration, you can download email messages and changes to contact records and calendar items from Microsoft *Outlook*. To download this information, the system administrator configures the download *Exchange* data process; sets up batch options for emails, contacts, and calendar items; and designates an owner for each batch. When the process runs, it downloads data into batches. The batch owner reviews the information and decides whether to commit it to the database.

Note: You can download data and email messages only for contact records and calendar items in *Outlook* that you created with the contact synchronization and calendar item synchronization processes. For information about the contact synchronization process, see Exchange Contacts on page 7. For information about the calendar item synchronization process, refer to Exchange Calendar Items on page 19.

Download Exchange Data

With *Exchange* server integration, you can download changes to contact records and calendar items created by the contact and calendar item synchronization processes. You can also download email messages for the contacts you create. After you download data from *Outlook*, you can update the corresponding information in the program. To download changes, the system administrator configures the download *Exchange* data process. On the Download Exchange Data page, you can manage batch options and other settings to download contact record changes, calendar item changes, and email messages.

From *Administration*, click **Exchange integration**. The Exchange integration page appears. On this page, click **Download Exchange data**. The Download Exchange Data page appears.

0	wnload Exchange data (1)	3 More -		
	Exclude personal messages	Exclude private messages	Exclude confidential messages	Exclude auto-reply messages
2	No	No	No	Yes
	🕞 Go to process 🛛 🔯 Downloa	ad 🛛 🍘 Configure 🛛 📂 Assign j	permissions	

This page displays whether the download process excludes auto-reply email messages and email messages marked as personal, private, and confidential. To make sure the latest information displays on the page, click **Refresh**.

Configure Download Exchange Data Process

The download *Exchange* data process allows you to update information in the database with changes in *Outlook*. The process downloads changes into batches for contact records and calendar items created by the contact synchronization and calendar item synchronization processes. You can then update the corresponding records in the program. The process also downloads email messages for contacts that the contact synchronization process created. You can use the batches to save email messages as constituent interactions. The administrator configures batch options for email messages, contact records, and calendar items, and designates owners for the batches. Batch owners review batches and decide whether to commit information to the database.

Configure the download Exchange data process

- 1. From Administration, click Exchange integration. The Exchange integration page appears.
- 2. Click Download Exchange data. The Download Exchange Data page appears.
- 3. Click Configure. The Configure Exchange download processes screen appears.
- 4. On the Emails tab, configure email and batch updates.

mails	Contacts	Calendar Items		
onfigur	e email proc	ess options		
ieneral				
Exclu	ide email me	ssages marked as perso	onal	
Exclu	ide email me	ssages marked as priva	te	
Exclu	ide email mei ide email mei	ssages marked as priva ssages marked as confi	te dential	
Exclu Exclu Exclu	ide email mei ide email mei ide auto-reply	ssages marked as priva ssages marked as confi y email messages	te dential	

a. Under General, select the types of email messages to exclude and select a default interaction type.

To provide privacy for *Outlook* users and prevent downloading non-business emails, select one or more of the **Exclude email messages marked as...** checkboxes for personal, private, and confidential emails.

To prevent downloading auto-reply emails, such as out of office messages, select **Exclude auto-reply email messages**. You are unlikely to save auto-reply email messages as interactions, so this checkbox is marked by default.

In the **Default interaction** field, select an interaction type to associate with email messages you download on a constituent's Interactions page.

5. On the Contacts tab, configure contact updates.

Emails	Contacts	Calendar Items	
onfigure General	e contact pro	ocess options	
Default c	ountry:		~

- a. Under **General**, in the **Default country** field, select a default country so *Outlook Web Access* (OWA) can access email messages, contact records, and calendar items when *Outlook* is unavailable.
- b. In the **Default source** field, select a default information source to appear on the constituent record for contact information added or updated through *Outlook*. For example, you can use an information source of "Outlook" to apply to any changes to contact information that come from *Outlook*. The information source appears next to the new or updated contact information on the Contact tab of the constituent record.
- 6. On the Calendar Items tab, specific configuration options do not exist for calendar item updates.

artch options efault owner: aximum number of records per batch: Selection *	mails	Contacts	Calendar Items			
efault owner: v aximum number of records per batch: 100 Selection Owner *	nfigur latch o	e calendar ito ptions	em process optior	15		
aximum number of records per batch: 100 Selection *	efault	owner:				~
Selection Owner *	aximu	m number of	records per batch		100	
*	Se	lection	(Owner		
	*					

- 7. Under **Batch options** on each tab, configure batch owner, number of records, and selection options for updates.
 - a. In the **Default owner** field, select an owner for batches generated by the download *Exchange* data process. The batch owner reviews the batch and decides whether to commit information to the database. You can enter a different default owner for each batch type. When you commit batches, the program saves email messages as constituent interactions; updates constituent records with changes to contact records; and updates pending constituent interactions, prospect plan steps, and pending stewardship steps with changes to calendar items.

Note: When you download information from *Outlook*, use these options to create separate batches for selected user groups. When you create separate batches for selections of application users, you can assign different batch owners to each selection to restrict access to the downloaded information. Each batch owner manages the information downloaded from the assigned application users. The batch owner entered in the **Default owner** field manages information downloaded from users not included in a selection. To assign different batch owners to selected user groups, use the **Selection** and **Owner** columns. For more information about batch, refer to the *Batch and Import Guide*.

- b. In the **Maximum number of records per batch** field, enter the maximum number of records in each batch.
- c. In the **Selection** column, enter the selections of application users to assign to batch owners. To search for a selection, click the binoculars. In the **Owner** column, select the batch owner to assign to

the selection of application users. This owner is responsible only for batches in the corresponding row in the **Selection** column.

8. Click **Save**. You return to the Download Exchange Data page and the configuration settings appear in the grid.

Assign Permissions

To restrict the users who can access the download *Exchange* data process, you can assign rights to system roles. When an application user goes to the Download Exchange Data page, the process appears only if the user belongs to a system role that is granted access. Users with permission to access the download *Exchange* data process can start and edit the process.

Note: If a user has multiple roles and one role is granted access to a download *Exchange* data process but another is denied, the user cannot access the process. If one role is granted access and another is unspecified, the user can access the process. For information about system roles and security, refer to the *Security Guide*.

Assign user permissions for a download Exchange data process

1. On the Download Exchange Data page, click the double arrows beside the process to expand the row and then click **Assign permissions**. The Assign permissions screen appears.

xchange Download Process	
his feature is available for:	
All roles	
Selected roles	
Clear all	🧭 Grant 📅 Deny 🗡 Clear
5	bystem roles
Accounting Manager	
📂 Annual Fund Manager	
Httribute Categories	
Billing clerk	
📂 Blackbaud Built-In AppFx System U	Jser Role
😕 Board Member	
👑Code Tables	
Constituent View Only	
40.11	

- 2. To grant permission to all roles in the system, select All roles.
- 3. To grant or deny permission to system roles, select Selected roles.
 - To grant access, select a system role and click Grant.
 - To deny access, select a system role and click **Deny**. Users in that system role cannot access the process even if they belong to other system roles that have access.
 - To remove an assignment, select a system role and click **Clear**. To remove all assignments, click **Clear** all.
- 4. Click **Save**. You return to the Download Exchange Data page. The program applies the system role permissions to the download *Exchange* data process.

Download Exchange Data Process Page

To view the process history and create job schedules for the download *Exchange* data process, click the double arrows beside the process to expand the row and then click **Go to process**. The Download Exchange data process page appears. On this page, you can start or edit the process, view the status of the most recent instance and details about past instances, and create job schedules.

Start Download Exchange Data Process

On the download *Exchange* data process page, you can manually start the process independent of a job schedule. Under **Tasks**, click **Start process**. The process downloads any changes or email messages from *Outlook*. The Recent status tab displays information about its progresses.

For information about the download *Exchange* data process, see Download Exchange Data on page 27.

Generate WSF

A Windows Scripting File (.wsf) is an executable script file format for Windows that can incorporate JScript (.js) or VBScript (.vbs) routines and include XML elements. On the download *Exchange* data process page, you can select an export process and use either JScript or VBScript language to generate a .wsf file of the process to use with another application. You can use Windows Task Scheduler to schedule tasks to run the exported Windows Scripting File through the other application at a time that is most convenient to your organization.

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.

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.

To print a report, click the **Print** button on the toolbar of the report. You can also set up the page format for the print job to determine how the printed report looks. You can also use the report information in another software application or save the report in another file format, such as to share the data with someone who cannot access the program. When you click the **Export** button on the toolbar, you can export the information into a shared application, such as Microsoft *Excel*, or save the report into an easily shared format, such as Adobe *Acrobat* (*.pdf) or a Web archive (*.mhtml).

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 include 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 a 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 the funnel in the action bar. 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 List** on the action bar.

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

Delete a Download Exchange Data Process History

On the History tab, you can delete instances of the download *Exchange* data process. For example, if an instance does not download any data, you can delete it from the process history.

On the download *Exchange* data process page, select an instance of the process on the History tab and click **Delete**. On the confirmation message that appears, click **Yes**. You return to the History tab, and the instance no longer appears in the grid.

Job Schedules Tab (Not Available on all Process Pages)

On the Job schedules tab, you view the job schedules of the process in the database. The details in this grid include the name of the job, whether a job schedule is enabled, the frequency of the job schedule, the start date and time and end date and time of the scheduled jobs, and the dates the job schedule is 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 List** on the action bar.

Schedule a Process Job

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 to run a process at a time convenient for your organization, such as overnight. You can create a job schedule from the Job schedules tab of the process status page. On the action bar, click **Add**. The Create job screen appears.

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		×
	Enabled		
One-time occurren	ce		
Date:	5/15/2014	Time:	4:38:43 PM
Frequency Occurs every:	1 day(s)		
Frequency Occurs every: Daily frequency Occurs once at:	1 day(s) 4:38:43 PM		
Frequency Occurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 4:38:43 PM	Starting at:	4:38:43 PM
Frequency Occurs every: Daily frequency Occurs once at: Occurs every:	1 day(s) 4;38:43 PM 1 Minutes	Starting at: Ending at:	4;38;43 PM 4;38;44 PM
Frequency Occurs every: Daily frequency Occurs once at: Occurs every: Duration	1 day(s) 4;38:43 PM 1 Minutes ¥	Starting at: Ending at:	4:38:43 PM 4:38:44 PM
Frequency Occurs every: Daily frequency Occurs once at: Occurs every: Duration Starting at:	1 day(s) 4;38:43 PM 1 Minutes ¥	Starting at: Ending at: © End date:	4:38:43 PM 4:38:44 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. To return to the Job schedules tab, click Save.

Screen Item	Description
Job name	Enter a name for the job schedule.
Schedule type	Select how often to run the job schedule. 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.
Enabled	By default, the scheduled process is active. To suspend the process, clear this checkbox.
One-time occurrence	For a process that runs once, select the date and time to run it.
Frequency	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.
Daily frequency	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. To run a process once, select Occurs once at and enter the start time. To run a process at intervals, select Occurs every and enter the time between instances, as well as a start time and end time.
Start date	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 .

Create Job Screen

Exchange Server Integration Batch Entry Tasks

The download *Exchange* data process downloads email messages and changes to contact records and calendar items from *Outlook* into uncommitted batches. The batches that are created use three existing batch templates: Exchange Calendar Item Batch, Exchange Contact Update Batch, and Exchange Email Batch. Multiple batches can appear for each type when selections of application users are assigned to multiple batch owners or when the number of batch items exceeds the maximum allowed.

Batch owners review the batches and decide whether to commit the information to the database. If the download process runs before a batch is committed, new entries can be added to an existing batch. On the Batch Entry page, you can view batches of information downloaded from *Outlook*. From *Administration*, click **Batch**. The Batch page appears. On this page, click **Batch entry**. The Batch Entry page appears.

On the Uncommitted Batches tab, you can manage uncommitted batches. To edit a batch, click the double arrows beside it to expand the row and then click **Edit batch**. The batch data entry screen appears. On the batch data entry screen, you can perform basic batch data entry tasks. You can delete a row of data, export data to *Excel*, find and replace values in a batch, set a message for a row in the batch, and validate the batch. For information about these tasks, refer to the *Batch and Import Guide*.

Exchange Email Batch

When you download email messages from *Outlook*, the program creates an uncommitted Exchange Email Batch on the Batch Entry page. On the Uncommitted Batches tab, to edit an email update batch, click the double arrows beside it to expand the row and then click **Edit batch**. The batch data entry screen appears.

Note: Depending on the batch workflow associated with the template, you may need to update the batch status to "Ready for review." To do this, click the double arrows beside the batch to expand the row and then click **Update status**. The Update batch status screen appears. In the **Next step** field, select "Ready for review," select an application user to assign it to, and enter comments as necessary. Click **Save**. You return to the Uncommitted Batches tab.

Batch	Cor	nfiguration	Proce	esses		N	Aessages			
	Pro	nerties	Valida	te		Clear	row messa	ne 🤞 Select previous		
 X 	Dec.	stomiza fields	19 Undat	in etatur		Close	all	k Select protious		
lose Expor	EA CU	stornize rielus	e opuar	ie status	Set row messag	ge Clear	all	V Select next		
						Sep 3110V	/ dii	u riter		
	rocess	Constituent		User		Date	Time	Subject	Sites	
1	1	Leslie		Tony		02/5/2014	1:58 PN	l Email		
Aessage De Constituent Iser name: Email body	tail Windo name: Lu Ti	ow eslie ony								×
Vessage De Constituent Jser name: Email body	tail Windo name: Lu To	ow eslie ony ≠®tot com								*
Vlessage De Constituent Jser name: Email body To: From:	tail Windo name: Li Tr Ieslies Tony	ow eslie ony t©test.com								
Vlessage De Constituent Jser name: Email body To: From: Sent: Sent:	tail Windo name: Li To Ieslies Tony 02/5/	ow eslie ony t©test.com 2014 1:58:07 PM	1							8
Message De Constituent Jser name: Email bod To: From: Sent: Subject:	tail Windo name: Li Tr Ieslies Tony 02/5/ Email	ow eslie ony t©test.com 2014 1:58:07 PM	1							
Aessage De Constituent Iser name: Email bod To: From: Sent: Subject: Email	tail Windo name: Li To Tony 02/5/ Email	ow eslie ony t©test.com 2014 1:58:07 PM	1							*
Aessage De ionstituent Iser name: Email body To: From: Sent: Subject: Email	tail Windo name: Li To Tony 02/5/ Email	ow eslie ony t©test.com 2014 1:58:07 Ph	1							*

The batch data entry screen displays email messages downloaded from *Outlook*. The grid displays the constituent and application user who exchanged the email message, the date and time it was sent, and the subject. In the **Process** column, select the entries to include. When you commit the batch, these email messages add to the program as constituent interactions.

To view the details of an email message, select the row on the batch data entry screen. In the **Message Detail Window**, the email message appears. The frame also displays the constituent and application user who exchanged the email message, when it was sent, and the subject. For more information about this window, refer to the *Batch and Import Guide*.

Exchange Contact Update Batch

When you download contact record changes from *Outlook*, the program creates an uncommitted contact Exchange Contact Update Batch on the Batch Entry page. On the Uncommitted Batches tab, to edit a contact update batch, click the double arrows beside it to expand the row and then click **Edit batch**. The batch data entry screen appears.

Note: Depending on the batch workflow associated with the template, you may need to update the batch status to "Ready for review." To do this, click the double arrows beside the batch to expand the row and then click **Update status**. The Update batch status screen appears. In the **Next step** field, select "Ready for review,"

select an application user to assign it to, and enter comments as necessary. Click **Save**. You return to the Uncommitted Batches tab.

lose Export	Review record updates ess Changed by Tony K	Constituent Robert C. Herna	Validate	e status Set row Information so Event Attendee	v message	lear row message lear all now all	 ✓ Select previous ▶ Select next ▼ Filter
Proce	changed by Tony K	Constituent Robert C. Herna	andez	Information so Event Attendee	e		
1	Tony K	Robert C. Hern	andez	Event Attendee	•		
		14 4	Baga				

The batch data entry screen displays the contact records downloaded from *Outlook*. The grid displays the *Outlook* user who changed the contact record and the constituent in the program. If multiple *Outlook* users modify contact records for a constituent, multiple entries for that constituent appear. In the **Process** column, select the entries to include. When you commit the batch, the program updates the corresponding constituent records.

Tabs of the Review Record Updates Screen

On the Review record updates screen, you can compare changes to the contact record in *Outlook* to the constituent record. The fields changed in *Outlook* determine the tabs that appear on the screen.

Biographical Tab

When you download changes to personal information from a contact record, the Biographical tab appears. On this tab, you view changes to biographical information such as name and website that is mapped to *Outlook*.

Process	Field	Newvalue	Surtem value	Action
V	Last name	Smith	Staggs	Changed

In the **Process** column, select the entries to include when you commit the batch. To select all of the checkboxes, click **Select All**. To clear all of the checkboxes, click **Clear All**. When you commit a batch, the program updates the constituent records.

The **Field** column displays the fields that were changed on the contact record. The **New Value** column displays the changes. You can edit entries in this column as necessary, such as to correct misspelled words. Changes to this column are reflected on the contact record after you commit the batch and run the contact synchronization again. The **System value** column displays the data in the constituent record before the change. The **Action** column indicates whether the *Outlook* user added or edited data on the contact record. When "Added" appears in this column, the user added data to a blank field. When "Changed" appears, the user edited existing data.

Phones Tab

When you download changes to phone numbers on a contact record, the Phones tab appears. On this tab, you view changes to phone numbers mapped to *Outlook*.

In the **Process** column, select the entries to include when you commit the batch. To select all of the checkboxes, click **Select All**. To clear all of the checkboxes, click **Clear All**. When you commit a batch, the program updates the constituent records.

The **Field** column displays the fields that were changed on the contact record. The **New Value** column displays the changes. You can edit entries in this column as necessary, such as to correct misspelled words. Changes to this column are reflected on the contact record after you commit the batch and run the contact synchronization again. The **System value** column displays the data in the constituent record before the change. The **Action** column indicates whether the *Outlook* user added or edited data on the contact record. When "Added" appears in this column, the user added data to a blank field. When "Changed" appears, the user edited existing data.

Email Addresses Tab

When you download changes to the email address on a contact record, the Email Addresses tab appears. On this tab, you view changes to email addresses mapped to *Outlook*.

In the **Process** column, select the entries to include when you commit the batch. To select all of the checkboxes, click **Select All**. To clear all of the checkboxes, click **Clear All**. When you commit a batch, the program updates the constituent records.

The **Field** column displays the fields that were changed on the contact record. The **New Value** column displays the changes. You can edit entries in this column as necessary, such as to correct misspelled words. Changes to this column are reflected on the contact record after you commit the batch and run the contact synchronization again. The **System value** column displays the data in the constituent record before the change. The **Action** column indicates whether the *Outlook* user added or edited data on the contact record. When "Added" appears in this column, the user added data to a blank field. When "Changed" appears, the user edited existing data.

Miscellaneous Address Types Tab

When you download changes to an address on a contact record, a tab appears for that address type. The name of the tab depends on the address type in the database that you map to *Outlook*. For example, if you map the "Home" address type to *Outlook* and change the information on the contact record, the Home tab appears. On this tab, you can view changes to addresses mapped to *Outlook*.

In the **Process** column, select the entries to include when you commit the batch. To select all of the checkboxes, click **Select All**. To clear all of the checkboxes, click **Clear All**. When you commit a batch, the program updates the constituent records.

The **Field** column displays the fields that were changed on the contact record. The **New Value** column displays the changes. You can edit entries in this column as necessary, such as to correct misspelled words. Changes to this column are reflected on the contact record after you commit the batch and run the contact synchronization again. The **System value** column displays the data in the constituent record before the change. The **Action** column indicates whether the *Outlook* user added or edited data on the contact record. When "Added" appears in this column, the user added data to a blank field. When "Changed" appears, the user edited existing data.

To save new address information but not replace an existing address, select **Copy address information to a new** address before updating with the downloaded information. In the New address type field, select an address type for the new address information. To mark the address on the constituent record as "Do not mail", select **Do** not mail to new address.

Exchange Calendar Item Batch

When you download calendar item changes from *Outlook*, the program creates an uncommitted Exchange Calendar Item Batch on the Batch Entry page. On the Uncommitted Batches tab, to edit a calendar update batch, click the double arrows beside the batch to expand the row and then click **Edit batch**. The batch data entry screen appears.

Note: Depending on the batch workflow associated with the template, you may need to update the batch status to "Ready for review." To do this, click the double arrows beside the batch to expand the row and then click **Update status**. The Update batch status screen appears. In the **Next step** field, select "Ready for review," select an application user to assign it to, and enter comments as necessary. Click **Save**. You return to the Uncommitted Batches tab. You can now edit the batch.

Batch	e e e e e e e e e e e e e e e e e e e	Configuration Properties	Processes			Messages	◀ Select previous		
lose Ex	port	Customize fields	🛐 Update	status	Set row message	Clear all Q Show all	 Select next Filter 		
	Process	Record type		Consti	ituent	User	Expect	ted date	Objective
1		Constituent int	eraction	Robert	t	Tony K	0	01/09/2014	
2	J	Constituent interacti		ction Robert		Tony K (01/09/2014	Call Robert
3	V	Constituent int	eraction	Robert	t	Tony K	1	2/09/2013	8AM PST

The batch data entry screen displays the calendar items downloaded from *Outlook*. The grid displays the constituent linked to the calendar item, the *Outlook* user who changed it, the expected date, and the objective. In the **Process** column, select the entries to include. When you commit the batch, the program updates the corresponding pending constituent interactions or prospect planned steps.

Note: The batch data entry screen for calendar update batches does not compare changes from *Outlook* to pending constituent interactions or prospect planned steps. To compare the information in the **Expected date** and **Objective** columns with information in the program, go to the constituent's Interactions page or the prospect's Plan page.