Outbound Data Connector

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Introduction

The Outbound Data Connector in Total Expert allows data from users' contacts and loans to be pushed to 3rd-party services or other external endpoints. Common use cases include sending contact data to a gifting service (such as when a loan closes), sending data to a repository (or "data lake") for business intelligence and analysis, and synchronizing with a parallel CRM.

Administrators create connectors, which define:

- which data should be pushed
  - which user roles can be push data with the connector
  - which type of record (contact or loan) the connector uses
  - which fields from a specific record are included in the push
- when the data should be pushed
  - manual trigger only
  - manual and automatic triggering

Only users who are granted access to the connector can have their data pushed with that connector. If a connector is set up to use automatic triggers, users with access to it can still force a push manually. Regardless of whether a push is made automatically or manually, only the specific fields defined in the connector are pushed.

The Outbound Data Connector Page

Select **Outbound Data Connector** from the navigation menu. The Outbound Data Connector page displays all existing connectors for your organization, with each connection shown on a separate tile. (Up to 9 tiles are shown on the page at a time. If there are more than 9 connectors, use the pagination controls at the bottom of the page to navigate past the first 9.) Tiles are listed in alphabetical order according to their names.
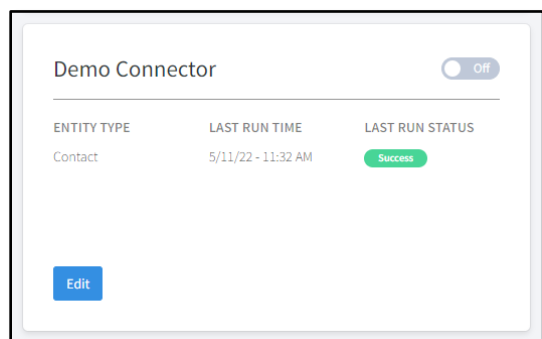
> **Note**
> There is no option to delete or archive a connector: however, you can turn it off so it cannot be used.

Connector Tiles

Each tile represents a connector that has been set up for your organization. A connector that appears here has been saved, which means the setup form has been completely filled out (however, this does not guarantee that the setup is valid). It may also have been published, which means it is able to push data from Total Expert using its automation triggers (if any) or by a manual push.

Each tile includes:

- the title of the connector
- an On/Off toggle switch, which:
    - shows whether the connector is published (On) or not (Off)
    - allows you to switch between these states
- the following text labels:
    - Entity Type (either Contact or Loan)
    - Last Run Time (the date & time the last time the connector ran automatically or manually)
    - Last Run Status (either Success or Failure, as determined by the connector's setup)
- an Edit button
    - Click this button to open the setup form for this connector and modify its parameters.
    - If the connector is published (On), this button is disabled. You must switch the connector to Off before you can change its setup.

> **Note**
> Depending on your permissions, you might have read-only access to the page. In that case, the On/Off toggle and the Create New Connector button are disabled. You would also see a View button instead of an Edit button; click the **View** button to see the setup details of the connector, but you cannot edit the setup.

Creating a New Connector

On the Outbound Data Connector page, click the **Create New Connector** button in the upper-right corner. This opens the Outbound Connector Setup page, which contains 4 collapsible sections:

- Connector Basics
- Authentication
- Data Request
- Success Criteria

You must fill out the minimum requirements in all 4 sections before you can save the connector. The specific fields in each section of the form are described in detail below. All fields are required unless otherwised noted.

Tip
A green checkmark icon appears to the right of a section header when that section's requirements are satisfied.

Warning
The form does not attempt to validate the information entered. The checkmarks merely indicate that the necessary fields are filled. You should test the connector with sample data before activating it for other users.

Connector Basics

When you open the Outbound Connector Setup page, the Connector Basics section is expanded by default.

- **Name** – Enter the name you want the connector to appear with in the platform. The text you enter here will be displayed on the connector list page and in menu options for users to perform a manual push.
- **Entity Type** – Select either **Contacts** or **Loans** from the drop-down list.
  - Your selection determines what fields are shown in the Data Request section, so when you change this selection, you are prompted to confirm the change and acknowledge that any selections you have made in the later sections will be cleared.

Tip
Select the desired Entity Type before moving on to the rest of the form to avoid losing your work.

Warning
The Loans type only works with mortgages. If a user attempts a manual push on a different kind of loan using this connector, data is passed as blank.

- **Automation Sync** – (optional) When selected, the following options trigger an automatic push of data each time the action occurs for a contact or loan. If none are selected, the connector can still be used to push data manually.) Check the boxes for each of the following desired options:
  - **On creation** – Push data when a contact or loan is created.
  - **On deletion** – Push data when a contact or loan is deleted.
  - **On update** – Push data when a contact or loan record is modified.
- **Role Access** – Select 1 or more user roles from the drop-down list. The connector will be available to any user assigned to any of the selected roles. This means:
  - Actions selected under Automatic Sync trigger a push from any contact or loan record owned by these users. Actions do not trigger a push for any other users.
  - These users can manually push data on demand using this connector. Other users cannot.

When you are satisfied with the setup in this section, click the **Next** button to collapse it and expand the Authentication section.

Authentication

The outbound data connector is compatible with 3 modes of authentication.

- **Authentication Type** – Select 1 of the following options from the drop-down list. The remaining fields in this section depend on which of these options you select (see images above).
  - **None** – No further configuration needed.
  - **Basic** – Fill in the required **User Name** and **Passcode** for the service you are connecting to.

> **Note**
> Whatever you type in the Passcode field is obscured by default. Click the eye icon on the right to toggle this display to plain text.

  - **Token**
    - Provide the required **Token Request Body**, **Access Token Name**, and **Token URL** for the service you are connecting to.

- In the **Token Expiration Time** field, enter a value (in seconds). A default value of 1800 (30 minutes) is given.

When you are satisfied with the setup in this section, click the **Next** button to collapse it and expand the Data Request section.

Data Request

This section is where you define what data you want to push and where you want it to go.

- **URL** – Enter the full Web address that is the target of the data push.
- **HTTP Method** – Select the type of data operation the push should perform at the above URL. The options are POST, PATCH, GET, and PUT.
- **Additional Request Headers** – (optional) If the operation requires any further headers, click the **+Add Request Header** link once for each desired header and enter the **Key** and **Value** each time.

> **Note**
> You can add as many additional headers as you like, but the form cannot be submitted if any Key/Value fields are blank. You can remove a Key/Value row from the form by clicking its **Delete** button.

- **Request Body** – This is where you define what information from the contact or loan record is pushed to the above URL.
  - o Use the **PROPERTIES** picker on the right to click on fields and insert the correct field names into the Request Body field. This picker includes all available fields for either contact or loan records (depending on the Entity Type selected in the Connector Basics section—the image above shows contact fields).

> **Tip**
> To help locate a particular field name in the picker, enter part of the name of the field in the text box at the top of the picker.

> **Note**
> If your organization is not configured to store birth year in contact records and you create a connector that passes a contact's birthday, then any push using that connector will substitute 1904 as a placeholder for the year.

  - o You can also type or paste text directly into the Request Body field, but be sure to check your work carefully.

> **Note**
> The Request Body must use proper JSON formatting, and the intended endpoint must be able to accept the data in this format. This must also fulfill any requirements of the intended endpoint, or the push will fail. For example, if the endpoint requires certain data to be sent in the request (such as name, address, and phone number), then that data must be included in the Request Body.

> **Warning**
> The Data Request section, and particularly the Request Body, are entirely dependent on the endpoint being called. Since these endpoints are external to Total Expert, and outside of our control or knowledge, your customer service representative will not be able to assist you. If you need assistance with building the data request, Total Expert requires an SOW and support documentation from the endpoint itself.

When you are satisfied with the setup in this section, click the **Next** button to collapse it and expand the Success Criteria section.

Success Criteria

This section is where you define what response is necessary from the endpoint for the push to be recognized as a success.

- **Source** – Select either **StatusCode** or **ResponseBody** from the list, depending on where the system should look for the Value (see below) that determines whether the push succeeded.
- **Comparator** – In the drop-down list, select an option that defines how to evaluate the Value to determine whether it indicates success. The options are **Equals**, **NotEquals**, **Contains**, and **NotContains**.
- **Value** – Enter a text string that should be compared against the Source.

If the operation requires any further success criteria, click the **+Add Success Criteria** link once for each desired criterion and define the **Source**, **Comparator**, and **Value** each time.

If you define multiple criteria, the response must meet *all* of them to be deemed a success.

> **Note**
> You can add as many additional criteria as you like, but the form cannot be submitted if any criteria are not fully defined. You can remove a criterion from the form by clicking its **Delete** button. (You must define 1 full criterion, so you cannot delete the first one.)

Saving the Connector

Once you have filled out the required fields in all 4 sections of the form, you can either:

- Click the **Save & Publish** button to save all your settings and turn the connector on. Appropriate data will be pushed when any of the automated settings trigger. Users with access can also push data manually using this connector.
- Click the **Save** button to save all your settings but keep the connector turned off for now. No data can be pushed using this connector—either automatically or manually—but you can turn it on at any time later. You can also return to modify the settings before turning the connector on.

Clicking either of these buttons returns you to the Outbound Data Connector list page, where you can see your new connector in the list.

If you are unsatisfied with the connector setup, click the **Cancel** button. This clears the form without saving and returns you to the Outbound Data Connector list page. Clicking the **< All Connectors** link at the top of the Outbound Connector Setup form page has exactly the same effect as clicking the Cancel button in the form.

> **Warning**
> Do not click the Cancel button unless you are sure you want to abandon the form. Any unsaved settings are lost.

Editing an Existing Connector

If you want to modify the setup of a connector:

1. Select **Outbound Data Connector** from the navigation menu.
2. Locate the tile for the connector you want to modify and click the **Edit** button.
   a. If the connector is switched on, you must click the toggle switch to move it to the **Off** position; otherwise the Edit button is disabled.
3. The Outbound Connector Setup page opens. The form is exactly the same as when setting up a new connector, except that the existing setup is shown. Modify any desired fields in the form and verify that the entire setup is what you want.

Note
If you change the Entity Type option in the Connector Basics section, the remainder of the form is cleared. You must fill out the entire form again.

4. Click either the **Save** button or the **Save & Publish** button, as desired. These behave the same way as when creating a new connector.

Data Pushes

Automatic Push

If you selected any options in the Automation Sync portion of the setup, the connector will trigger each time the selected event(s) occur for any user with access to the connector.

Example
Suppose a connector is set up to push contact records, and the On creation and On update options were checked, but On deletion is not. Access is provided to users in the Loan Officer role only.

• When Bob, a loan officer, creates a new contact record, that new record is pushed to the external service. If Bob then modifies that same contact record, it is pushed a second time. If he deletes the record, nothing is pushed.

• If Amy, an administrator, performs any of the above actions, nothing is pushed because her role does not have access to the connector.

Note
The automatic triggers for creating or updating a contact record do not recognize when contact records are merged. The newly created (merged) record would have to be pushed manually. Any further changes would be triggered as updates.

Manual Push

A manual push performs all the actions according to the setup of the connector, but *only* when a user actively chooses to do so. This might be desired when a connector is not set up to push automatically when records are updated but you want to push changes or when you want to push data that existed before the connector was created.

A user can only use a connector manually if their user role was selected in the Role Access field during setup of the connector.

To push a contact manually:

1. Navigate to **Leads & Contacts → Contacts**.
2. Locate the contact you want to push. You might need to use sorting and filtering to narrow down the list.
3. Click the contact's name to open the details page for that contact.
4. In the upper-right corner of the page, select **Actions → Push to XYZ** (where XYZ is the name of the desired connector.
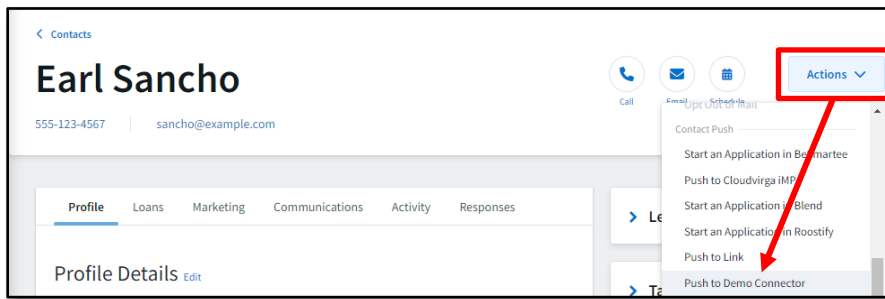
To push a loan manually:

1. Select **Loans** in the navigation menu.
2. Locate the loan you want to push. You might need to use sorting and filtering to narrow down the list.
3. Click the **Actions** button for that loan.
4. In the drop-down menu, hover the mouse pointer over the **Push to…** option and select the desired connector from the submenu.
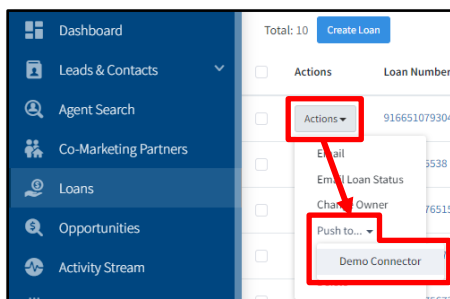
> **Warning**
> Loan connectors only work with mortgages. If you attempt a manual push on a different kind of loan using this connector, data is passed as blank.