NPSP Advanced User's Guide to Importing Data

@salesforcedocs

Last Updated: November 26, 2018

Contents

Contents

Introduction

This guide is for advanced Administrators, Integrators, and Developers who are familiar and comfortable with basic import tasks in the Nonprofit Success Pack. This guide covers advanced data import functionality such as processing data imports in batches.

If you're new to the data import process or want step-by-step instructions for how to import data into NPSP, see NPSP Administrator's Guide to Importing Donor Data.

Batch Data Import

The ability to import data in batches can be very useful. Batch Data Import allows you to have different groups of data import records that you want to process differently, using their own set of unique configuration options (instead of using the default settings).

In this section, we'll tell you how to set up the Batch Data Import feature, give you a sample use case, and show you how to process a batch data import, both manually and automatically using a scheduled job.

Setup–Before You Begin

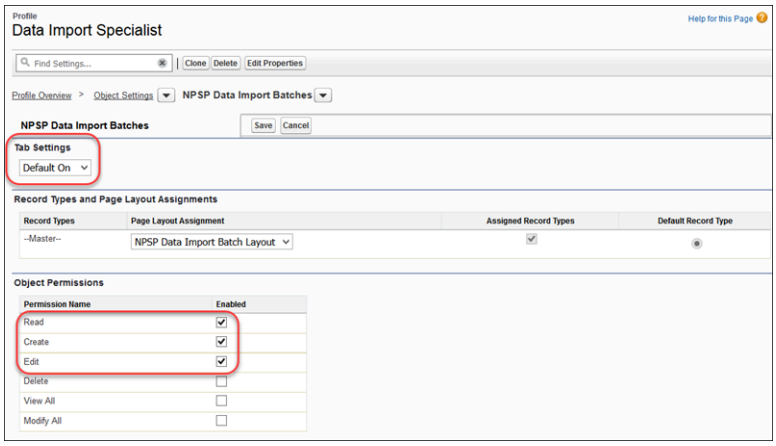
Perform the following setup tasks before you start creating batches.

If you started using NPSP at version 3.108 (September 2017) or later, you can skip this section. If you don't know which version of NPSP you're using, check out Which Version of Nonprofit Success Pack Am I Using? to find out.

1. Enable the new NPSP Data Import Batches object and field for any profiles that need to create batches.

    a. Edit Object Settings for the NPSP Data Import Batches object as follows:

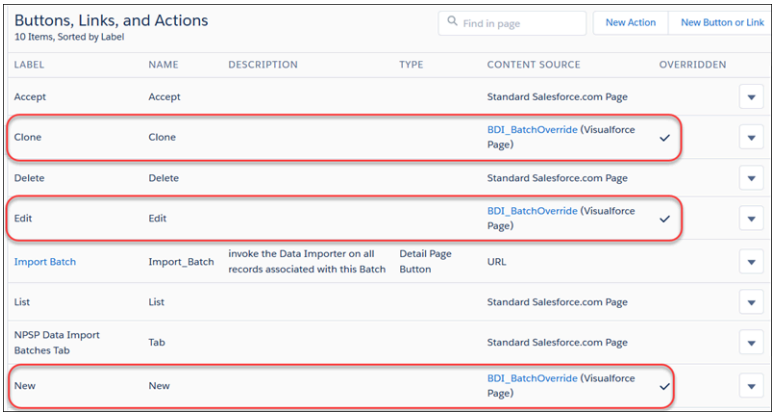
    - Make sure Tab Settings is set to `Default On`.
    - Enable Read, Create, and Edit object permissions.
    - Enable Edit access for all fields.



    b. Edit Object Settings for the NPSP Data Imports object as follows:

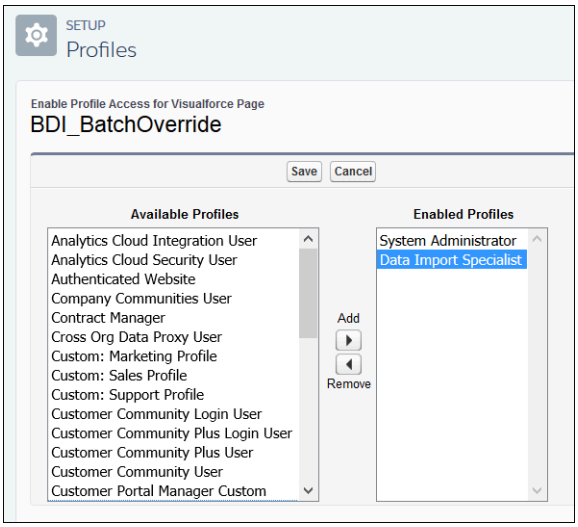
    - In the Field Permissions section, ensure that the Read Access and Edit Access checkboxes are selected for the NPSP Data Import Batch field.

2. Edit the NPSP Data Import Batch page layout as follows:
    - Add all available fields to the layout.
    - Add the Process Batch button to the layout.
3. Edit the NPSP Data Import page layout to include the new NPSP Data Import Batch field.
4. Make sure the **Clone**, **Edit**, and **New** buttons on the NPSP Data Import Batch object are overridden to point to `BDI_BatchOverride` page.



5. Verify that you see **NPSP 09 - Data Import Batch Processing** in the list of Scheduled Jobs in Setup.
    - If you don't see the Scheduled Job, click the NPSP Settings tab to automatically reload the Scheduled Jobs. This must be done by a System Administrator.
    - If you don't see the Scheduled Job and you have the **Don't Auto Schedule Default NPSP Jobs** checkbox checked (in **NPSP Settings** > **Bulk Data Processes** > **Process Scheduler**), you need to manually reschedule the job. For instructions, see Edit or Reschedule NPSP Scheduled Jobs.

6. If you have non-System Admin users who import data, update security for the `BDI_BatchOverride` Visualforce page and ensure the correct profiles have visibility.



Sample Use Case

Each time you run the NPSP Data Importer, all unprocessed records are evaluated using the default configuration settings. So, if you have records that require different matching or other configurations, you have to reset the configuration options each time and ensure only the appropriate records are ready to be imported. The NPSP Data Import tab works well if you're importing a CSV file with records from the same source that require the same Contact and Donation matching, and you want to process all those records right away.

But now, imagine you have an event for which you're importing spreadsheets of signups on a regular basis. You want to match these records by first name, last name, and email address. You also have a different integration for which you're frequently importing opportunities that match against a specific Contact Unique ID field and you want to be sure that they always match existing Opportunities (so you're not creating duplicate records). On top of all that, it would be so helpful to automatically process those records without having to reset the configuration. It is very time consuming to have to adjust the default configuration options and process the records each time you import new records for these two very different scenarios.

With the NPSP Data Import Batch object, you can create a batch for importing the signup spreadsheets with the configuration options set to match against the first name, last name, and email fields on a Contact. Then, you can create another batch for your Opportunities with the configuration options set to match against the Contact Unique ID field and Single Match Donation Matching rule, and set up the batch to process automatically using a scheduled job. Then, when you want to import records, you just have to select

the right batch record for that row in your spreadsheet, and the configuration options are automatically set to the right values when that batch is processed.

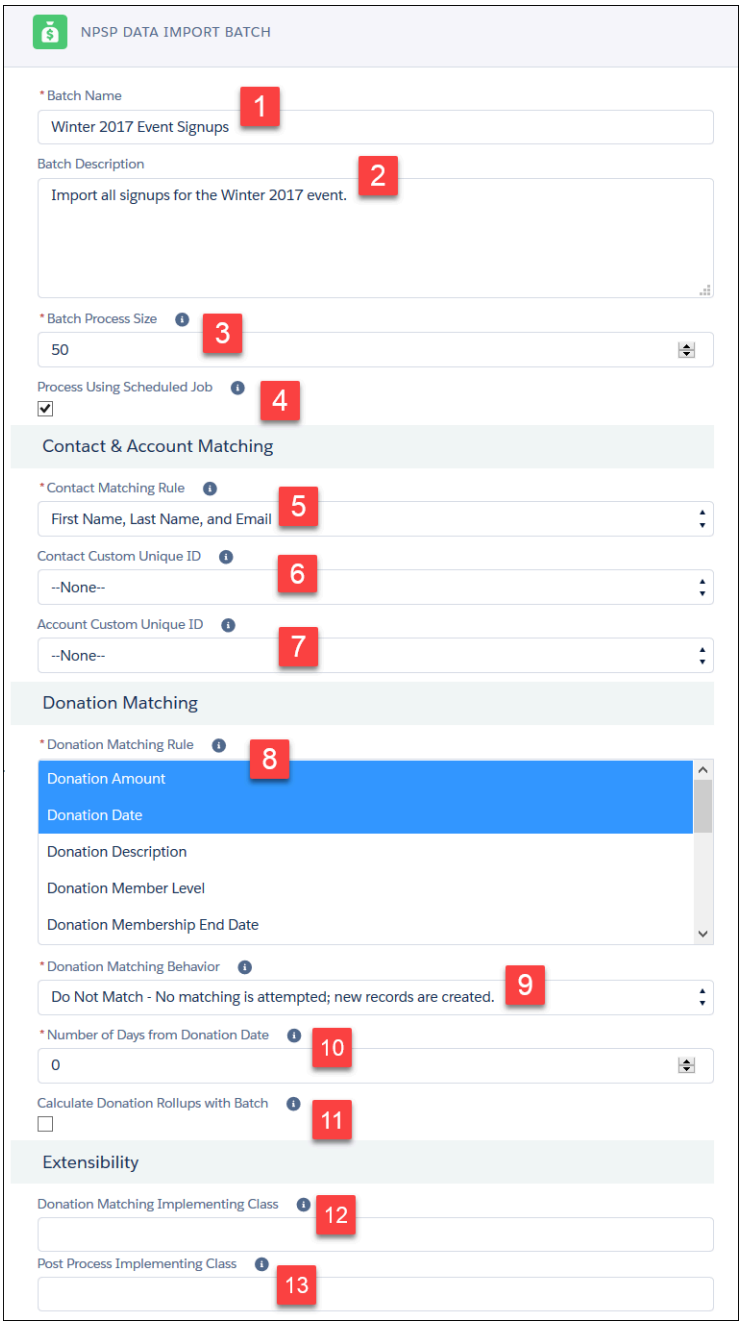
Create a Batch

First, you need to define the configuration that will be used on only a selected set of records. To illustrate an example, we will create a batch for the upcoming event (that we mentioned earlier).

To create a new batch in NPSP:

1. In the top left corner, click the App Launcher ().
2. Click **NPSP Data Import Batches**.
3. Click **New**.

4. Fill in the required fields and any configuration options you want to apply specifically to this batch. When you select this batch in the NPSP Data Importer, the configuration options are updated to show the values you select here.



- **Batch Name**–(1) The name must be unique in your org. Be sure to use a descriptive name, since you will be searching for and selecting it when you perform your data

import. (Tip: If you're using a scheduled job, you may want to name your batches "Company name - date" so that it's easier to find the right batch.)

- **Batch Description**–(2) An optional description of the batch.
- **Batch Process Size**–(3) The number of NPSP Data Import records you want Salesforce to process in each batch. The default is 50 records.
- **Process Using Scheduled Job**–(4) When checked, the batch will be processed each day based on the schedule outlined for the scheduled job.
- **Contact Matching Rule**–(5) Specifies how to match Contacts in NPSP Data Import records against existing Contacts. The rules specify which set of Contact fields to use to find matches. For example: First Name, Last Name, and Email or First Name, Last Name, and Phone. (Keep in mind that the phone number format has to be an exact match. For example, if all of the phone numbers in your database are formatted as 123-345-4567, then you must use that format, not 123.345.4567 or 1233454567.)
- **Contact Custom Unique ID**–(6) This field can be any custom text or numeric field that uniquely identifies a Contact, and is used for matching Contacts in addition to the method specified in Contact Matching Rule. This option is useful if your external data source has a unique identifier for each Contact record. For example, you could add a custom field on Contact, such as MyOldID, and matching fields for Contacts in the NPSP Data Import object (Contact1_MyOldID, Contact2_MyOldID).
- **Account Custom Unique ID**–(7) This field can be any custom text or numeric field that uniquely identifies an Account, and is used for matching Accounts in addition to matching by Account Name. This option is useful if your external data source had a unique identifier for each Account record. For example, you could add a custom field on Account, such as MyOldID, and matching fields for Accounts in the NPSP Data Import object (Account1_MyOldID, Account2_MyOldID).
- **Donation Matching Rule**–(8) Specifies the set of Donation fields to use for matching against existing Opportunities and/or Payments. If no fields are selected, the Donation Date and Donation Amount fields are used. The Donation fields specified must map to either Opportunity fields or Payment fields (with the exception of Donation Amount, which maps to both

Opportunity.Amount and Payment.Payment Amount, and Donation Date which maps to Opportunity.CloseDate and Payment.Scheduled Date).

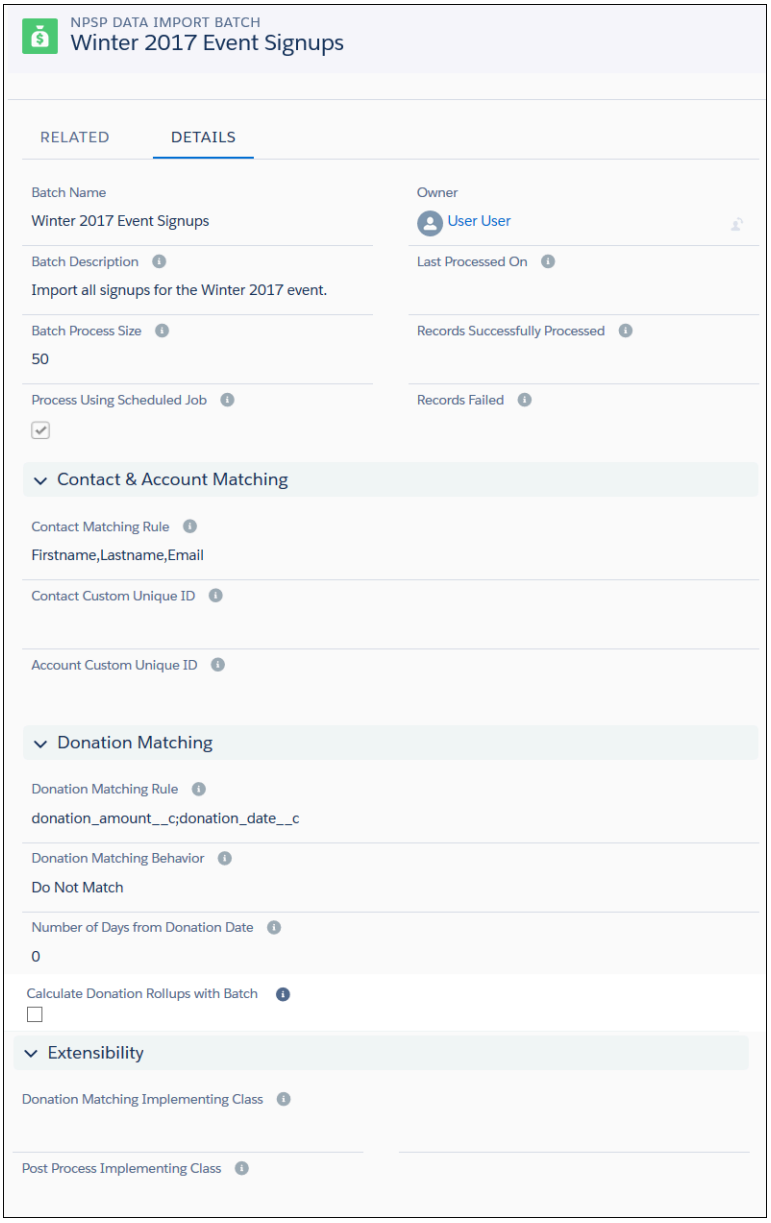
- **Donation Matching Behavior**–(9) Defines how the Data Importer should handle matching Opportunities and Payments. Must be one of the following values:
  - Do Not Match–No matching is attempted; new records are created.
  - No Match–Only import a record if it doesn't match an existing record.
  - Single Match–Only import a record if it matches a single existing record.
  - Single Match or Create–Import a record if it matches a single existing record; create a new record if no single match found.
  - Best Match–Only import a record when it matches at least 1 existing record, and update the best matched record.
  - Best Match or Create–Import a record if it matches an existing record; create a new record if no match found.

  Important: If you choose No Match, Single Match, or Best Match and the Data Importer can't match against an existing Opportunity or Payment, the status of the Data Import will show "Failed." However, any associated Account or Contact from the Data Import will still be created. You can evaluate the Opportunity or Payment that failed and rerun the Data Importer.

- **Number of Days from Donation Date**–(10) Specifies the number of days to consider (from the Donation date) when looking for a matching Opportunity or Payment. The Data Importer will use the matching Opportunity or Payment that falls within the number of days specified AND is closest to the Donation Date.
- **Calculate Donation Rollups with Batch**–(11) When checked, NPSP calculates donor statistics when donations are processed as part of an NPSP Data Import Batch. If unchecked (the default), donor statistics are only calculated during the default nightly Scheduled Job. Note that selecting this checkbox may slow down processing of this batch.
- **Donation Matching Implementing Class**–(12) The full developer name of an Apex class that implements the BDI_IMatchDonations interface, in case you are working with a developer who would like to alter this behavior. When left empty, the NPSP default implementation is used.
- **Post Process Implementing Class**–(13) The full developer name of an Apex class that implements the BDI_IPostProcess interface, in case you are working with

a developer who would like to alter this behavior. For more information, see Additional Automation Using Custom Apex Code.

5. Click **Save**.



Create Data Import Records Connected to a Batch

After you create a batch, you need to upload your data import file to create the data import records for the batch. For our example, this would be a spreadsheet of all the people who signed up for the upcoming event.

1. Create your data import file (csv).

2. Make sure in your data import file, you have a column called `NPSP Data Import Batch`. For each row in your spreadsheet that you want to include in that batch, enter the batch's Salesforce ID, or you can enter the batch name if you're using an Import tool that supports matching a record by its name, such as the Data Import Wizard.

If you need more information on creating your CSV file and importing records, see Moving Your Data to the Template, Uploading Your Data, and Importing Your Data in the NPSP Administrator's Guide to Importing Donor Data.

Process a Batch

Now that you have records associated with your batch, you can process them so that they're imported into your organization. This is the step that will bring the data from your spreadsheet into NPSP.

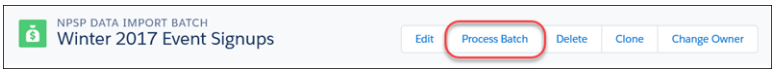
Note:

You can do a dry run of your batch to check for potential duplicates or errors before processing. Keep in mind that when you validate a batch record using dry run, the batch record itself won't be updated with Success and Failure counts. Those values are only updated upon actual import of records.

For more information on performing a dry run, see the Do a Dry Run section of NPSP Administrator's Guide to Importing Donor Data.

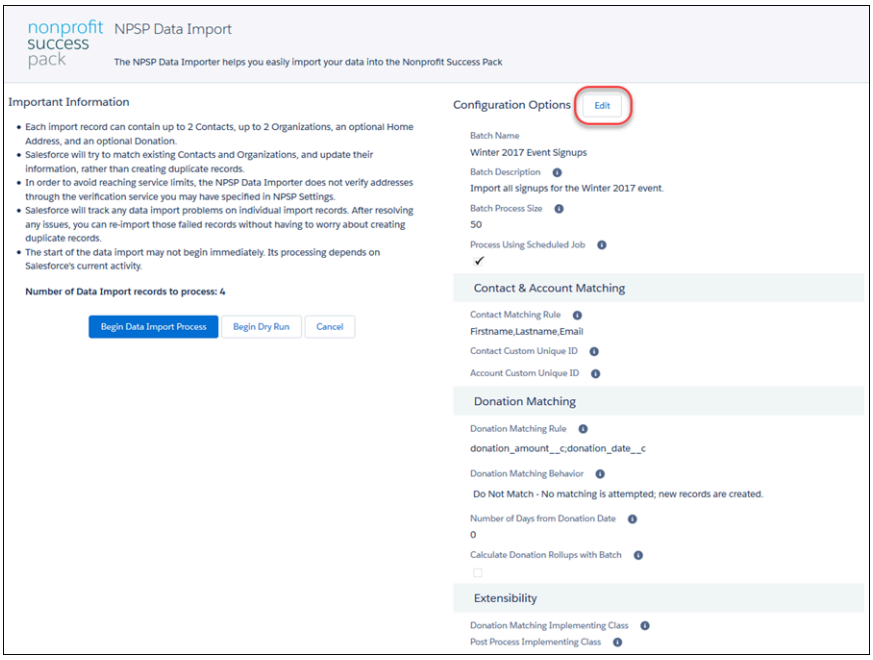
Keep in mind that when you process a batch, it only processes records for that particular batch. It doesn't process records for any other Data Import Batch.

1. In the App Launcher, click **NPSP Data Import Batches**.
2. Find your batch and click the Batch Name.
3. Click **Process Batch**.

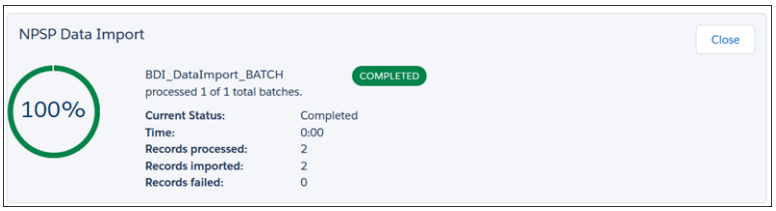


4. Confirm Configuration Settings. You can click **Edit** if you need to update the settings.

> **Note**: If you edit settings while the Batch is selected and save, it updates the default configuration options for that batch.

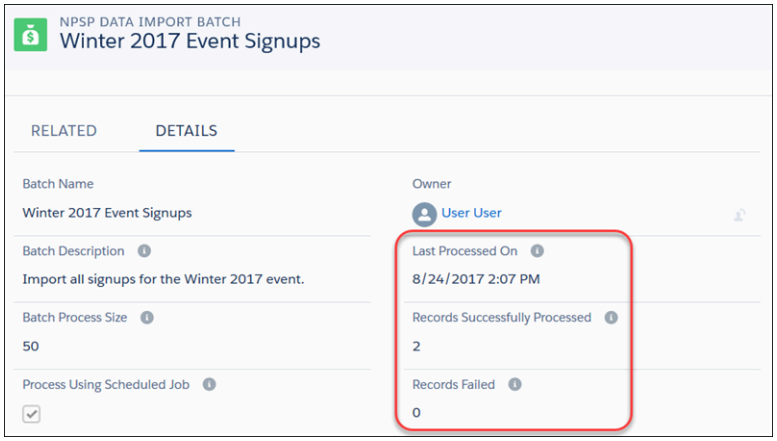


5. Click **Begin Data Import Process**.
6. Wait until the confirmation page shows that the import completed successfully.

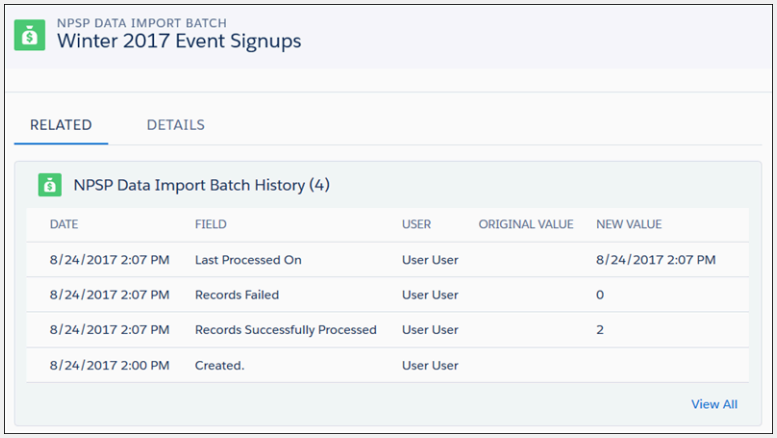


7. Close the page to return to the NPSP Data Import Batches tab. Review your imported records on the related list on the batch record.

After the records for this batch are processed, the Last Processed On field is updated with the date and time. The Records Successfully Processed and Records Failed fields are also updated accordingly. Each time the batch is processed, these fields are overwritten with the new date/time and record counts.



Tip: Enable field history on the Last Processed On, Records Successfully Processed, and Records Failed fields, so that you have a history of batch results (since these values are overwritten each time a batch runs.) You can enable field history in the Object Manager.



Schedule a Batch

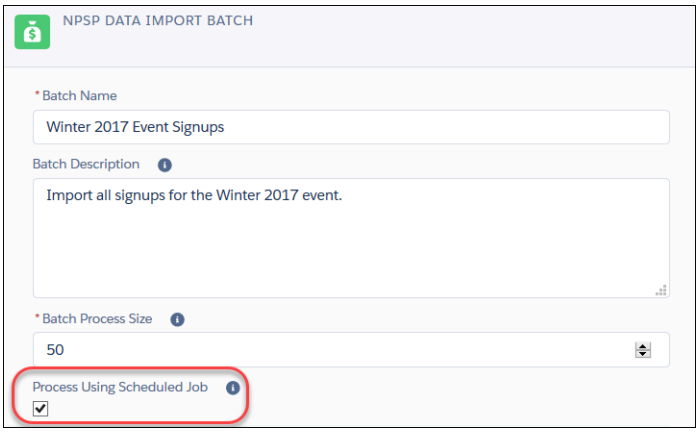
Now, you want to make sure that you'll be regularly uploading files and you don't want to worry about manually processing them. This is really useful for cases like the upcoming event signup example, where you have signups coming in at different times, and you want to regularly upload the new signups.

You can automatically process an NPSP Data Import Batch using a scheduled job. The batch will be processed each day based on the schedule outlined for the scheduled job. After the

batch processes, the date and time as well as the results of the batch process, are recorded on the NPSP Data Import Batch record.

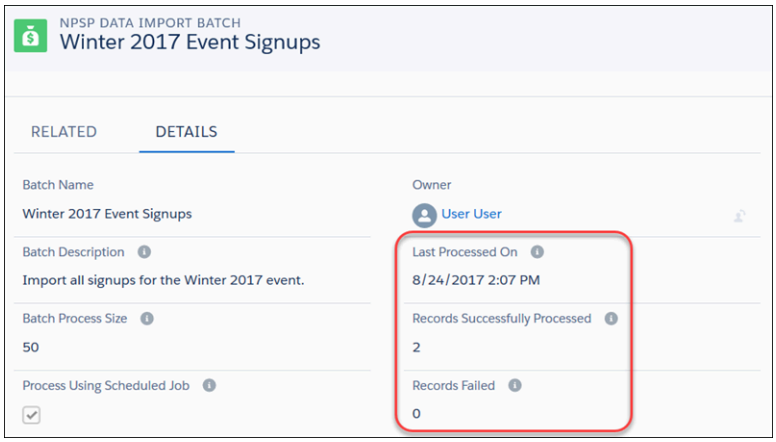
Note: It's important to keep in mind that all batches that are scheduled will run at the same time (as part of one batch job).

1. In the App Launcher, click **NPSP Data Import Batches**.
2. Find your batch and click on the Batch Name.
3. On the detail page, click **Edit**.
4. Select the **Process Using Scheduled Job** checkbox.



5. Click **Save**. The batch will be processed based on the scheduled job time for the **NPSP 09 - Data Import Batch Processing** job. To find out what time that job will run, go to Setup and search for Scheduled Jobs. For information on changing the scheduled job time, see Edit or Reschedule NPSP Scheduled Jobs.

After the job runs and the records for this batch are processed, the Last Processed On field is updated with the date and time. The Records Successfully Processed and Records Failed fields are also updated accordingly.



Recommendations:

- If you'd like to be notified of the results of the processed batch, create a workflow rule or process with an email template based on an update to the Last Run field. That way, you can easily identify and fix any failures.
- If you want a quick way to isolate records that failed for that processed batch, clone the "Failed Data Imports" list view on the NPSP Data Import object and add a filter for **NPSP Data Import Batch** equal to *Batch Name*.

Additional Automation Using Custom Apex Code

Important: This feature requires Apex coding and should only be used by a developer.

Post Processing

When you're importing data records, you may have some post processing that would be easier to do with code because you can process higher volumes and perform more complex procedures.

NPSP includes an interface that you can customize to perform post-processing functionality on your data import records. The interface, `BDI_IPostProcess`, includes one method called `process`. To take advantage of this functionality, you'll need to write an Apex class that implements the interface and its method. You then specify the Apex class in the Post Process Implementing Class field in either the NPSP Data Import configuration options or in the NPSP Data Import Batch configuration options.

After NPSP processes the number of records you specify as the batch size (in configuration options), NPSP will call your class and perform any post processing specified in the class.

Sample Code

This sample code shows a simple post-processing scenario where a "Spouse" relationship is automatically created between Contact1 and Contact2 (assuming the contacts are newly-created). This is a working example, just to give you an idea of what is possible. We encourage you to write a post processing class that performs more complex tasks.

```
global with sharing class MyPostProcess implements npsp.BDI_IPostProcess {

global void process(npsp.BDI_DataImportService bdi) {

    List<npe4__Relationship__c> listRel = new List<npe4__Relationship__c>();
```

```
    for (npsp__DataImport__c di : bdi.listDI) {
        // create a relationship if both c1 and c2 are specified
        // and they are newly created contacts
        if (di.npsp__Contact1Imported__c != null &&
 di.npsp__Contact2Imported__c != null &&
            di.npsp__Contact1ImportStatus__c == label.npsp__bdiCreated &&
 di.npsp__Contact2ImportStatus__c == label.npsp__bdiCreated) {
            listRel.add(new npe4__Relationship__c(
                npe4__Contact__c = di.npsp__Contact1Imported__c,
                npe4__RelatedContact__c = di.npsp__Contact2Imported__c,
                npe4__Type__c = 'Spouse',
                npe4__Status__c = 'Current'));
           }
        }

        if (listRel.size() > 0) {
            database.insert(listRel);
        }

    }
  }
}
```

Resources

Here are some resources related to advanced data import functionality.

- NPSP Administrator's Guide to Importing Donor Data
- Data Importer Template