Starting workflows from Zapier:

External Start for Nintex Workflow 2013

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Introduction

This document describes a practical scenario using External Start with Zapier. In this scenario, a sales team uses External Start and Zapier to automatically start a Nintex workflow creating SharePoint sites for new Salesforce accounts.

What is External Start?

The External Start feature allows you to start Nintex workflows based on events occurring outside of SharePoint.

How can I use External Start?

With External Start, you can trigger workflows based on external events. For example, you can initiate a workflow when a new file is added to a directory in Dropbox or when a Salesforce account is created.

How does External Start work?

External Start exposes a workflow using the endpoint URL that you generate (along with its associated security key). You can then point to that endpoint URL and map workflow variables to fields in the connected product (such as Twitter, Yammer, OneDrive, or Salesforce), using either an integration system (such as Zapier) or a manual code solution.

This document describes how to use Zapier to start a Nintex workflow whenever a new Salesforce account is created.

Scenario in this document

Your sales team cannot easily find customer agreements and other documents for Salesforce accounts because your team relies on email servers for storage and team members often change roles. This inability to find documents is especially problematic when it's time for annual renewal of customer contracts.

Although your team likes the idea of account-specific SharePoint sites to store customer documents, team members often forget to create the account-specific site when they convert a lead to an account (or create a brand-new account). In addition, it's hard to remember later on where the site lives and what it's called.

To address this issue, your team will implement External Start using Nintex Workflow 2013.

Using External Start, your team will initiate a Nintex workflow whenever a new Salesforce account is created. The workflow will automatically create a site and then write that site URL back to the account in Salesforce. With this setup, your sales team will now be able to easily find customer documents by using the site URLs noted in the relevant account.

Requirements

The scenario described in this document has the following requirements. Asterisked (*) items are required to write site URLs to Salesforce accounts.

Nintex Workflow 2013 Enterprise Edition, with External Start enabled

Salesforce account field "Site" for storing site URLs* (and Salesforce credentials)

Zapier credentials to monitor Salesforce for new accounts

Published site workflow with the following configuration (steps in a later section):

- Variables for identifying the Salesforce account and related SharePoint site
- Salesforce connection to update Salesforce account*
- Workflow actions to do the following:
    o Log variable values received from Salesforce
    o Create a site using those values
    o Build the full site URL*
    o Log the site URL and full site URL
    o Update the Salesforce account with the full site URL*
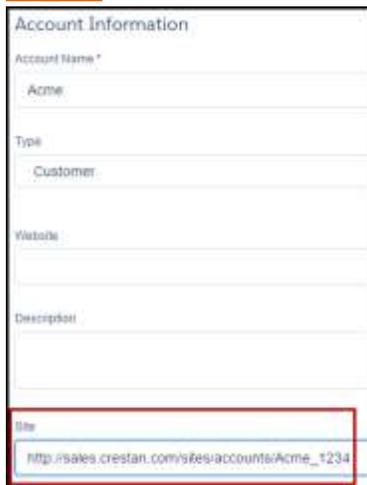
External Start endpoint URL and security key

Steps

Follow these high-level steps to start a Nintex workflow outside SharePoint and fulfill the scenario described in this document.

1. In Salesforce, make sure there is a field to store site URLs. If you create a custom field, use the "URL" data type.
For instructions on creating custom fields in Salesforce, see the Salesforce help at https://help.salesforce.com/apex/HTViewHelpDoc?id=adding_fields.htm&language=en_US.

2. Using Central Administration, enable External Start for Nintex Workflow 2013. Example of page showing External Start enabled:

For instructions, see the Nintex Workflow 2013 help (excerpt available at Nintex Connect).

3. Configure the workflow to meet requirements.
For instructions, see Configure the workflow.

4. Publish the workflow.
For instructions on publishing workflows, see the Nintex Workflow 2013 help (excerpt available at Nintex Connect).

5. Generate and copy an External Start endpoint URL for the workflow.
For instructions, see Generate and copy the endpoint URL.

6. Configure a zap in Zapier to point to the External Start URL and to map Salesforce account fields to the Nintex workflow start variables.
For instructions, see Configure Zapier.

7. Run the zap in Zapier.
For instructions on running Zapier zaps, see https://zapier.com/help.

8. Test the zap with a sample new account.
Note: Some Zapier plans have longer monitoring frequencies, such as 15 minutes. See https://zapier.com/help.

Configure the workflow

This section describes how to configure the Nintex workflow for the scenario in this document.

To configure the workflow for this scenario

Ensure that the Nintex workflow includes the following variables, connection, and workflow actions.

- Variables for identifying the Salesforce account and related SharePoint site.
  To facilitate variable mapping, give the variables names that are identical or near identical to the Salesforce field names.
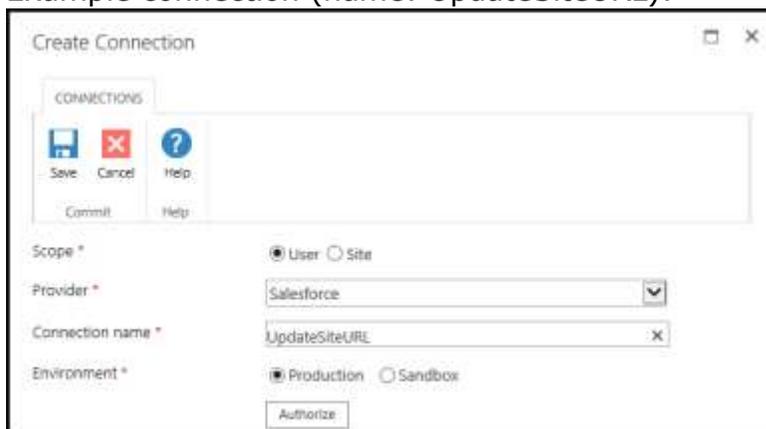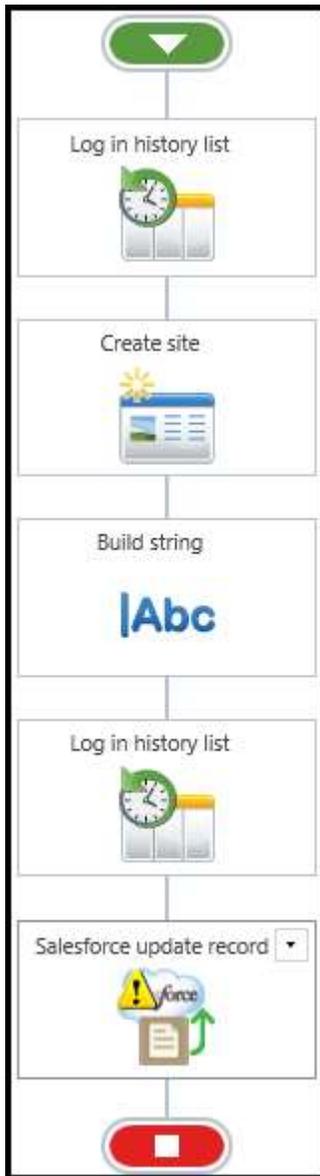
Example of variables:

Variable name examples:

- Account identifiers (text type; Show on start form: Yes)
  Example variable names:
  AccountId
  AccountName
  AccountNumber
- Site identifiers (text type; Show on start form: No)
  Example variable names:
  SiteURL
  FullSiteURL

- Connection: Using **Connection Manager** from the ribbon, create a connection to connect to Salesforce. (Required to write site URLs to Salesforce accounts.)
  Example connection (name: UpdateSiteURL):

Example of workflow:

- Workflow actions:
    - **Log in history list** to log variable values received from Salesforce.
      Example action configuration using variables:
      Account information received from SalesForce
      ID : {WorkflowVariable:AccountId}
      Name : {WorkflowVariable:AccountName}
      Number : {WorkflowVariable:AccountNumber}
    - **Create site** to create a SharePoint site using the account identifiers.
      Example action configuration using variables:
      Title: AccountName
      Description: AccountNumber
      URL name: AccountId
      Store URL in: SiteURL
    - **Build string** to build the full site URL. (Required to write site URLs to Salesforce accounts.)
      Example action configuration using variables:
      Text: {Common:WebUrl}/{WorkflowVariable:SiteURL}/
      Store result in: FullSiteURL
    - **Log in history list** to log the site URL and full site URL.
      Example action configuration using variables:
      Account site URL: {WorkflowVariable:SiteURL}
      Account site URL (full): {WorkflowVariable:FullSiteURL}
    - **Salesforce update record** to update the Salesforce account with the full site URL. (Required to write site URLs to Salesforce accounts.)
      Example action configuration using variables:
      Connection: UpdateSiteURL
      Update: Account
      where Record ID equals: AccountId
      Field: Site
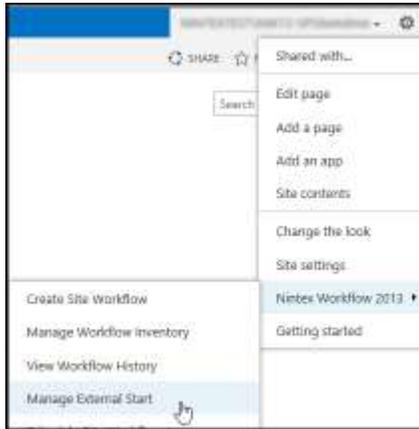   **Value:** FullSiteURL

Generate and copy the endpoint URL

This section provides instructions for generating the External Start endpoint URL for the workflow and for copying the URL and its security key. A version of these instructions is also available in the Nintex Workflow 2013 help (excerpt available at Nintex Connect).

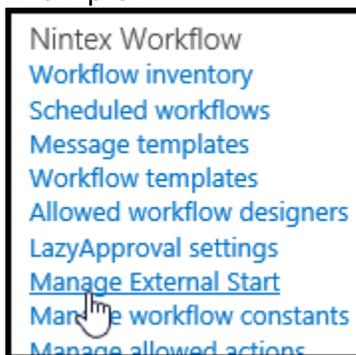## To generate an External Start endpoint URL for the workflow

1. Access the Manage External Start page using one of the following methods.
    *   Click the Settings icon on the upper right of the page, select **Nintex Workflow 2013**, and then select **Manage External Start**.
        Example:

    *   On the Site Settings page, in the Nintex Workflow section, click **Manage External Start**.
        Example:

        The Manage External Start page is displayed, listing all site workflows.

2. On the Manage External Start page, locate the workflow of interest and then click **Configure**.
    The Manage External Start configuration page for the selected workflow is displayed. The selected workflow is indicated in the page title.
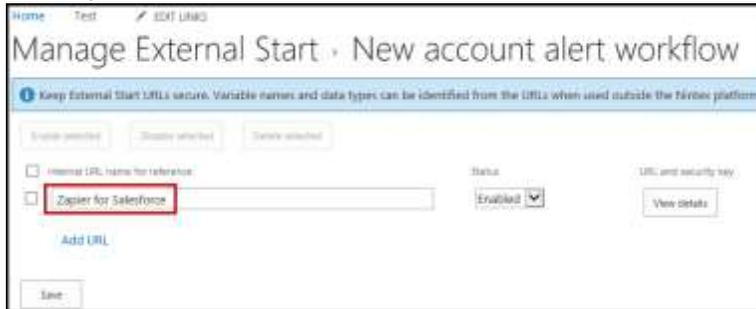3. On the Manage External Start configuration page, click **Add URL**.
    An example image is in the following procedure.
    After a moment, the new endpoint URL is displayed on the page. When the URL is generated, its security key is also generated; both items are stored securely by Nintex. The endpoint URL and security key are visible when you click View details.

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4. (Optional.) Enter a name for the endpoint URL using the text box under the column Internal URL name for reference, and then click **Save**.
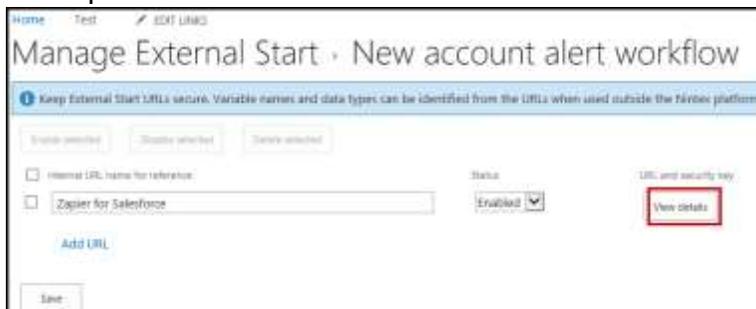   Example:

The endpoint URL is now available for connecting to Zapier.

To copy an endpoint URL

1. On the Manage External Start configuration page, under the URL and security key column for the endpoint URL of interest, click **View Details**.
   For instructions on accessing this page, see the previous procedure.
   Example:

2. In the View details dialog box, click **Copy URL** to copy the endpoint URL.
   Example:

The URL is now copied to the clipboard for pasting into Zapier.
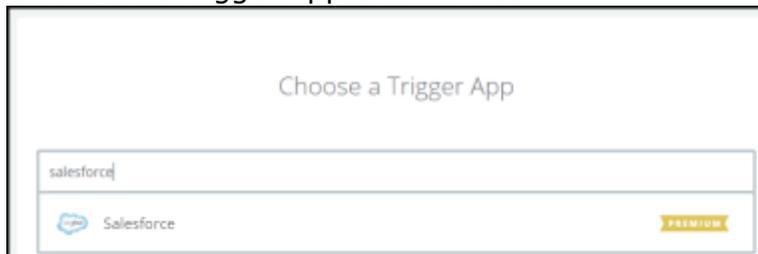When you want to copy the security key, click **Copy security key**.

Configure Zapier

This section describes how to configure the Zapier zap for the scenario in this document. Use Zapier to monitor Salesforce for new accounts and then send a request to start the Nintex workflow.

Configuring the Zapier zap includes pointing to the External Start URL and mapping the Salesforce account fields to the Nintex workflow start variables.
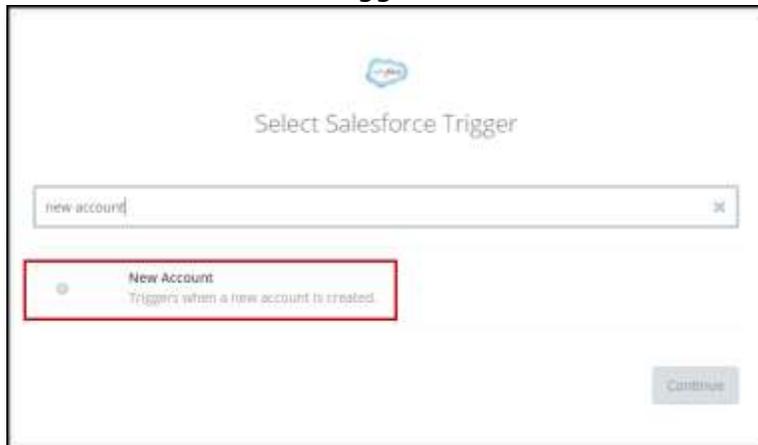
Note: Zapier images matched the Zapier user interface at the time this document was published.

To configure Zapier for this scenario

1. Create a new zap.
   See the Zapier help for creating zaps: https://zapier.com/help/creating-zap/
2. Set up a trigger to monitor Salesforce for new accounts.
   a. Choose the trigger app **Salesforce**.

   b. Select the Salesforce trigger **New Account**.

   c. Click **Save + Continue**.
   d. On the Select Salesforce Account page, click **Connect a New Account**.
   e. In the new window appearing for authorization and authentication, follow the prompts to connect the new account.
   f. Click **Save + Continue**.
   g. On the Test Salesforce page, follow the prompts to test the account connection.
3. Set up an action to start your Nintex workflow.

a. Choose the action app **Nintex**.

b. Select the Nintex action **Start Workflow**.

c. Click **Save + Continue**.
d. On the Select Nintex Account page, click **Connect a New Account**.
   A new window appears prompting you for the workflow URL and security key.
e. On your SharePoint site, individually copy the endpoint URL (External Start URL) and security key. For instructions, see Generate and copy the endpoint URL.
f. In the new window launched by Zapier, individually paste the copied endpoint URL and security key and then click **Yes, continue**.

Example workflow URL and security key:

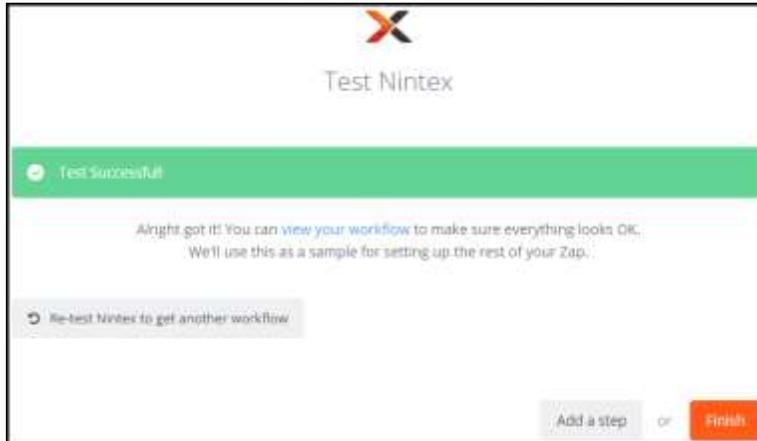g. On the Set up Nintex Workflow page, to the right of each Nintex variable, click ⊒⊕ to display a list of Salesforce fields for mapping.

h. Map the Nintex variables to the following Salesforce fields.

Nintex variable	Salesforce field
AccountId	Account ID
AccountName	Account Name
AccountNumber	Account Number

Example of Nintex variables mapped to Salesforce fields:

4. On the Test Nintex page, follow the prompts to test the zap and then click **Finish**.
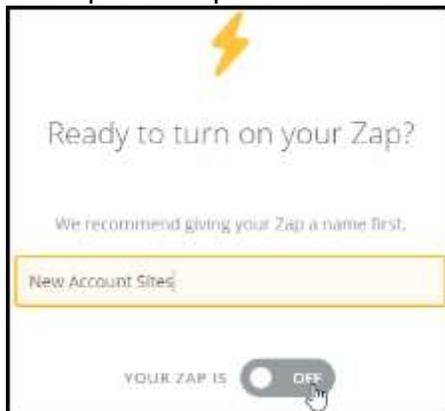

5. On your SharePoint site, on the Manage External Start configuration page, note the number of calls before the zap is turned on. Review the Calls column for the endpoint URL that was copied.
   For instructions on accessing this page, see the previous procedure.
   Example of Calls column; 0 for first endpoint URL, 1 for second:

6. In Zapier, name the zap and turn it on.
   Example of zap name: "New Account Sites"

7. Create an account in Salesforce to confirm that the zap operates as expected.
8. On the Nintex site, go back to the Manage External Start configuration page and note the number of calls after the zap is turned on. Review the Calls column again. The call count increments every time the zap sends a request to run the workflow.
9. View the SharePoint site repository to confirm creation of the new site. View the Salesforce account to confirm that the new site URL was recorded.

   Congratulations! You have completed Zapier configuration and confirmed its operation as well as that of your configured workflow and External Start URL.

Troubleshooting

This section provides general troubleshooting information for External Start. A version of this information is also available in the Nintex Workflow 2013 help (excerpt available at Nintex Connect).

External Start options not available

This topic provides information for troubleshooting unavailability of External Start.

- **Do you have the required license?** Your license must be enabled for Enterprise Edition and Nintex Live.
- **Are both Nintex Live and External Start enabled?** To enable Nintex Live and External Start, go to the Central Administration Home page, click Nintex Workflow Management, click Live settings, and then click Enable for both settings.
- **Was the workflow last published before External Start was enabled?** External Start options continue to be unavailable for existing published site workflows. To make External Start options available for these workflows, republish them after enabling External Start.
- **Did you update the workflow recently without publishing?** If you recently updated variables for the workflow, make sure you republish. External Start is available for published site workflows only.

Workflow doesn't start

If the workflow didn't start after you ran the Zapier zap, review the possible causes below.

Cause	Resolution
Workflow error. The External Start URL was successfully called and the workflow started, but the workflow ran into issues before expected actions completed.	See the External Start URLs page. An incremented value in the Calls column indicates that an External Start URL for this workflow was called. You can also check workflow history for workflow errors.
Monitoring frequency. The External Start URL is not yet called because your Zapier plan is subject to a monitoring frequency.	See the Zapier documentation on monitoring frequency. For example, some Zapier plans monitor every 15 minutes.
Connection issue. The External Start URL was not called because the Zapier zap could not connect.	See the Zapier logs and documentation.
Variable mapping mismatch. The Salesforce fields specified in the Zapier zap do not match the variables configured in the workflow. This issue can occur when you update the workflow after configuring the Zapier zap.	Compare the Zapier zap configuration to the workflow configuration to ensure that variables match.

Cause	Resolution
Required service not running. The Windows service Nintex Workflow Start Service is not running on the Central Administration server.	On the Central Administration Home page, click System Settings, and then click Manage services on server. Ensure that the status for the service Nintex Workflow Start Service is Started.

More information

This section provides additional information about External Start.

Nintex Connect

For more information about using External Start, see the following page on Nintex Connect.
https://community.nintex.com/docs/DOC-3167

Nintex App for Zapier

This section provides information about Nintex App for Zapier as used with External Start.

Workflows with no start variables

If your workflow has no start variables configured, then the app prompts you to enter a placeholder value in the **Input placeholder** field. Because Zapier requires start variables, the placeholder value you specify will be used to continue configuration with Zapier. When Zapier calls the endpoint URL to initiate the workflow, this placeholder value is sent to the Windows service Nintex Workflow Start Service with the variable name `NintexExternalStartNoVariables`. Typically, the value is ignored by the workflow, even if the workflow includes a variable of the same name (`NintexExternalStartNoVariables`), assuming that the variable does not meet variable configuration requirements for External Start.

Deleted External Start URLs

If you delete an External Start URL, then Zapier disables any running Zapier zaps configured using that URL.

For instructions on deleting External Start URLs, see the Nintex Workflow 2013 help (excerpt available at Nintex Connect).