

Name of Solution:

Cloud REST API : Update Trigger on SFDC ACCOUNT

Business Requirement:

Create an Update Trigger on Salesforce Account object. This Trigger should call the REST API and start the Informatica cloud task to reflect the changes in the local database in realtime.

Solution URL:

<https://community.informatica.com/solutions/2411>

Description:

An Informatica Cloud Data Synchronization (DSS) Task is used to load data and integrate applications, databases, and files. We can use a DSS Task to pull all updates and changes from the salesforce objects into the local system.

With the REST API, we can control when the integration task is fired off. So instead of relying on a manual/scheduled execution, we can start a cloud DSS task based on an event.

This Block demonstrates the use of REST API to start the Informatica Cloud Task in realtime.

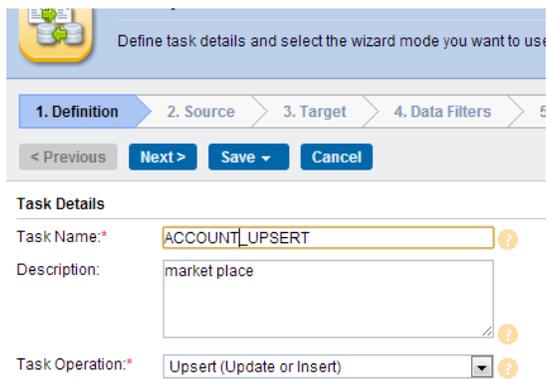
Download file contents:

1. Sample code for Apex Class and Apex Trigger
2. Target Table DDL

Steps to create an Informatica Cloud DSS Task:

The Informatica Cloud DSS Task will upsert the data from Salesforce ACCOUNT object into the local database.

- Choose the task operation as UPSERT.



The screenshot shows the 'Define task details' wizard in Informatica Cloud. The wizard is at step 1, 'Definition'. The 'Task Name' field is set to 'ACCOUNT_UPSERT', the 'Description' is 'market place', and the 'Task Operation' is set to 'Upsert (Update or Insert)'. The wizard has a progress bar with steps 1. Definition, 2. Source, 3. Target, 4. Data Filters, and 5. Data Filters. There are 'Previous', 'Next >', 'Save', and 'Cancel' buttons.

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- Source is the Salesforce ACCOUNT object.
- Target is the Accounts table in the locally hosted database.
- In the data filter tab, use the below filter expression to get the incremental data from Salesforce ACCOUNT object.

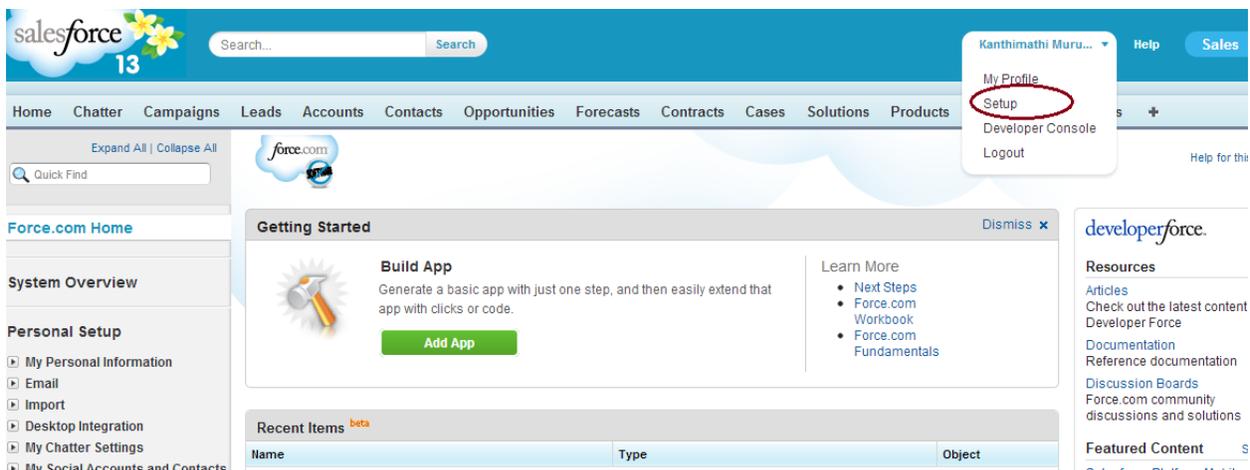
Filter Expression:

```
LastModifiedDate>$LastRunTime or  
CreatedDate>$LastRunTime
```

- Check the field mappings and save the task in Informatica Cloud.

Steps to setup in Salesforce Org

1. Login to your Salesforce org and navigate to the setup tab as shown in the below figure.



2. Navigate to Administration Setup tab in the bottom left of the setup page in your org. Click Security controls and then Remote Site Settings. Create a New remote site (for Informatica REST API). Put the base url of Informatica Cloud Web Service as shown in the below picture.

Remote Site Edit

Enter the URL for the remote site. All s-controls, JavaScript OnClick commands in custom buttons, Apex, and , salesforce.com.

This allows the Salesforce to call Informatica API. SAVE it and check if it is active.

3. Create a new Apex Class to accept the parameters such as the name of the Informatica cloud task and make a call to the REST API.

- Navigate to the App Setup tab on the left hand side of the setup page. Click Develop Tab and then click Apex Classes as shown in the below picture.
- Click [here](#) to get a sample code for Apex Class with a method to call the Informatica REST API. (The code is also present in the attached file).
- Provide the Informatica cloud Username,password,jobname and jobtype as specified in the example

Eg: `AccountUpdate.runJob ('abcd@domain.com','password','REST_API','DSS');`

```

1  /*-----
2  Sample Apex Class code AccountUpdate
3  -----*/
4
5  /*Declare a new class called AccountUpdate.*/
6
7
8  public with sharing class AccountUpdate {
9
10     @future (callout=true)
11
12     /* Define a method called runJob. Parameters are username, password, jobName and jobtype for the Informatica cloud.*/
13     public static void runJob(String username, String password, String jobName, String jobType) {
14
15         /* Define a new http req.*/
16         HttpRequest req = new HttpRequest();
17
18         /* Get the response back from the API to let us know whether the call has been successful or not.*/
19         HttpResponse res = new HttpResponse();
20         Http http = new Http();
21
22         /* Create the request and set the endpoint. Provide the API for the Informatica cloud and the parameters required as shown below.*/
23         req.setEndpoint('https://app.informaticaondemand.com/s/aaS/ap1/1/runJob?username='+EncodingUtil.urlEncode(username, 'UTF-8')+
24             '&password='+EncodingUtil.urlEncode(password, 'UTF-8')+
25             '&jobName='+EncodingUtil.urlEncode(jobName, 'UTF-8')+
26             '&jobType='+EncodingUtil.urlEncode(jobType, 'UTF-8')+
27             '&');
28     }
29 }

```

- Save and Check if the Class is verified.
4. Build an Apex Trigger to call the above created Apex Class, every time there is an update in the salesforce ACCOUNT object.
- Navigate to the App setup on the left hand side of the setup page. Click Customize and then Accounts. Click Triggers and create a new one.
 - Click [here](#) to get a sample code for Apex Trigger to trigger the Apex Class whenever there is a change or update. (The code is also present in the attached file).

The screenshot shows the Salesforce interface for configuring an Apex Trigger. On the left is a navigation sidebar with sections like 'Force.com Home', 'System Overview', 'Personal Setup', and 'App Setup'. The 'App Setup' section is expanded to 'Accounts', and 'Triggers' is selected. The main content area shows the 'Apex Trigger Detail' for a trigger named 'realTimeUpdate' on the 'Account' object. The trigger is active and was created by Kanthimathi Murugesan on 4/17/2013 at 4:33 AM. Below this, there are tabs for 'Apex Trigger', 'Version Settings', and 'Log Filters'. The 'Apex Trigger' tab is active, displaying the following code:

```

1/*-----
2Apex Trigger realTimeUpdate.
3-----*/
4
5/*define the trigger "realTimeUpdate" on the ACCOUNT object. This trigger will be fired after an update occurs on the ACCOUNT object.*/
6
7trigger realTimeUpdate on Account (after update) {
8
9/* Call the class and execute the method created in the previously.*/
10 AccountUpdate.runJob('InformaticaCloudUsername','password','CloudTaskName','DSS');
11
12/*
13 Type of task: or taskflow. Use one of the following options:
14
15 DSS: Data Synchronization task.
16 DRS: Data Replication task.
17 DQA: Data Assessment task.
18 PCS: PowerCenter task.
19 Workflow: Task flow.
20 */
21}
22/*-----
23End of Apex Trigger realTimeUpdate.

```

- Save and Check if the Class is verified.

Steps to Test the code:

1. In Salesforce org go to the ACCOUNTS tab choose an existing account and edit it, for example change the billing city. Save it.
As soon as you click the save button the trigger will fire off and call the Apex Class and execute the method. The method will call the REST API. The REST API will then call the Informatica cloud task and the change made will be reflected in the database table.
2. You can see the Informatica task up and running in the Activity Monitor.
3. Once the task completed successfully open the database table and check if the change has been made.

Useful links:

- [Setting up a Flat File Connection in Informatica Cloud](#)
- [Setting up a Database Connection in Informatica Cloud](#)
- [Creating a Plug-In in Informatica Cloud](#)

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[Creating a Template in Informatica Cloud](#)

[Building a Data Synchronization Task in Informatica Cloud](#)