How to Use Kudosync

Requirements

- Kudosync requires
  - **Microsoft Access 2007** (or above, 32-bit version), and
  - **Apex Data Loader 24** (or above).

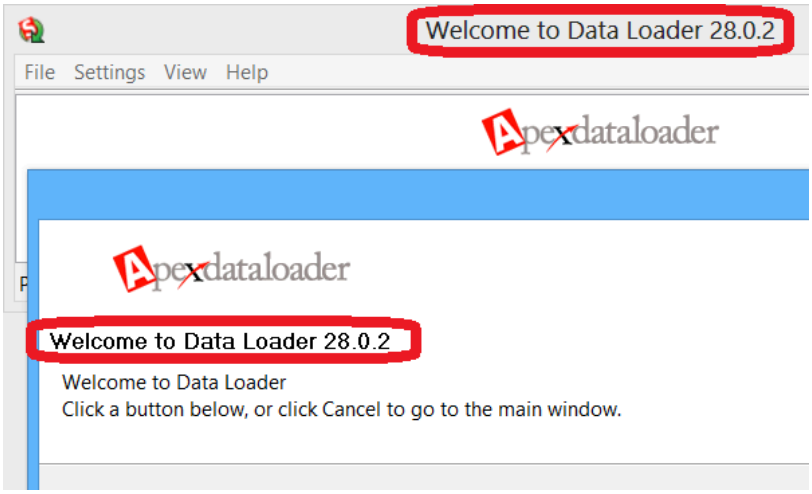
Short Instructions

- Download **Kudosync**
- Start goofing around

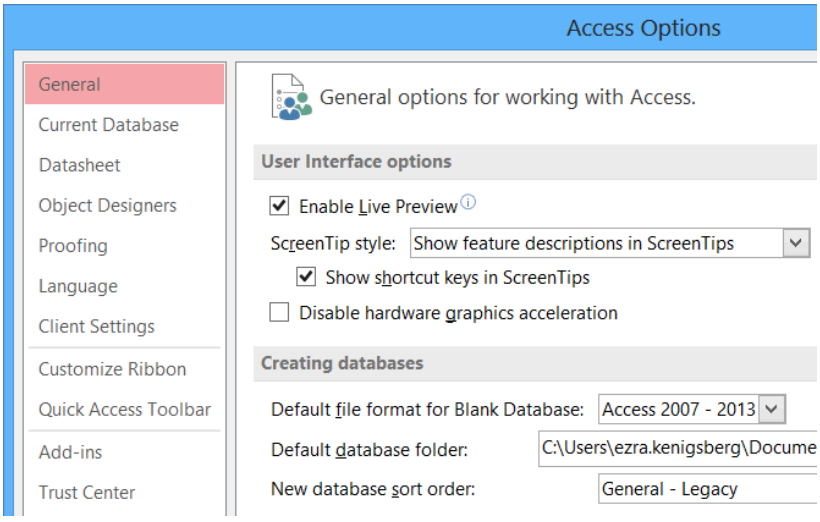
Detailed Instructions: Setting up

- You need to be running Data Loader version 24 (or later).
  To determine which version of Apex Data Loader you're using:
  - Open Apex Data Loader.

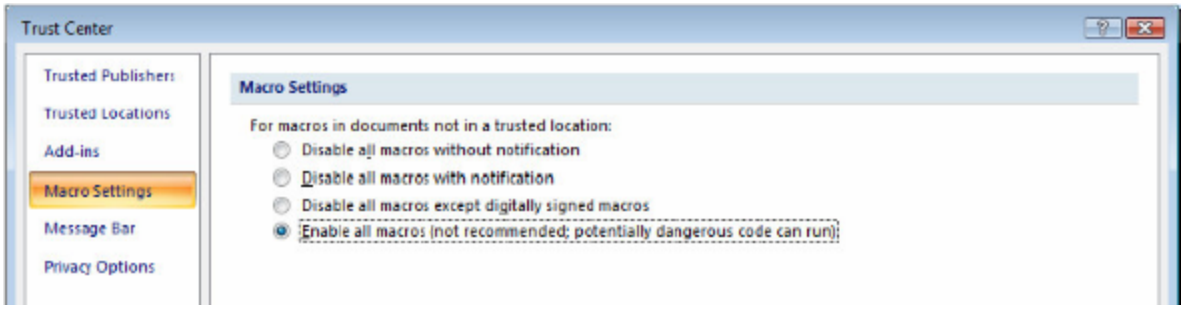
    The Welcome screen and the main window's title bar each shows the message "Welcome to Apex Data Loader X", where X is your version:



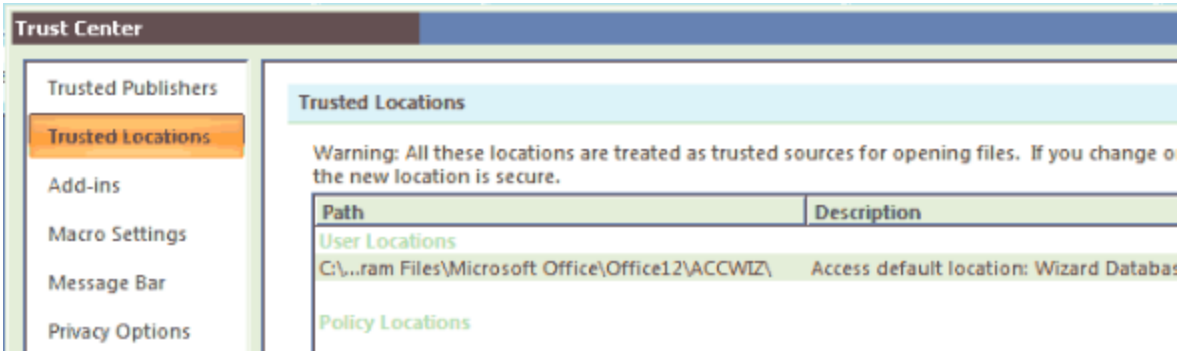
- Open Access and ensure Access allows macros to run. To do this:
  - Open Access's "Options" dialog, then



  - click "Trust Center" in the left-hand pane of the "Access Options" window,
  - click the "Trust Center Settings…" button, then **EITHER**
    click "Macro Settings" in the left-hand pane of the "Trust Center" window, and select either "Enable all macros", **OR**



click "Trusted Locations" in the left-hand pane of the "Trust Center" window, and add the ACCDB's folder to the list:



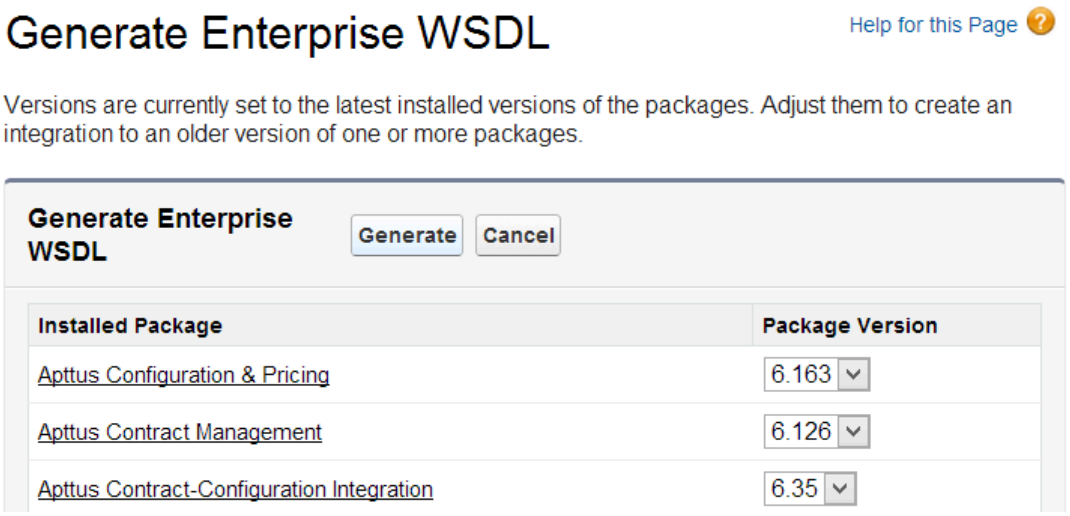
- If you haven't downloaded the Kudosync ZIP file already, download it now. You can download it by clicking the "Download Kudosync" link on the "About Kudosync" tab.

- Once the Kudosync ZIP is downloaded, extract the three enclosed files to a directory on your computer. The Kudosync app ("Kudosync 2016-11-27.accdb") won't run well from within a ZIP file.
    - You can copy-and-paste multiple ACCDB files with different names for different tasks.
    - It is not necessary to keep the ACCDB's original name.

- Open the ACCDB.

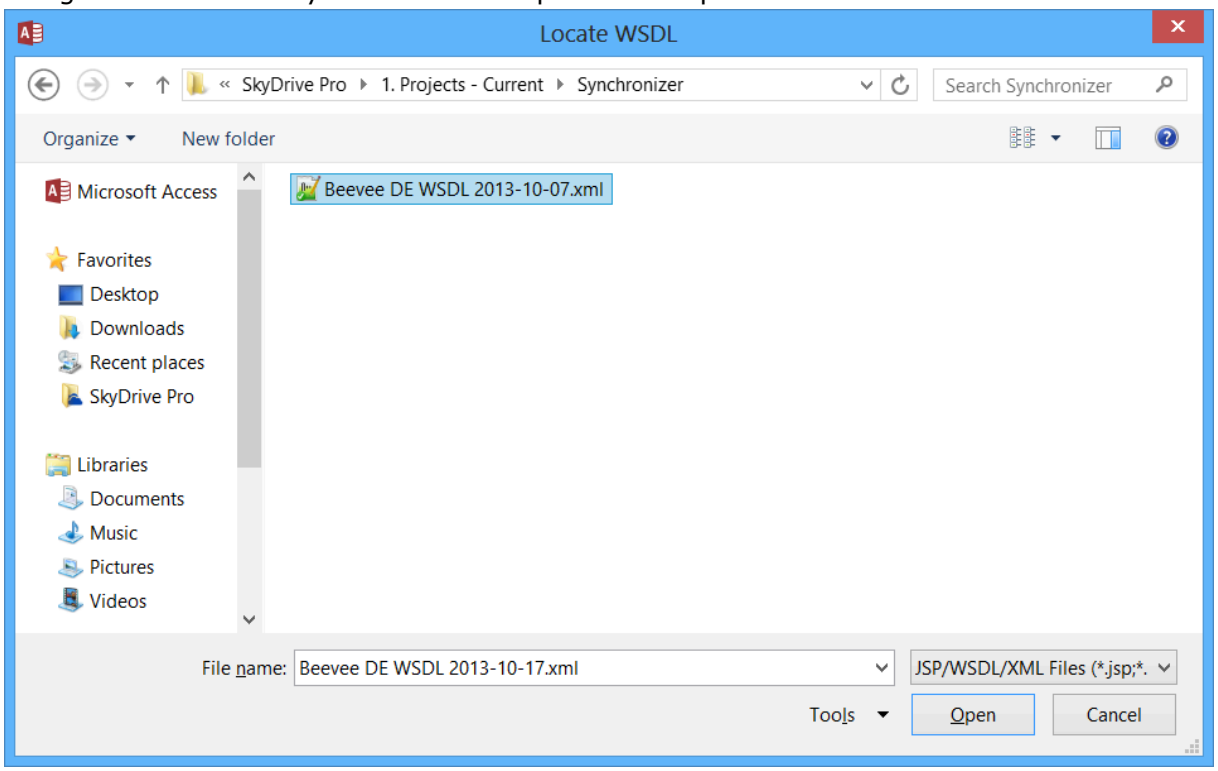
- Click on the **Settings** tab.

- If the settings are already correct, go to the next step. Otherwise revise the values for the "Org Settings" and "Kudosync Settings".
    - The following org-level settings are required:
        - Username
        - Password
        - Endpoint
    - The following Kudosync-level settings are required:
        - Data Loader Path
- By default, Salesforce is set up to get object and field data using the latest API, which requires you to download a WSDL. To download your WSDL:
    - Open a web browser
    - Log in to Salesforce
    - Navigate to Setup
    - Click "Develop"
    - Click "API"
    - Click "Generate Enterprise WSDL"
    - On the "Generate Enterprise WSDL" screen, leave all the default settings alone and click "Generate":



- Once the WSDL is generated, right-click anywhere on the screen and select "Save as…" to save the WSDL to your hard drive.

- When you click "Save Login Settings" in Kudosync, it'll present you with a "Locate WSDL" dialog. Navigate to the WSDL you saved in the previous step:



Detailed Instructions: Running Kudosync

- Click on the **Database** tab to create, open, or modify Tables and Queries.

- Click on the **SyncSteps** tab to create data jobs.

  You can create new SyncSteps by clicking the  button.

  You can delete SyncSteps by selecting one or more in the SyncSteps list box, then clicking the  button.
  - You can run a SyncStep by selecting it in the SyncSteps list box, then clicking the "Run Current SyncStep" button.

- You can run multiple SyncSteps by designating them as Active and then **EITHER**
  - clicking the "Run All Active SyncSteps" button **OR**
  - closing the ACCDB and double-clicking the **KudosyncKicker.bat** file (see "How Do I Customize the 'KudosyncKicker.bat' File" below).

  You can change SyncSteps' order by clicking the up or down arrow buttons  , or by clicking the  buttons beside the Step Number.
- For deletes, extracts, inserts, updates, and upserts:
  - Please fill out all dropdowns and textboxes in the "SyncStep Detail" box. Any unneeded dropdowns or textboxes will be grayed out.
  - The "Kudosync: Source Data" dropdown must contain exact API field names (use the "Create Query" tab to create a query that maps the exact field names).
  - If you're running an update, you must have an ID field.
  - When running extracts, you can use the variables **%TODAY%** and **%NOW%** in the SOQL Query Text box to substitute the current Date or DateTime, respectively.
- Use the "(Kudosync-only SQL)" action to run a SQL query against your own database tables or queries. A Kudosync-only SQL SyncStep will not affect any data in Salesforce.
- If you don't see the tables you expect in the "Salesforce: Source Object" dropdown or in the list of fields on the far right, click the "Get Objects & Field Info" button in the lower right-hand corner to refresh the table.
- Choose **Create Regular Query** from the **Work with Queries** dropdown to quickly create queries that map your tables' field names to Salesforce's field names.
  - Kudosync uses queries — instead of Data Loader SDLs — to map data.

- For some quick **demonstrations** of what Kudosync can do:
  - **click the "Run All Active SyncSteps" button**: Kudosync will demonstrate the four action queries in Data Loader by inserting, then updating, then upserting, then deleting a sample Account record. It'll then do an extract of all Opportunities with a Close Date later than today (note the use of that funky %TODAY% variable in the query).
  - **select "Create Cross-Object Owner Report" from the "Custom Reports" picklist**: Kudosync will put together an Excel report summarizing who owns how many Accounts, Contacts, and Opportunities
  - **select "Extract Product-Related Objects" from the "Extract Multiple Objects" picklist**: Kudosync will extract a bunch of related tables, all with two clicks.

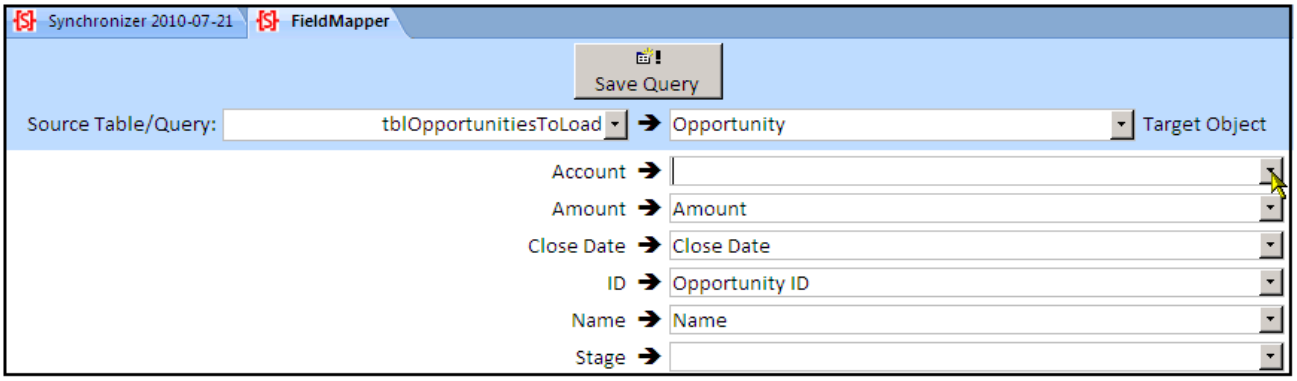
- When upserting:
  - Make sure there's a value in the "External Key" dropdown. If Kudosync is connected using the "Use Latest API (Requires WSDL)" option, you'll need to type in the External Key manually, unfortunately.
  - To leverage an External Key on a related object, your "Source Data" table/query requires a field named in the "Parent:External_key" format. As an example, let's say:
    - Account has an external key named "Oracle ID" (its API name is "Oracle_ID__c").
    - You want to create/update Contacts, and you want to associate those Contacts to Accounts using Oracle ID instead of Salesforce's Account ID.
    - Your Contacts table in Kudosync is called `tblContacts` and looks like this:

Last	First	Oracle ID
Smith	Jane	123
  - In Kudosync, you'll want your Upsert SyncStep to refer to a query that renames the fields, like this:

    ```
    SELECT [Last] AS [LastName], [First] AS [FirstName], [Oracle ID] AS
    [Account:Oracle_ID__c] FROM tblContacts;
    ```
  - The field `Account:Oracle_ID__c` will automatically be mapped by Kudosync.

What's up with those “Special Commands”?

Glad you asked! Clicking "Create Regular Query" in the "Work with Queries" dropdown provides a quick way to create queries that map fields. Kudosync doesn't use SDL files, but using queries is more powerful:



I've also gotten requests to help facilitate tasks that involve multiple SyncSteps, so I've created dedicated commands that enable you to run them with two clicks.

Items in the “Custom Reports” picklist can extract data from varied Salesforce objects, report on them using SQL, and export them to Excel. Here’s the “Cross-Object Owner Report”:

	A	B	C	D
1	**User**	**Account**	**Contact**	**Opportunity**
2	Day, Jane		1	
3	DirectRep1, Larry	1		
4	DirectRep2, Moe	1		
5	DirectRep3, Curly	2	2	
6	Henderson, Bob	25		
7	Johnson, James	2	2	
8	Kenigsberg, Ezra	30	12	5
9	Repeast, John			1
10	Repwest, Jane			1

- The “Extract Multiple Objects” picklist gives you the ability to extract an entire set of tables. The current categories are
  - Contract-related objects (Approval, Contact, Contract, Contract Contact Role, and Contract Status)
  - Product-related objects (Opportunity, OpportunityLineItem, OpportunityLineItemSchedule, Pricebook2, PricebookEntry, and Product2)
  - Sales-related objects (Account, AccountContactRole, Contact, Opportunity, and OpportunityContactRole)
  - User-related objects (Profile, Role, and User), and
  - EVERYTHING (over 150 objects! takes a while to run.)
- The “GroupAssigner” picklist makes it easy to assign Roles and Users to Groups;
  - click “Create GroupAssigner XLS” to create a spreadsheet that you can customize quickly:

	A	B	C	D
1	ID	Group/Role/User	Reps - Direct (00G40000000xFZXEA2)	Reps - Indirect (00G40000000xFZSEA2)
2	00G40000000xFZXEA2	Group - Reps - Direct		
3	00G40000000xFZSEA2	Group - Reps - Indirect		
4	00G30000000k0cPEAQ	Role - CEO		
5	00G40000001U1aeEAC	Role - Sales Engineer	(+)	(+)
6	00G40000000xF55EAE	Role - Sales Rep - East		
7	00G40000001TyKhEAK	Role - Sales Rep - West		
8	00G40000000xF4tEAE	Role - Senior VP - Sales		
9	00G30000000k0cQEAQ	Role And Subordinates - CEO		
10	00G40000001U1afEAC	Role And Subordinates - Sales Engineer	(+)	
11	00G40000000xF56EAE	Role And Subordinates - Sales Rep - East		
12	00G40000001TyKiEAK	Role And Subordinates - Sales Rep - West		
13	00G40000000xF4uEAE	Role And Subordinates - Senior VP - Sales		
14	00G400000018nZQEAY	Role And Subordinates Internal - CEO		(+)
15	00G40000001U1agEAC	Role And Subordinates Internal - Sales Engineer		(+)
16	00G400000018nYGEAY	Role And Subordinates Internal - Sales Rep - East		(+)
17	00G40000001TyKjEAK	Role And Subordinates Internal - Sales Rep - West	(+)	(+)
18	00G400000018nYEEAY	Role And Subordinates Internal - Senior VP - Sales		(+)
19	00540000001NFfRAAW	User - ADDA,		
20	00540000001NFfQAAW	User - AZFAZ,		
21	00530000000epDmAAI	User - Directrep1, Janet		(+)
22	00530000000qeDxAAI	User - Directrep2, Chrissy	(+)	(+)
23	00540000000rVP3AAM	User - Directrep3, Jack	(+)	(+)
24	00540000001NFVLAA4	User - immy,		
25	00530000000epCxAAI	User - Kenigsberg, Ezra	(+)	(+)
26	00540000000rltxAAA	User - Repeast, John	(+)	
27	00540000000rlrXAAQ	User - Repwest, Jane	(+)	
28	00540000000rVOtAAM	User - Seniorveep, Joan		

    - click "Import GroupAssigner XLS" to bring all those changes into Salesforce.
- The "UserMaker" picklist makes it easy to create new Users;
    - click "Create UserMaker XLS" to create a spreadsheet for new Users (email address is the ONLY required field):

	A	B	C	D	E	F
1	EMAIL	Last Name	First Name	Time Zone		Profile
2	bsmith@demo.com	Robert	Smith	America/Chicago		
3	jdoe@demo.com					
4						
5						
6						
7						
8						
9						

Demo Profile
Marketing User
Partner User
Read Only
Solution Manager
Standard User
System Administrator
Standard + API

    - click "Import UserMaker XLS" to import those new users.

What Happens When I Run a SyncStep?

When Kudosync runs SyncSteps, it performs the following actions:

- Inside the directory where the Kudosync is being run, it creates a timestamped subdirectory using the naming scheme "[YYYY]-[MM]-[DD]#[HH].[MM].[SS]".

- For each SyncStep Kudosync runs, a subdirectory is created within the timestamped directory using the naming scheme "Step[NN]_[ObjectName]".

- Within each SyncStep's subdirectory, the following files are created:
    - BatchModeOutput.txt
    - config.properties
    - [object]_lastRun.properties
    - process-conf.xml
    - Step[XX]_[stepname].txt
    - *for deletes, inserts, updates, and upserts:*
        - an input CSV named "Step[NN]_[accessobjectname].csv"
        - success and error CSVs named "Step[NN]_[accessobjectname]_[success|error].csv"
        - success and error tables in the database.
    - *for extracts:*
        - an output CSV named "[object].csv"

How Do I Customize the “KudosyncKicker.bat” File?

- Kudosync can be run as a cron job by launching “KudosyncKicker.bat”.
    - You can rename the KudosyncKicker.bat to any other filename.

- The batfile has one command in it:
  [AccessPath] [KudosyncPath] /x KudosyncKicker

- So a typical “KudosyncKicker.bat” file may look like this:
  "C:\Program Files\Microsoft Office\Office12\Msaccess.exe" "C:\Kudosync.accdb" /x KudosyncKicker

- Customize the paths in “KudosyncKicker.bat” and you’re good to go! This will run all the SyncSteps in your database marked as Active. You do not need to specify the steps in this .bat file.

Please contact me at acumen@gmail.com with any comments/bug reports/suggestions.

Thanks and happy Kudosyncing!