

5 - Database to Source Apps

Quick start with DBSync Replication

Use DBSync Replication for different databases like *MySQL, SQL Server, Oracle, DB, PostgreSQL, Cassandra, AWS RedShift, Snowflake, Sybase, and MongoDB*. to connect with source applications like Salesforce and Microsoft CRM.

(Note: Source Apps includes Salesforce and Microsoft CRM Application)

The quickstart walks through shows how database to source applications synchronization can be performed in the same profile wherein source applications to database replication is configured.

DBSync replication tool facilitates database to source apps replication using control Flag (do_sync_flag).

Log in to the DBSync Replication portal

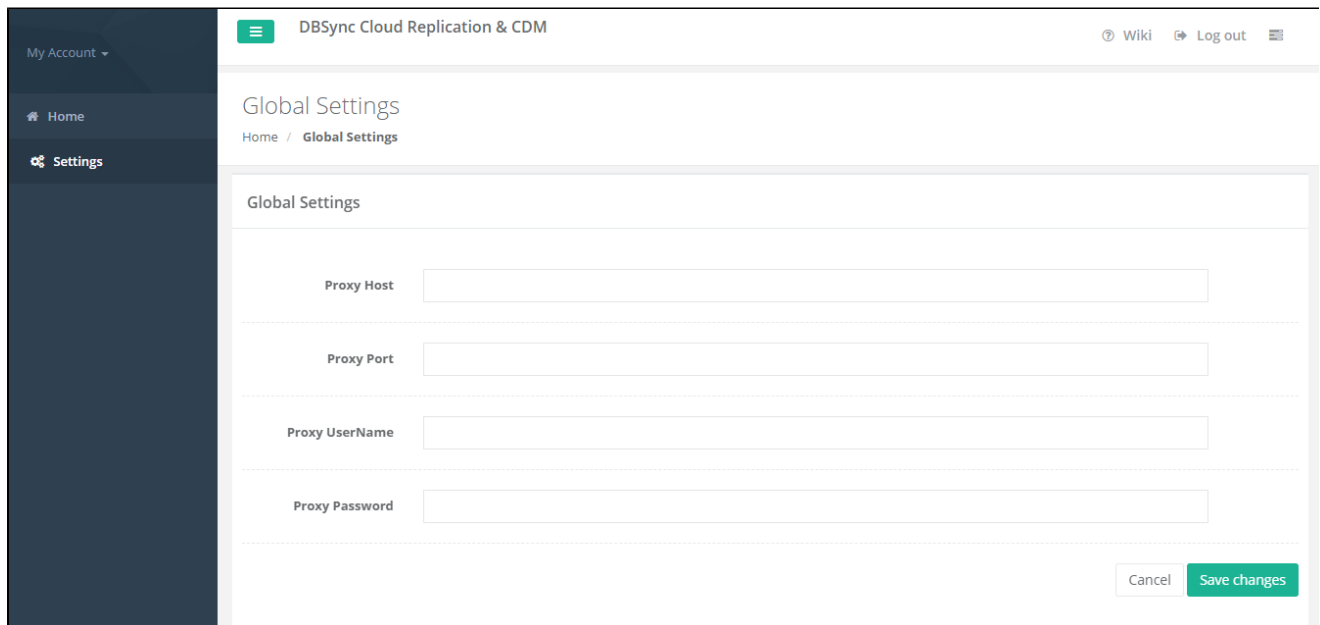
Sign in to the [DBSync Replication portal](#).

Fill the configuration details in global settings

Start the DBSync Replication console to configure the proxy settings under the global settings option on the home page.

Follow these steps to configure a proxy global settings in the DBSync replication portal.

1. Once, you have logged in then click to **"the main menu"** in the **right-hand top corner on the home page** of the DBSync Replication portal.
2. Next, enter the **required proxy credentials** in different text boxes like **proxy host, port, username and password** under the global settings section.
3. **Click on save changes button** to **save global settings details**.



The screenshot displays the DBSync Cloud Replication & CDM interface. On the left is a dark sidebar with 'My Account' and navigation links for 'Home' and 'Settings'. The top header shows the application name and links for 'Wiki' and 'Log out'. The main section is titled 'Global Settings' and includes a breadcrumb 'Home / Global Settings'. Below this, there's a 'Global Settings' section with four labeled input fields: 'Proxy Host', 'Proxy Port', 'Proxy UserName', and 'Proxy Password'. At the bottom right of this section are two buttons: 'Cancel' and 'Save changes'.

Create a source application profile

Source application profile Includes Salesforce and Microsoft CRM. The source app profile is created within the DBSync Replication platform.

Follow these steps to create a profile under source applications like Salesforce and Microsoft CRM.

1. Click to **"add profile"** in the right-hand corner of the profiles section of the DBSync replication portal.

2. Select, the required **source name application** from the **drop-down menu** under the **product header**.
3. Next, **enter the name of the profile** like **"testprofile"** under the name section.
4. **Click on save changes button** to **create a new replication profile**.

Source application setup details

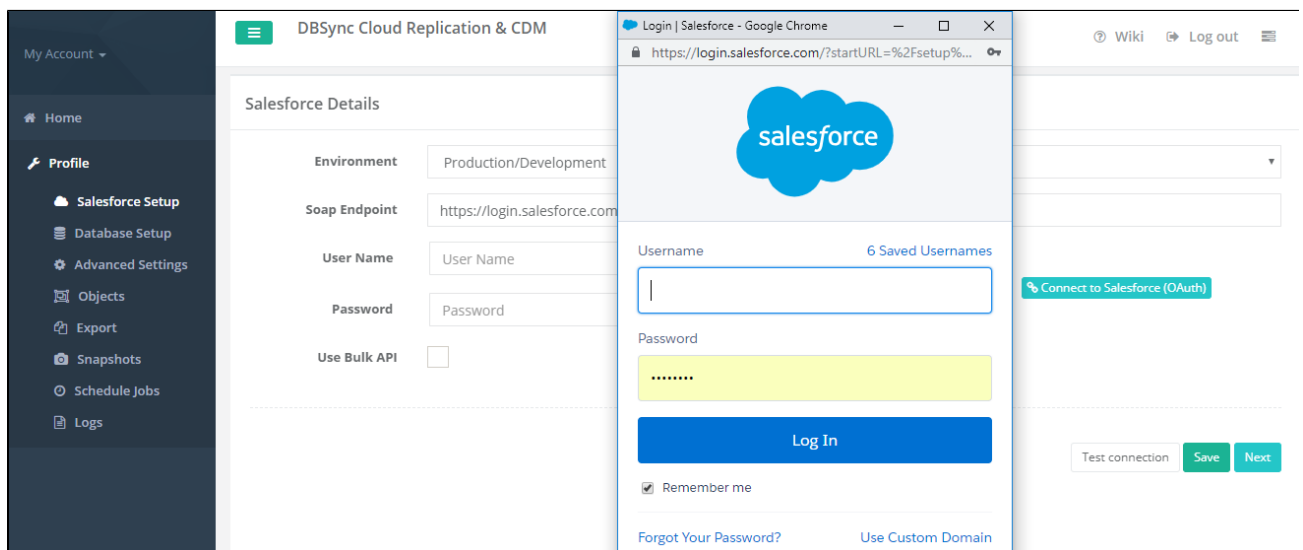
Start with source application setup details includes Salesforce and Microsoft CRM.

The source setup application details required to configure your **Salesforce and Microsoft CRM** credentials like **"username"** and **"password"**.

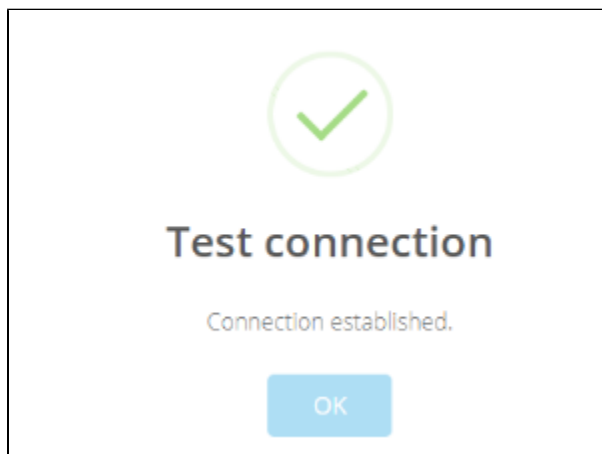
Follow these steps to configure your source application like Salesforce and Microsoft CRM.

1. Click to **"Salesforce and Microsoft CRM" setup tab** on the left-hand corner in the profiles section of the DBSync Replication portal.
2. Don't change the **"environment and soap end details"**, all these details are pre-filled.
3. Next, enter the **"username" and "password" credentials for Salesforce and Microsoft CRM**.

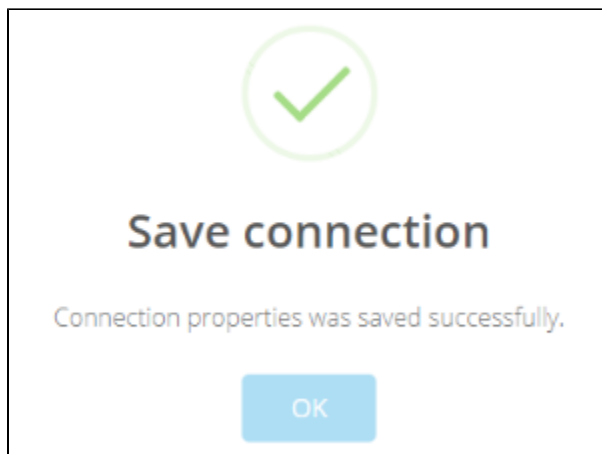
4. **"OR", "Other option for salesforce"** click on connect to **Salesforce (OAUTH)** to enter Salesforce login credentials like **"username"** and **"password"** to connect the Salesforce application.



- Click on the **test connection button** to validate your source application login details.



- Click on the **Save button** to save your source apps login details.



- Once completed, click on the **next button** to proceed to the database setup tab.

Configure database setup details

Start with the **database setup tab**, to fill all the necessary details and follow the same procedure for testing and validating your database credentials.

Follow these steps to configure your database credentials with different databases like **MySQL, SQL Server, Oracle, DB, PostgreSQL, Cassandra, AWS RedShift, Snowflake, Sybase, and MongoDB**.

1. Click to **"database" setup tab** on the left-hand corner in the profiles section of the DBSync replication portal.
2. Select, the required **"type name"** from the **drop-down menu** options like **"MySQL, SQL Server, Oracle, DB, PostgreSQL, Cassandra, AWS RedShift, Snowflake, Sybase, and MongoDB"** under the **"database setup" section**.

The screenshot shows the 'Database Setup' interface. On the left is a sidebar with navigation links: Home, Administration, test (highlighted), Salesforce Setup, Database Setup, Advanced Settings, Objects, Export, Schedule Jobs, and Logs. The main area is titled 'Database Details' and contains the following fields:

- Type:** A dropdown menu with 'MySQL' selected. The menu is open, showing options: MySQL, SQLServer, Oracle, DB2, MySQL (highlighted), PostgreSQL, Cassandra, AWS Redshift, Sybase, MongoDB, AWS S3, and Snowflake.
- Host:** An empty text input field.
- Port:** A text input field with the placeholder text 'Port'.
- User Name:** A text input field.
- Password:** A text input field.
- Database:** A text input field.
- URL:** A text input field containing 'jdbc:mysql://'.

Below these fields is a section labeled 'Advanced Settings'. At the bottom right of the form are three buttons: 'Test Connection', 'Save', and 'Next'.

(Note: The database URL can also be entered manually if you know your database Connection string.)

3. To start with database credentials user has to enter all the configuration details like host, port, username, password, database name, and schema.
4. Once, all the details entered by the user then URL details will get auto-filled.
5. Click on the **Test Connection button** to validate your source application login details.
6. Click on the **Save button to save your source apps login details**.
7. Once completed, click on the **next button to proceed to the advanced settings tab to get the email Id to get the notifications**.

Note:

- While replicating with Cassandra, please refer to the following wiki link for specific details on Replication with Cassandra. <http://help.mydbsync.com/docs/display/CloudReplication/3+-+Big+Data+Support>
- While replicating with the Amazon Redshift database, please refer to the following wiki link for specific details on Replication with Amazon Redshift. <http://help.mydbsync.com/docs/display/CloudReplication/Amazon+Redshift>

Advanced settings tab details

Start with the **advanced settings tab**, to fill all the necessary details and follow the same procedure for testing and validating Advanced settings credentials.

Follow these steps to configure your Advanced settings credentials.

1. Click to **"advanced" settings tab** on the left-hand corner in the Profiles section of the DBSync replication portal.
2. Mark the checkbox to **"enable database logging"** to create an auto-created table in the database.
3. Next, Mark the checkbox of **"email only on error"** to get an email message when error will occur.
4. Enter an email for an **"email recipient"** to get the notification when any run command is executed.
5. Click on the **save button to save the details of your advanced setting**.
6. Once the process is completed then click on **save and next button to proceed further**.

My Account ▾

Home

Profile

Salesforce Setup

Database Setup

Advanced Settings

Objects

Export

Schedule Jobs

Logs

DBSync Cloud Replication & CDM

Wiki Log out

Advanced Settings

Notifications

Enable Database Logging

☐ SFLOG_C table will be auto created in the database

Email Only on Error

☐ An email message will be sent only if an error occurs

Email Recipients

Advanced

Process only non-replicable objects

☐ These are Salesforce.com objects that cannot have bi-directional sync and require complete data replication instead of incremental replication.

Cancel

Save

Next

Source Application Objects tab

Start with Source Application Objects tab, to get synced all the objects when the user will get connected to different source applications like Salesforce/Microsoft CRM.

Follow these steps to synced all objects for source application like Salesforce and Microsoft CRM.

1. Click to **"objects"** tab on the left-hand corner in the Profiles section of the DBSync replication portal.
2. Once, the user has connected to source applications like Salesforce and Microsoft CRM then objects will get synced and it will show on the objects tab.
3. Select any **"source apps objects"** you want to sync into the database from the left objects section as shown below.

AVSFQB_Invoices__Chang

AVSFQB_Invoices__c

AcceptedEventRelation

☒ Account

AccountChangeEvent

AccountCleanInfo

AccountContactRole

AccountFeed

AccountHistory

AccountPartner

AccountShare

ActionLinkGroupTemplate

ActionLinkTemplate

ActivityHistory

AdditionalNumber

AggregateResult

Announcement

ApexClass

ApexComponent

ApexEmailNotification

Available Fields

Count 90

AccountNumber - < VARCHAR >

AccountSource - < VARCHAR >

Active_c - < VARCHAR >

AnnualRevenue - < DECIMAL >

AVSFQB_Billing_Address_c - < CLOB >

AVSFQB_Billing_City_c - < VARCHAR >

AVSFQB_Billing_Country_c - < VARCHAR >

AVSFQB_Billing_State_c - < VARCHAR >

AVSFQB_Billing_Zip_c - < VARCHAR >

AVSFQB_Credit_Limit_c - < VARCHAR >

AVSFQB_Email_c - < VARCHAR >

AVSFQB_Fax_c - < VARCHAR >

AVSFQB_First_Name_c - < VARCHAR >

AVSFQB_Last_Name_c - < VARCHAR >

AVSFQB_Open_Balance_c - < DECIMAL >

AVSFQB_Phone_c - < VARCHAR >

Excluded Fields

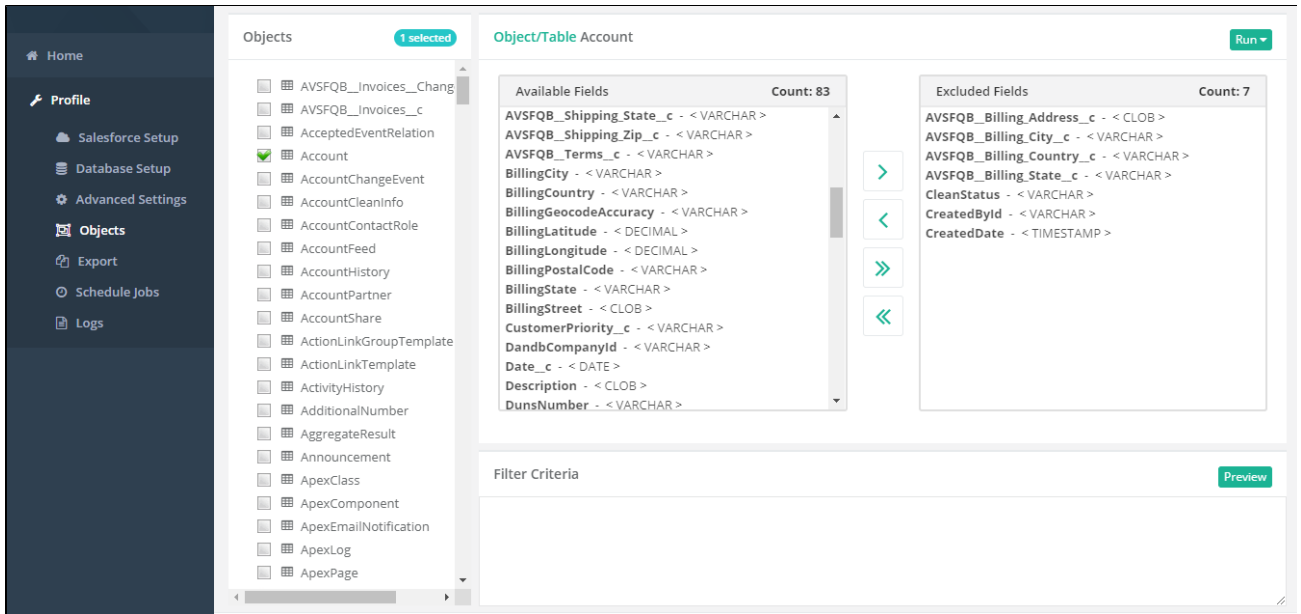
Count 0

Filter Criteria

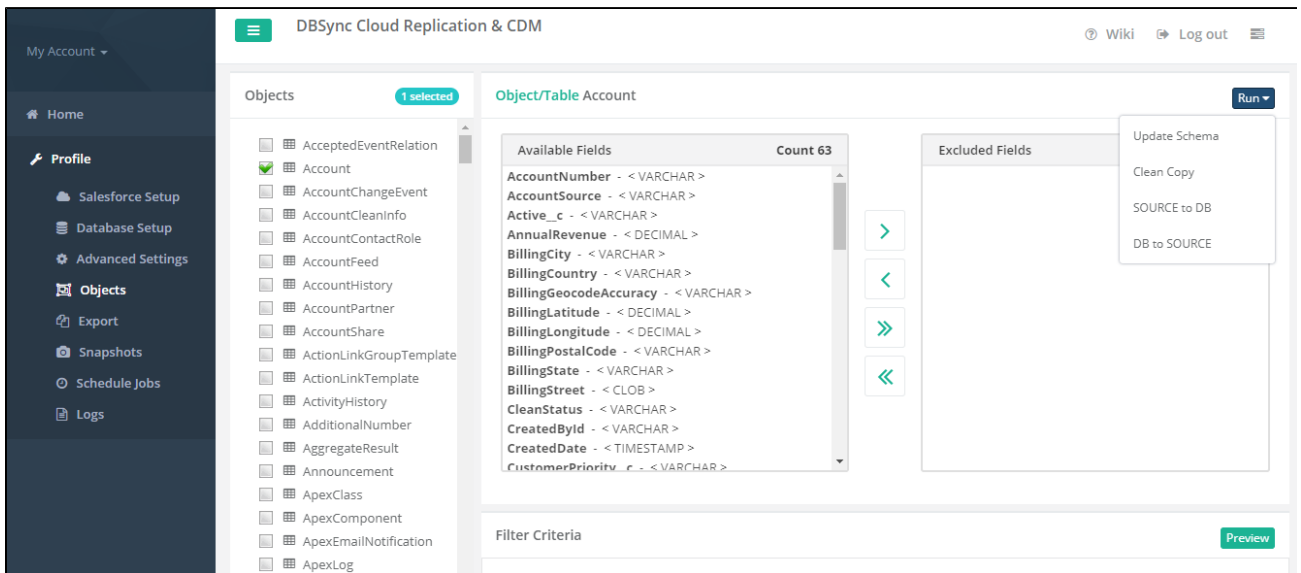
Type = ' Customer ' and AccountNumber != ' 4567 '

Preview

4. Select the object fields you want to sync into the database from the **"available fields"** section and use the **"exclude fields"** section to filter out fields you don't want to sync into the database.



- Once completed, click on the **"Run button"** to Run the configuration for the **Source Apps object**.
- Run menu to select the required commands like an **update database schema, source apps to the database (Clean Copy), source apps to the database (Incremental)** to execute
As per the above commands options, the user has to **select the database to source command to replicate all the sync objects to their source applications**.



- Include required control flags in the column **do_sync_flag of database table** where in source app data is already stored during previous runs for source app to database replication.
The selection of control flags shown in the below table is illustrated with an example in the topic do_sync_flag.

1 Messages 2 Table Data 3 Info							
☐	sync_id	sf_update_timestamp	do_sync_flag	merge_id	Id	IsDeleted	MasterRecordId
☐	1	2018-12-12 00:00:00	Y	(NULL)	0017F00000Roh05QAB	false	(NULL)
☐	2	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3SQAX	false	(NULL)
☐	3	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3YQAX	false	(NULL)
☐	4	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3WQAX	false	(NULL)
☐	5	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3XQAX	false	(NULL)
☐	6	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3ZQAX	false	(NULL)
☐	7	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3aQAH	false	(NULL)
☐	8	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3VQAX	false	(NULL)
☐	9	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3RQAX	false	(NULL)
☐	10	2018-12-12 00:00:00	Y	(NULL)	0017F00000TIU3bQAH	false	(NULL)
*	(Auto)	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)

Database: new5 Table: account

Values	Description
Y	The record has been synchronized between Source Apps and Database
S	A request from an external system to indicate that the record needs to be synchronized from Database to Source Apps
D	This indicates that the record was deleted in Source Apps.

- Once the user has selected and **"run"** the command, then it will redirect to the user on the **log screen tab** to see the status of the command is completed or not.

Configure schedule jobs tab

Start with the Scheduler Jobs tab, where users can schedule the sync using Scheduler Tab.

Follow these steps to schedule the sync using the Scheduler tab with scheduler functionality like run commands options, Date, Month and year format settings and repeat Drop-down menu details to set the desired duration to sync the selected objects.

- Click to **"scheduler jobs" tab** on the left-hand corner in the Profiles section of the DBSync replication portal.
- Once, the user has connected to source applications like Salesforce and Microsoft CRM then objects will get synced and the user can directly select the required process from the command drop-down and configure the frequency of the sync by selecting a desired duration from the **Repeat drop-down menu**.
- Next, **"start on"** option to select the **date, month and year** from the **drop-down menu** to get the objects synced for particular Date and Month format.
- Create a task in the **"task section"** with all the details including **task name, action, command, and start, date and time**.
- Once the process is completed then click on **the Save button to proceed further**.

My Account
Home
Profile
Salesforce Setup
Database Setup
Advanced Settings
Objects
Export
Schedule Jobs
Logs

DBSync Cloud Replication & CDM

Wiki Log out

Schedule Jobs

Command Update Schema Starts On 12/12/2018 05:10
Repeat No Repeat
Save Cancel

Tasks

Task Name	Repeat	Start Date Time	Next Fire Date Time	Command	Actions
-----------	--------	-----------------	---------------------	---------	---------