

# Database To Database Integration

This tutorial deals with implementing Database to Database integration using DBSync. The tutorial shows how data exchange can happen between 2 MYSQL databases.

## Environment -

- Source : MYSQL Database.
  - Target : MYSQL Database.
  - DBSync : DBSync Enterprise OnPremise Edition.
1. Setup your Database for Integration. For this Tutorial I will use MySQL Database Named "**salesforce**".
  2. Create tables "**dbAccount**" and "**dbAccountNew**" in Database with following script.

### Database Scripts

```
create table `salesforce`.`dbAccount`
( `AccountID` varchar(100) NOT NULL ,
  `AccountName` text NOT NULL ,
  `BillingStreet` text ,
  `BillingPostalCode` numeric(20) ,
  `AnnualRevenue` decimal(30,2) ,
  `CreatedDate` date ,
  `LastModifiedDate` datetime ,
  `NumberOfOfficeLocations` int ,
  PRIMARY KEY (`AccountID`)
);

create table `salesforce`.`dbaccountnew`
(`AccountID` varchar (100) NOT NULL,
`AccountName` varchar (300) NOT NULL,
`BillingAddress` varchar (500),
`AnnualRevenue` Decimal (50,2),
`CreatedDate` datetime ,
`LastModifiedDate` datetime ,
`NumberOfOfficeLocations` int,
PRIMARY KEY (`AccountID`)
);
```

1. Enter some test data in "**dbAccount**" table. Go To [www.mydbsync.com](http://www.mydbsync.com).
2. Select **Customer Login**. Enter your **Username** and **Password**. Click **Sign in**. Then, click on **Launch** to access DBSync Project page.
3. Click on **Projects** on the left panel. Then, click on **Create New Project**. Enter Project Name **DatabasetoDatabase** & Save.
4. Click on the project **DatabasetoDatabase**. Then, click on **Create New Process**. Enter Process Name **Database2Database** & Save.
5. Click on **Connectors** on the left panel. Then click on **Create New Connector**. Enter Connector Name **Database1**. Then, select Connector type\* Database Connector\* & Save.
6. Click on the new Connector **Database**. Enter your Database details in Connector settings.
7. **Username, Password, Type, Host, Port** fields should all be updated with your Database details - Note: **Database URL** will get updated automatically.
8. Click Save. Then **Validate Connection** to confirm connection.
9. Click on the process **Database2Database**. Then, click on **Create New Workflow**. Enter Workflow Name **Execute** & Save.
10. Click on the workflow **Execute**. Here, you will see two sections: **Trigger and Rules**.
11. In the Trigger section, you will see **Query Builder, Advanced Query Builder and Properties**. In Rules section, you will see a button to add a new rule.
12. In this example, Advanced Query Builder is used to query. Click on Advanced Query Builder. Then, select the datasource as **Database**.
13. Click on **Switch to Advanced View**. In Query Builder section type the following query and click on Save and Close.

- `Select AccountID, AccountName, BillingStreet, BillingPostalCode, AnnualRevenue, CreatedDate from dbaccount`

1. Go to the Rules section. Click on Add New Rule. Select target Connector, Operation, Target object and map - as per the requirement.
2. In this example, **Target Connector is database, Operation is Insert, target object is dbaccountnew.**
3. Operation can be insert, update or upsert. **Insert:** If this option is selected then, only new records from the source table will be pushed to target data source.
4. **Update:** If this option is selected, it will update the target data source records with updated values in the source.
5. **Upsert:** Upsert is a combination of **insert** and **update**. If this option is selected then, new data will be inserted in target data and old data will be updated with changed data.
6. Click on **Map**. You will see a list of column names of target object **dbaccountnew**. You can map these columns to the required columns of source object **dbaccount**. You just have to drag the required column name from Schema and drop it in front of the required column name of source. In Schema, you will see the list of columns of source object.
7. Validate Row remains "true". AccountID, AccountName and AnnualRevenue from target is mapped with the value of source columns AccountID, AccountName and AnnualRevenue respectively.
8. Click Save and close.
9. Go to process **Database2Database**. Make sure that **status** of workflow Execute is ON. Click '**Run Now**' to run the integration.
10. You will see the **logs** at the bottom in **console** section.
11. If you go to target object dbaccountnew, you will see a list of records inserted from the source object dbaccount.