

Step 1: Create First sample table and database:

```
CREATE DATABASE Database_One;
```

```
CREATE TABLE public.tbl_Employee  
(  
  EmpID INT PRIMARY KEY  
  ,EmpName CHARACTER VARYING  
  ,EmpGender CHAR(1)  
);
```

```
INSERT INTO public.tbl_Employee  
VALUES  
(1, 'Anvesh', 'M')  
, (2, 'Neevan', 'M')  
, (3, 'Martin', 'M');
```

```
create table tbl_department ( id int primary key , name varchar, EmpID int, foreign  
key(empid) references tbl_employee(empid));
```

```
select * from tbl_employee te ;  
insert into tbl_department values(101, 'database', 1);  
insert into tbl_department values(102, 'database', 1);  
insert into tbl_department values(103, 'database', 2);  
insert into tbl_department values(104, 'java', 3);
```

Step 2: Create Second sample table and database:

```
CREATE DATABASE Database_Two;
```

Step 1: Connect to Database_Two:

Step 2: Install / Create DBLink Extension:

```
CREATE EXTENSION dblink;
```

Step 3: Verify the system tables of DBLink

```
SELECT pg_namespace.nspname, pg_proc.proname  
FROM pg_proc, pg_namespace  
WHERE pg_proc.pronamespace=pg_namespace.oid  
AND pg_proc.proname LIKE '%dblink%';
```

Step 4: Test the connection for Database_One:

```
SELECT dblink_connect('host=localhost user=postgres password=password  
dbname=first_db');
```

Step 5: Create foreign data wrapper and server for global authentication.

You can use this server object for cross database queries:

```
CREATE FOREIGN DATA WRAPPER postgres VALIDATOR postgresql_fdw_validator;  
CREATE SERVER demodbrnd_postgres FOREIGN DATA WRAPPER postgres OPTIONS (hostaddr  
'127.0.0.1', dbname 'first_db');
```

Step 6: Mapping of user and server:

```
CREATE USER MAPPING FOR postgres SERVER demodbrnd_postgres OPTIONS (user 'postgres',  
password 'password');
```

Step 7: Test this server:

```
SELECT dblink_connect('demodbrnd_postgres');
```

Step 8: Now, you can SELECT the data of Database_One from Database_Two:

```
SELECT * FROM public.dblink  
( 'demodbrnd_postgres', 'SELECT e.EmpID,e.EmpName,d.name FROM public.tbl_Employee e  
join public.tbl_department d on e.empid=d.empid')  
AS DATA(EmpID INTEGER,EmpName CHARACTER varying,name CHARACTER varying);
```

```
CREATE EXTENSION dblink;
```

```
SELECT pg_namespace.nspname, pg_proc.proname  
FROM pg_proc, pg_namespace  
WHERE pg_proc.pronamespace=pg_namespace.oid  
AND pg_proc.proname LIKE '%dblink%';
```

```
SELECT dblink_connect('host=localhost user=postgres password=password dbname=hr');
```

```
CREATE FOREIGN DATA WRAPPER postgres1 VALIDATOR postgresql_fdw_validator;  
CREATE SERVER demodbrnd_postgres1 FOREIGN DATA WRAPPER postgres OPTIONS (hostaddr  
'127.0.0.1', dbname 'hr');
```

```
CREATE USER MAPPING FOR postgres SERVER demodbrnd_postgres1 OPTIONS (user 'postgres',  
password 'password');
```

```
SELECT dblink_connect('demodbrnd_postgres1');
```

```
create table test  
as
```

```
SELECT * FROM public.dblink  
(  
'demodbrnd_postgres1',  
'SELECT e.EmpID,e.EmpName,d.name FROM public.tbl_Employee e  
join public.tbl_department d on e.empid=d.empid'  
)  
AS DATA(EmpID INTEGER,EmpName CHARACTER varying,name CHARACTER varying);  
select * from test;
```

```
SELECT * FROM public.dblink  
(  
'demodbrnd_postgres1',  
'SELECT employee_id,first_name,last_name from  
public.employees'  
)  
AS DATA(EmpID INTEGER,EmpName CHARACTER varying,name CHARACTER varying);  
select * from test;
```

mysql to postgresql

create user and privileges
Bibek-mysql
Mysql123

```
-- step 1: Create extension  
CREATE EXTENSION mysql_fdw;
```

drop foreign data wrapper

```
select * from pg_extension;
```

```
-- drop server mysql_server;
```

```
-- step 2: create server with server IP Address  
CREATE SERVER mysql_server_10  
FOREIGN DATA WRAPPER mysql_fdw  
OPTIONS (host '192.168.40.148', port '3306');
```

```

--step 3: Create user mapping with mysql credentials
CREATE USER MAPPING FOR root
SERVER mysql_server_10
OPTIONS (username 'my_sql_username', password 'password');

-- DROP USER MAPPING IF EXISTS FOR postgres SERVER mysql_server;

-- step 4: create DDL on destination database like on source database
CREATE FOREIGN TABLE emptest
(
id int,
name varchar
)
SERVER mysql_server_10
OPTIONS (dbname 'test', table_name 'employee');

select * from emptest;

```

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```

creating user and privileges
user bibek-mssql
password = Mssql@123

```

```

drop server mssql_server cascade;
CREATE SERVER mssql_server
FOREIGN DATA WRAPPER tds_fdw
OPTIONS (servername '192.168.50.185', port '1433', database 'master');

```

```

ALTER SERVER mssql_server OWNER TO postgres;

```

```

CREATE USER MAPPING FOR postgres
SERVER mssql_server
OPTIONS (username 'bibek-mssql', password 'Mssql@123');

```

```

drop foreign table test_mssql;

```

```

CREATE FOREIGN TABLE test_mssql (
  ID int,

```

```
    name varchar)  
SERVER mssql_server  
OPTIONS (schema_name 'dbo', table_name 'test');  
  
select * from test_mssql;
```