

## Create IBM DB2 and Connect with Python

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Project	Containment Zone Alerting Application

**STEP 1:** Import the ibm\_db Python library:

```
pip install --force-reinstall ibm_db==3.1.0 ibm_db_sa==0.3.7 import ibm_db
```

**STEP 2:** Identify the database connection credentials:

```
dsn_hostname = "fbd88901-ebdb-4a4f-a32e-  
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud"  
  
dsn_uid = "hfg03206"  
dsn_pwd = "SoqyYdwRvABV6G5a"  
dsn_driver = "{IBM DB2 ODBC DRIVER}"  
dsn_database = "BLUDB"  
  
# e.g. "BLUDB" dsn_port = " 32731"      # e.g. "32733" dsn_protocol = "TCPIP"  
# i.e. "TCPIP" dsn_security = "SSL" #i.e. "SSL"
```

**STEP 3:** Create the DB2 database connection:

```
dsn = (  
    "DRIVER= {0};"  
    "DATABASE= {1};"  
    "HOSTNAME= {2};"  
    "PORT= {3};"  
    "PROTOCOL= {4};"  
    "UID={5};"  
    "PWD= {6};"  
    "SECURITY= {7};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol,  
    dsn_uid, dsn_pwd, dsn_security) print (dsn)
```

Now establish the connection to the database

try:

```
conn = ibm_db.connect (dsn, "", "") print ("Connected to database: ", dsn_database, "as user: ",  
dsn_uid, "on host: ", dsn_hostname)
```

except:

```
    print ("Unable to connect: ", ibm_db.conn_errormsg ())  
server = ibm_db.server_info (conn)  
print ("DBMS_NAME: ", server.DBMS_NAME)  
print ("DBMS_VER: ", server.DBMS_VER)  
print ("DB_NAME: ", server.DB_NAME)  
client = ibm_db.client_info(conn)  
print ("DRIVER_NAME: ", client.DRIVER_NAME)  
print ("DRIVER_VER: ", client.DRIVER_VER)  
print ("DATA_SOURCE_NAME: ", client.DATA_SOURCE_NAME)  
print ("DRIVER_ODBC_VER: ", client.DRIVER_ODBC_VER)  
print ("ODBC_VER: ", client.ODBC_VER)  
print ("ODBC_SQL_CONFORMANCE: ", client.ODBC_SQL_CONFORMANCE)  
print ("APPL_CODEPAGE: ", client.APPL_CODEPAGE)  
print ("CONN_CODEPAGE: ", client.CONN_CODEPAGE)
```

**STEP 4:** Close the Connection:

```
ibm_db.close (conn)
```

**STEP 5:**

Thus the IBM DB2 is created and connected with python.