

# i2i Academy

## Training Document

Topic	Volt Active Data
Document Name	VOLTDB-EX-03

Document Difficulty Level			
Beginner	Junior	Senior	Expert
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## Document History

Date	Author	Ver	Comments
<b>05.03.2025</b>	Mennan Tekbir	1.0	Initial Draft
<b>05.03.2025</b>	Mehmet Erdem Önal	1.1	Revisions

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## Volt Active Data

### Exercise VOLTDB -EX-03:

**Definiton:** Connect VoltDB instance that you have created in the *VOLTDB -EX-03* exercise from [DBeaver](#). In order to connect VoltDB from DBeaver, you should create a new database driver ( Database → Driver Manager menu ) and download VoltDB client jar from maven [repo](#). Create sample table and insert some rows as shown below. Please also connect VoltDB [UI](#) from 55004 port ( you can inspect port mappings via docker ps command. )

**Note:** If you did not get a cloud machine previously, you may simply run it on your local machine.

#### Sample Table Creation, and Row Insertion:

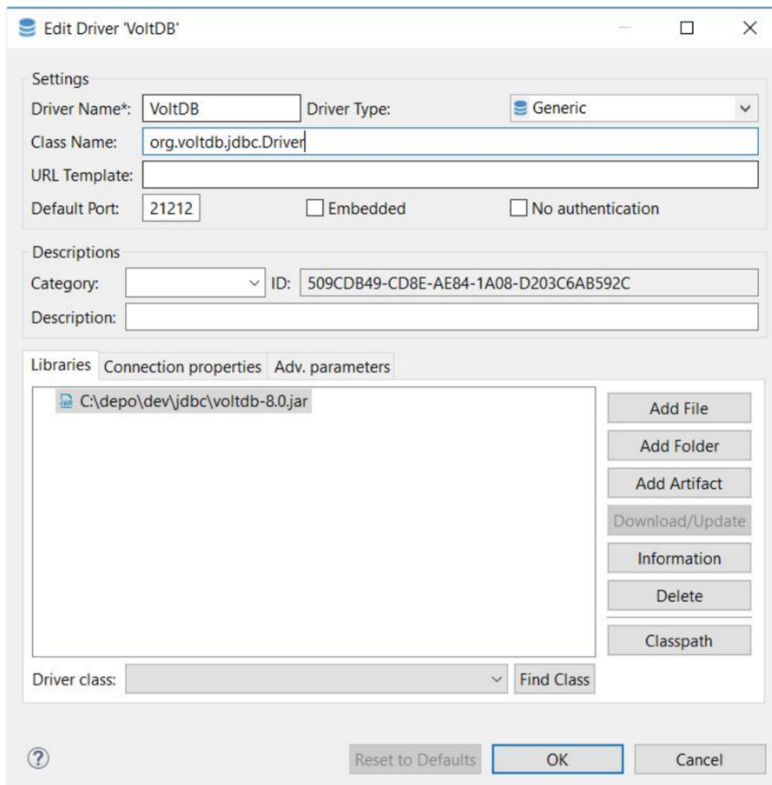
```
create table mth3902 (  
  id bigint not null,  
  start_date_epoch bigint,  
  create_user varchar(32),  
  constraint mth3902_pk primary key(id)  
);  
partition table mth3902 on column id;  
--- dr table mth3902;  
insert into mth3902 ( id, start_date_epoch, create_user ) values ( 1, 1698295044,  
'MENNAN');  
insert into mth3902 ( id, start_date_epoch, create_user ) values ( 2, 1698295088,  
'ERKUT');  
select * from mth3902 limit 1;
```

#### Connecting to VoltDB

```
sqlcmd --servers=localhost --port=21212
```

**Hint:** [Voltdb Quick Start](#)

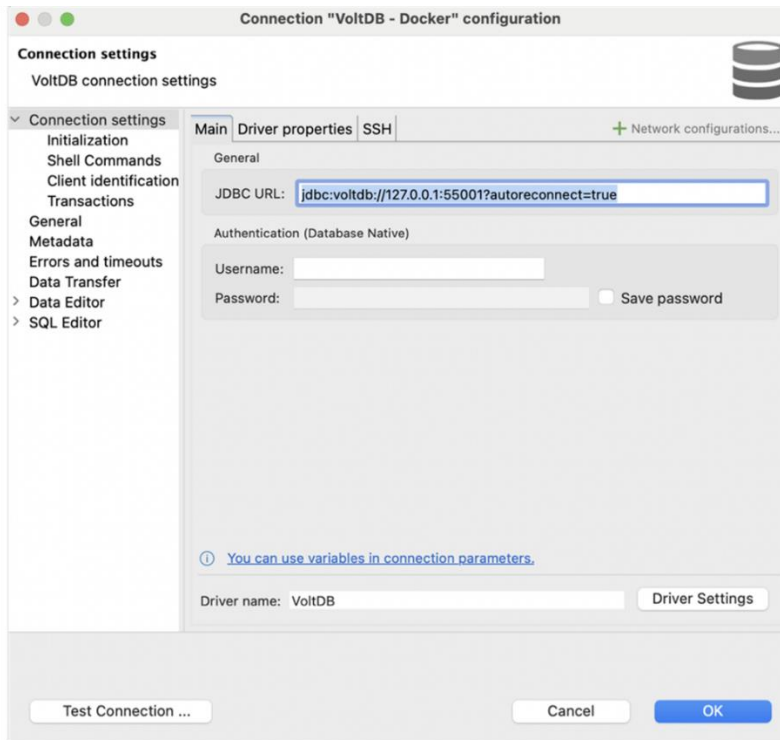
## DBeaver Driver Setup



The 'Edit Driver VoltDB' dialog box is shown with the following settings:

- Settings**
  - Driver Name\*: VoltDB
  - Driver Type: Generic
  - Class Name: org.voltodb.jdbc.Driver
  - URL Template: (empty)
  - Default Port: 21212
  - ☐ Embedded
  - ☐ No authentication
- Descriptions**
  - Category: (empty)
  - ID: 509CDB49-CD8E-AE84-1A08-D203C6AB592C
  - Description: (empty)
- Libraries** (selected tab)
  - Connection properties: C:\depo\dev\jdbc\voltodb-8.0.jar
  - Buttons: Add File, Add Folder, Add Artifact, Download/Update, Information, Delete, Classpath
- Driver class:** (empty) Find Class
- Buttons: ? (help), Reset to Defaults, OK, Cancel

## DBeaver Connection Details



The 'Connection VoltDB - Docker' configuration dialog box is shown with the following details:

- Connection settings**
  - VoltDB connection settings
- Connection settings** (selected tab)
  - Initialization
  - Shell Commands
  - Client identification
  - Transactions
  - General
  - Metadata
  - Errors and timeouts
  - Data Transfer
  - Data Editor
  - SQL Editor
- Main** (selected tab)
  - General
    - JDBC URL: jdbc:voltodb://127.0.0.1:55001?autoreconnect=true
  - Authentication (Database Native)
    - Username: (empty)
    - Password: (empty)
    - ☐ Save password
- Driver name:** VoltDB
- Buttons:** Test Connection ..., Cancel, OK

## VoltDB Management Center

**VOLTD B**

DB MonitorAnalysisAdminSchemaSQL Query

Help ▾


OverviewSchemaProcedures & SQLSize WorksheetDDL SourceRefresh

**Schema**

☐ Expand All

Name ▾	Type ▾	Partitioning ▾	Columns ▾	Indexes ▾	PKey ▾	TupleLimit ▾
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
▶ MTH3902	Table	Partitioned on ID	3	1	Has-PKey	No-limit

[View the DDL Source](#)

 VoltDB DocumentationGenerated by VoltDB 9.2.1 on 20 Apr 2024 07:08:58 GMT+00:00

Please provide screenshots to show your work.

## VOLTDB-EX-03 Solution:

```

PS C:\Users\asus> docker run -d --name node1 -p 8080:8080 -p 21212:21212 full360/docker-voltdb-ce voltdb create --ignore=voltdbroot
Docker: Error response from daemon: Conflict. The container name "/node1" is already in use by container "b092831515c34704d95f76906781f057034d69fd34e7e5bde5834b5bc0e86d48". You have to remove (or rename) that container to be able to reuse that name.

Run 'docker run --help' for more information
PS C:\Users\asus> docker stop node1
node1
PS C:\Users\asus> docker rm node1
node1
PS C:\Users\asus> docker run -d --name node1 -p 8080:8080 -p 21212:21212 full360/docker-voltdb-ce voltdb create --ignore=voltdbroot
964d46f471abee22cd15df231e08e3b5daa6281eae4bb996b9740026d65087c7
PS C:\Users\asus> docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS
964d46f471ab  full360/docker-voltdb-ce            "voltdb create --ign-"  30 seconds ago Up 31 seconds  0.0.0.0:8080->8080/tcp, [::]:8080->8080/tcp, 0.0.0.0:212
PS C:\Users\asus> docker exec -it node1 sqlcmd
SQL Command :: localhost:21212
1> create table mth3902 (
2>   id bigint not null,
3>   start_date_epoch bigint,
4>   create_user varchar(32),
5>   constraint mth3902_pk primary key(id)
6> );
Command succeeded.
7> partition table mth3902 on column id;
Command succeeded.
8>
8> insert into mth3902 ( id, start_date_epoch, create_user ) values ( 1, 1698295044, 'MENNAN');
(Returned 1 rows in 0.04s)
9> insert into mth3902 ( id, start_date_epoch, create_user ) values ( 2, 1698295088, 'ERKUT');
(Returned 1 rows in 0.00s)
10>
10> select * from mth3902;
ID  START_DATE_EPOCH  CREATE_USER
-----
2   1698295088       ERKUT
1   1698295044       MENNAN
  
```

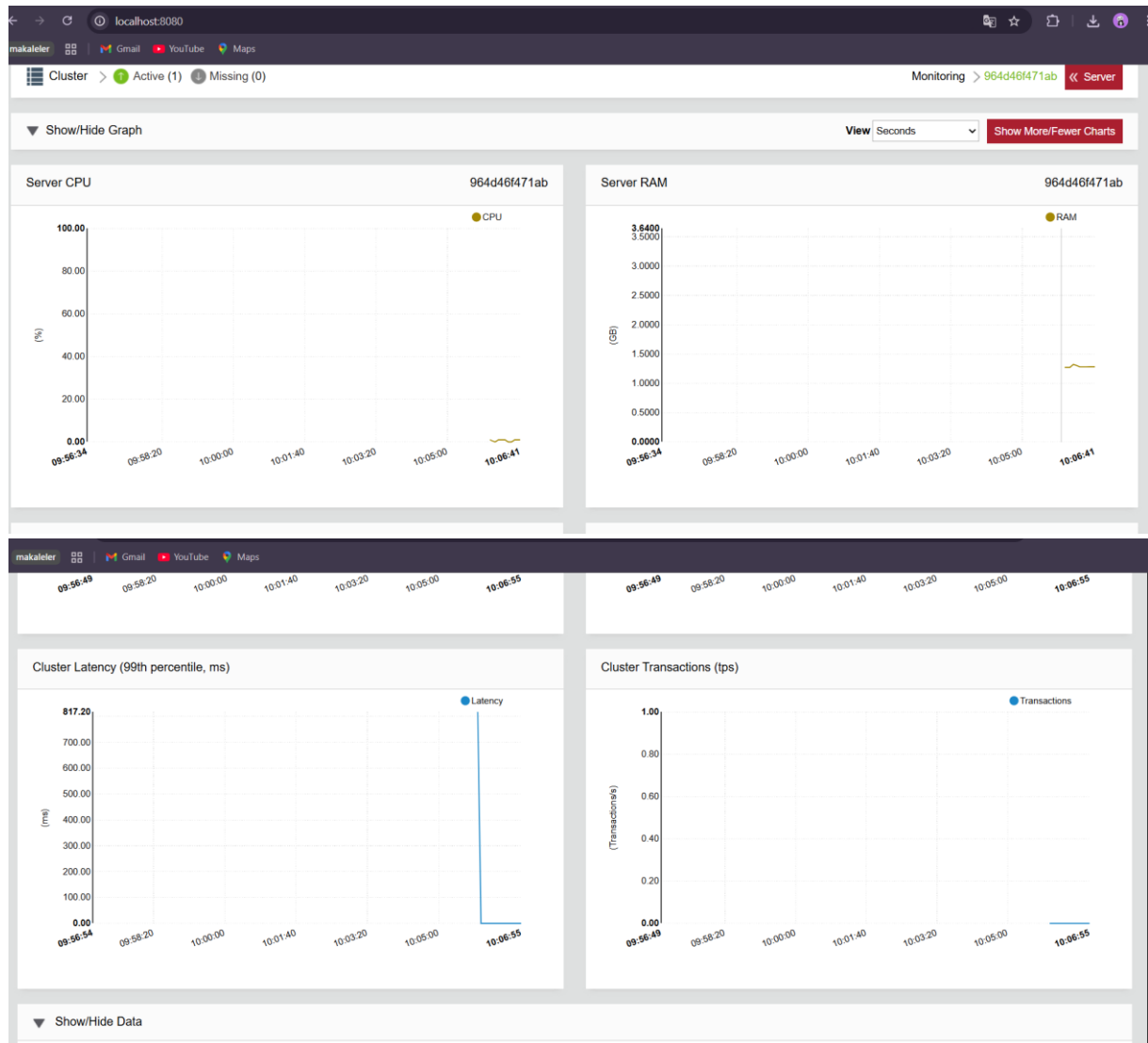
▼ Show/Hide Data

Database Tables

Search Database Tables

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Table	Row Count	Max Rows (per partition)	Min Rows (per partition)	Avg Rows (per partition)	Type
MTH3902	2	1	0	0	PARTITIONED



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**Your Answer:**

You may provide screenshots here to show your work...