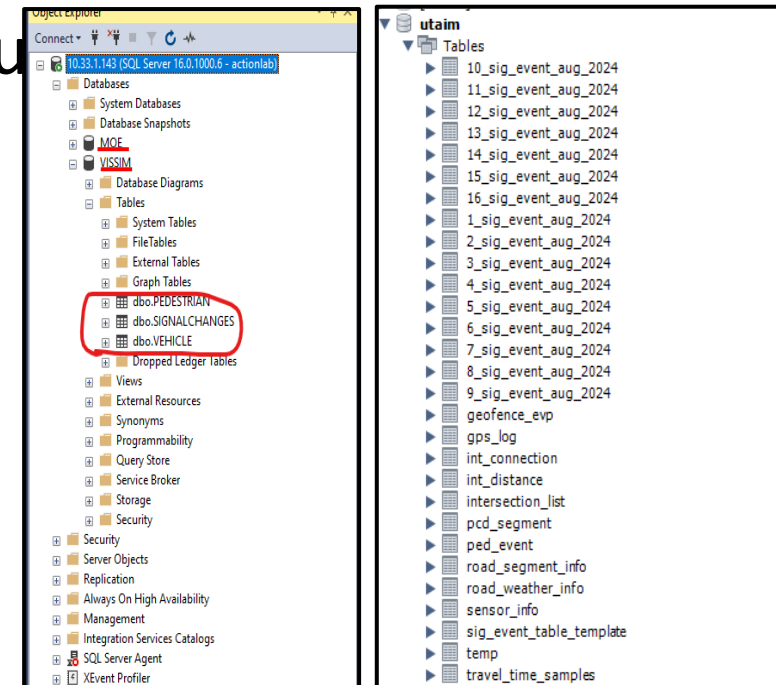


P3: ATSPM-In-the-Loop Simulation software tutorial

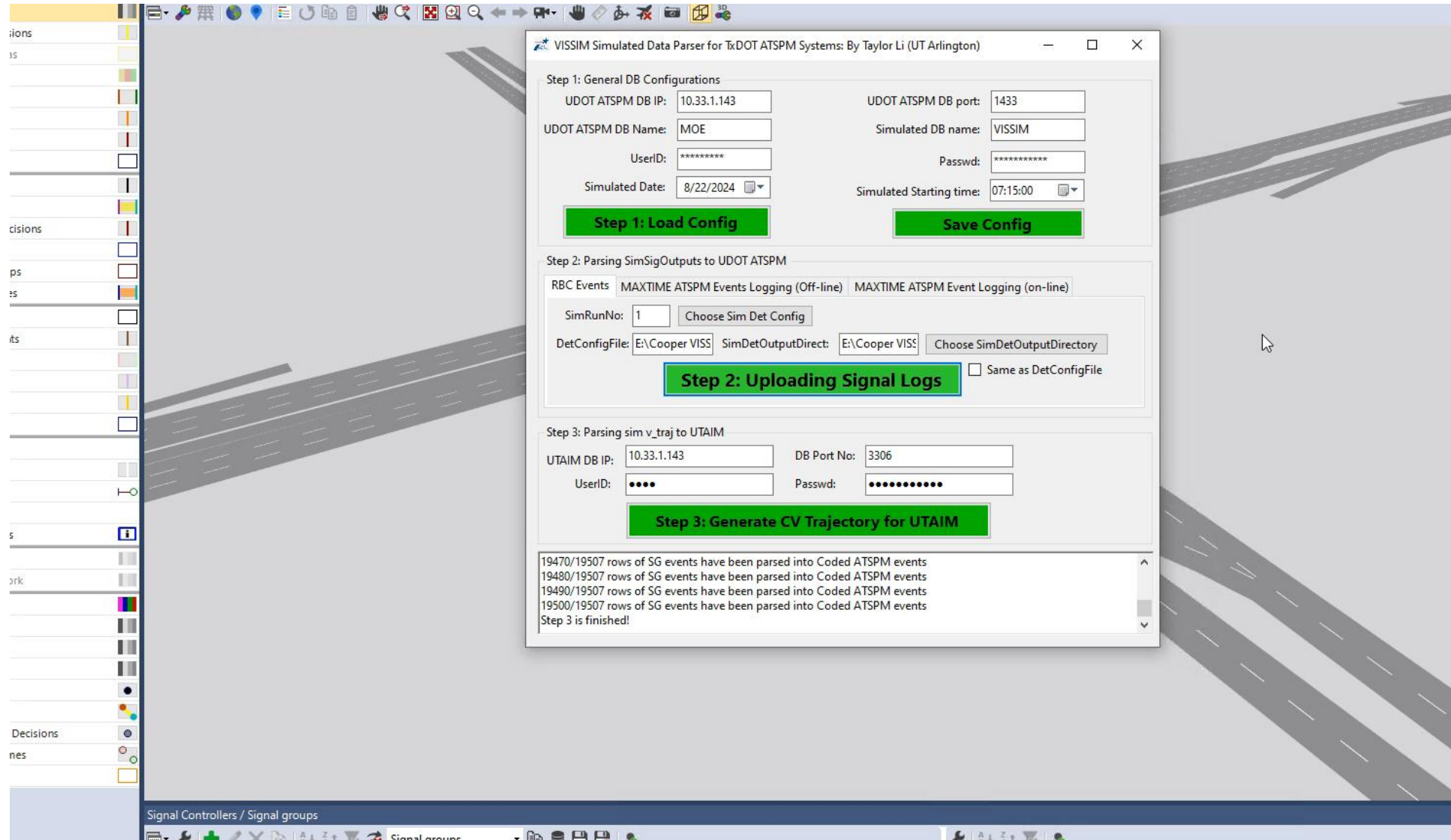
[Students/users/manual](#)

Software 1: Data parser from VISSIM output to UDOT-ATSPM Database

- Pre-requisite:
 - Set up a Utah-DOT ATSPM
 - Set up the database for VISSIM simulation output
 - Set up the MySQL for UTA-In-Motion database
- Run VISSIM software and get the simulation output
- Reference:
 - Final report (download link to be determined)



Transfer VISSIM RBC signal/trajectory data into UDOT-ATSPM and UTA-In-Motion Database



Software Interface

The screenshot displays the 'VISSIM Simulated Data Parser for TxDOT ATSPM Systems' window. It is divided into three main sections, each with a green button and a red box highlighting specific fields:

- Step 1: General DB Configurations**
 - UDOT ATSPM DB IP: 10.33.1.143
 - UDOT ATSPM DB Name: MOE (labeled 1)
 - UserID: *****
 - Simulated Date: 8/22/2024
 - UDOT ATSPM DB port: 1433
 - Simulated DB name: VISSIM (labeled 2)
 - Passwd: *****
 - Simulated Starting time: 07:15:00
 - Buttons: Step 1: Load Config, Save Config
- Step 2: Parsing SimSigOutputs to UDOT ATSPM**
 - Buttons: RDC Events, MAXTIME ATSPM Events Logging (Off-line), MAXTIME ATSPM Event Logging (on-line)
 - SimRunNo: 1
 - Choose Sim Det Config (labeled 3)
 - DetConfigFile: E:\Cooper VISS
 - SimDetOutputDirect: E:\Cooper VISS
 - Choose SimDetOutputDirectory
 - Same as DetConfigFile (checkbox)
 - Button: Step 2: Uploading Signal Logs
- Step 3: Parsing sim v_traj to UTAIM**
 - UTAIM DB IP: 10.33.1.143
 - DB Port: 3306 (labeled 4)
 - UserID: ****
 - Passwd: *****
 - Button: Step 3: Generate CV Trajectory for UTAIM

Step 3 is finished! (labeled 5)

19470/19507 rows of SG events have been parsed into Coded ATSPM events
19480/19507 rows of SG events have been parsed into Coded ATSPM events
19490/19507 rows of SG events have been parsed into Coded ATSPM events
19500/19507 rows of SG events have been parsed into Coded ATSPM events

1. UDOT DB information
2. VISSIM DB information
3. Sim Output Configuration
4. UTA-In-Motion DB information
5. Logging information

Software 2: Transfer ATSPM data from UDOT-ATSPM to UTA-In-Motion

Special call: UDOT2UTA_ATSPM_DB_Makeup_Parser v1.1.1: ACTIOINLAB@UTA

UDOT->UTAIM DB Transmission is performed once per operation

UDOT SPM SQL SERVER (V4.2+)	UTA SPM MySQL DB (V1.1+)
IP address: 10.33.1.143	IP address: 10.33.1.143
Port: 1433	Port: 3306
Database Name: MIE	Database Name: utaim
UserID: *****	UserID: *****
Password: *****	Password: *****

ATSPM
Automated Traffic Signal Performance Measures

ACTION Laboratory
Department of Civil Engineering

One-time Makeup Data Transfer

Sig ID: checked for all intersection registered in UTAIM

From time: 2023-05-20 00:00:00 To time: 2024-09-01 10:09:23

Load Parameter **Start Data Transfer** **Flush UTAIM DB**

```
A new data transfer started at 02-24-2024 10:10:49.4.  
1 k rows were processed, total rows is 544 k  
2 k rows were processed, total rows is 544 k  
3 k rows were processed, total rows is 544 k  
4 k rows were processed, total rows is 544 k  
5 k rows were processed, total rows is 544 k  
6 k rows were processed, total rows is 544 k  
7 k rows were processed, total rows is 544 k  
8 k rows were processed, total rows is 544 k  
9 k rows were processed, total rows is 544 k  
10 k rows were processed, total rows is 544 k  
11 k rows were processed, total rows is 544 k  
12 k rows were processed, total rows is 544 k  
13 k rows were processed, total rows is 544 k  
14 k rows were processed, total rows is 544 k  
15 k rows were processed, total rows is 544 k
```

1. UDOT-ATSPM DB Info
2. UTA-In-Motion DB Info
3. Sim Output Configuration
4. Logging information

Traffic Signal performance analysis

- Users can refer to the UDOT-ATSPM user manual and its community to generate various traffic signal performance measures.
- Users can also refer to the project final report to user UTA-In-Motion.