Developing Detector Volume Reports from the MarcNX Traffic Management System

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Introduction/Background

To store, process, and analyze volume data from Eagle EPAC 300 traffic controllers, users must set up parameters to generate a Detector Volume Report within MarcNX (Siemens ITS). Prior to generating this report, the user must have identified the detectors to be counted (preferably for each travel lane). The following information can be used to set up and the controllers to collect and store volume data, as well as generate Detector Volume Reports that can be processed for operational and planning studies.

24-hour Turning Movement Counts

The procedures outlined for obtaining volume data were based on MarcNX Version 3.3.4 (Version 3.2.0 was also tested). The following steps provide information to collect and store continuous volume information.

Step 1. From the Day Schedules screen, open EVERYDAY.
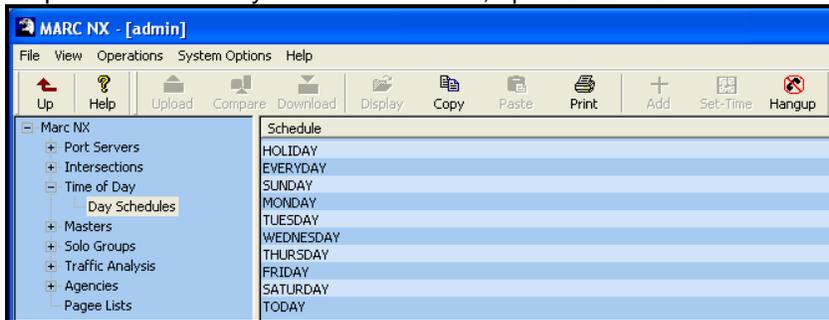
Step 2. From the Time of Day Schedule window, insert New Command.
- -Select Type of Command: Intersections
- -Using the CTRL key select the desired intersections to gather data from
- -Select Command: Highlight Reports and select Add.
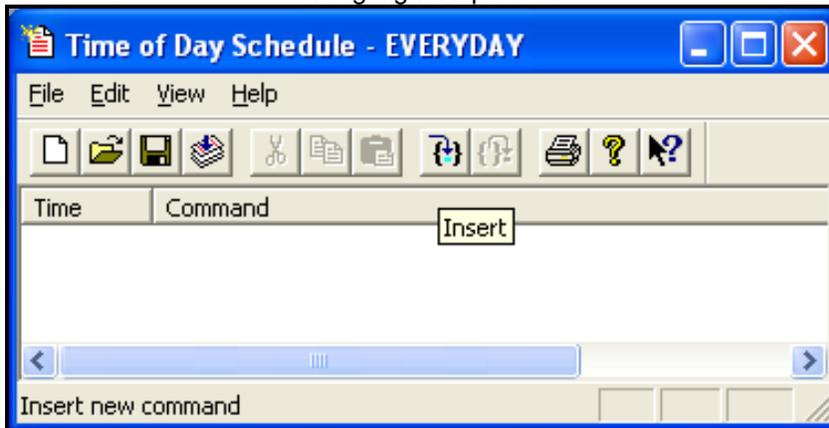
Step 3. From the Report window, enter the following information and select OK.
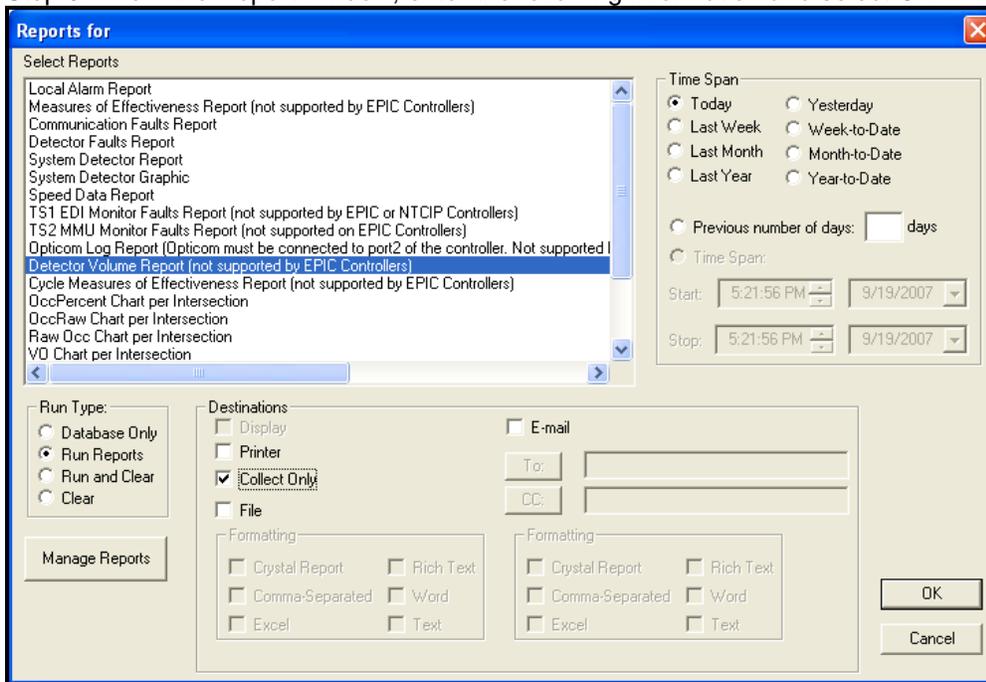
Note: you can also select Collect Only for the destination to eliminate the creation of this file.

Step 4. Verify the commands and select Next.
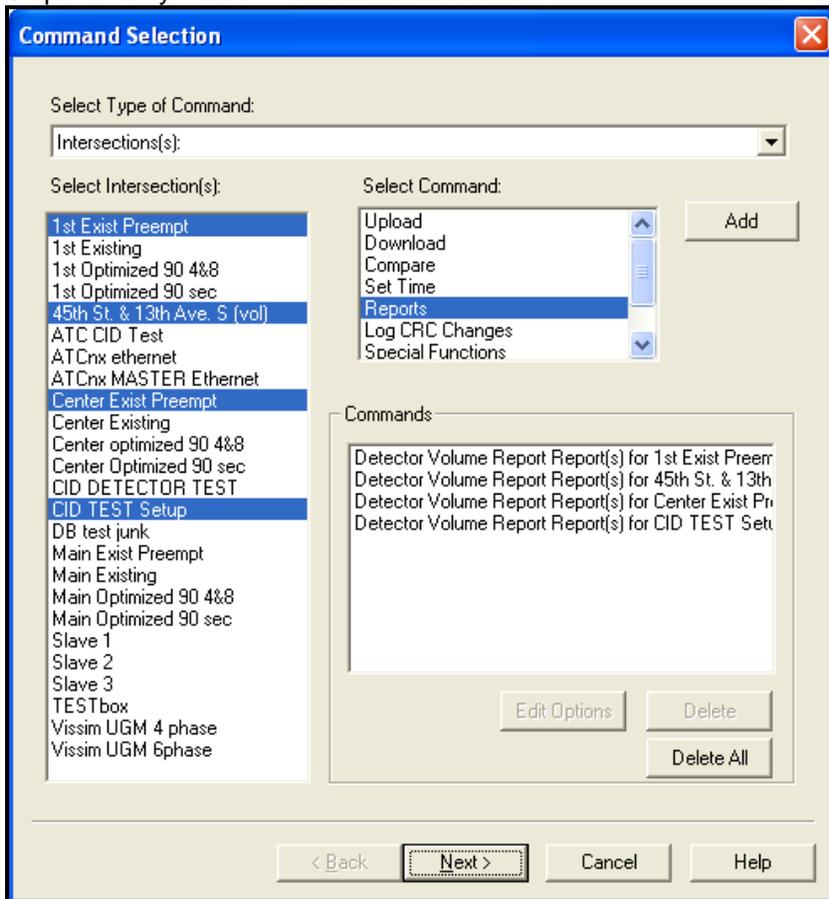
Step 5. For the Command type, select check Every day and select Next.

Step 6. Enter an Execution Time of 1200 (48 intervals) to 2200 (72 intervals – maximum value)
– use 1205 and select Finish. This will gather data for at least half of the day.

Step 7. Save the command information.
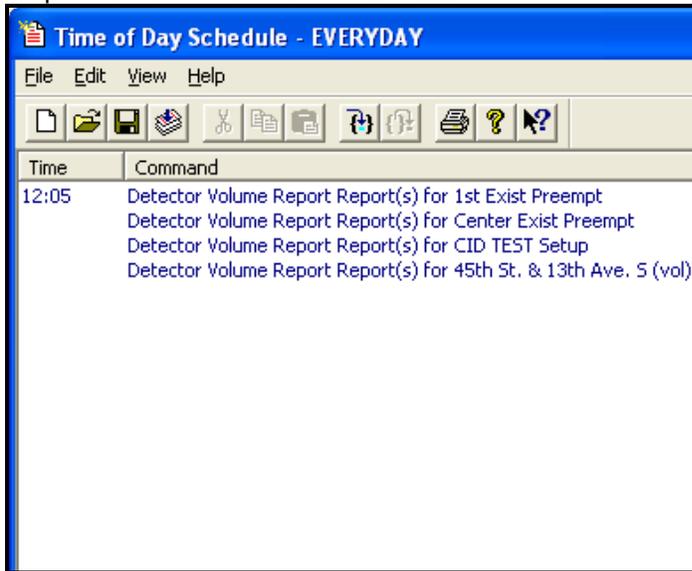
To gather data for the remaining part of the day, repeat Steps 1-6, with the following changes.

1. Use a Time Span of Yesterday, as discussed in discussed in Step 3.
2. Enter an Execution Time of 0005 (captures the last 72 intervals from previous day), as discussed in Step 6.

Step 8. Save the active schedule. The Everyday window should appear as shown below:
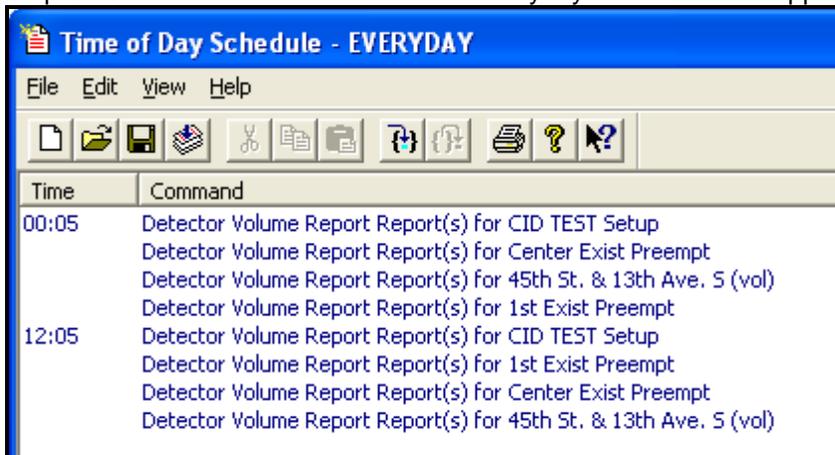
Generate .CSV Formatted Detector Volume Reports

Step 1: Under Intersections, highlight (left click) the desired intersection
Step 2: Right click on the same intersection and select (left click) Reports
Step 3: Select Detector Volume Reports, with the following Run Type, Destination, and Formatting:
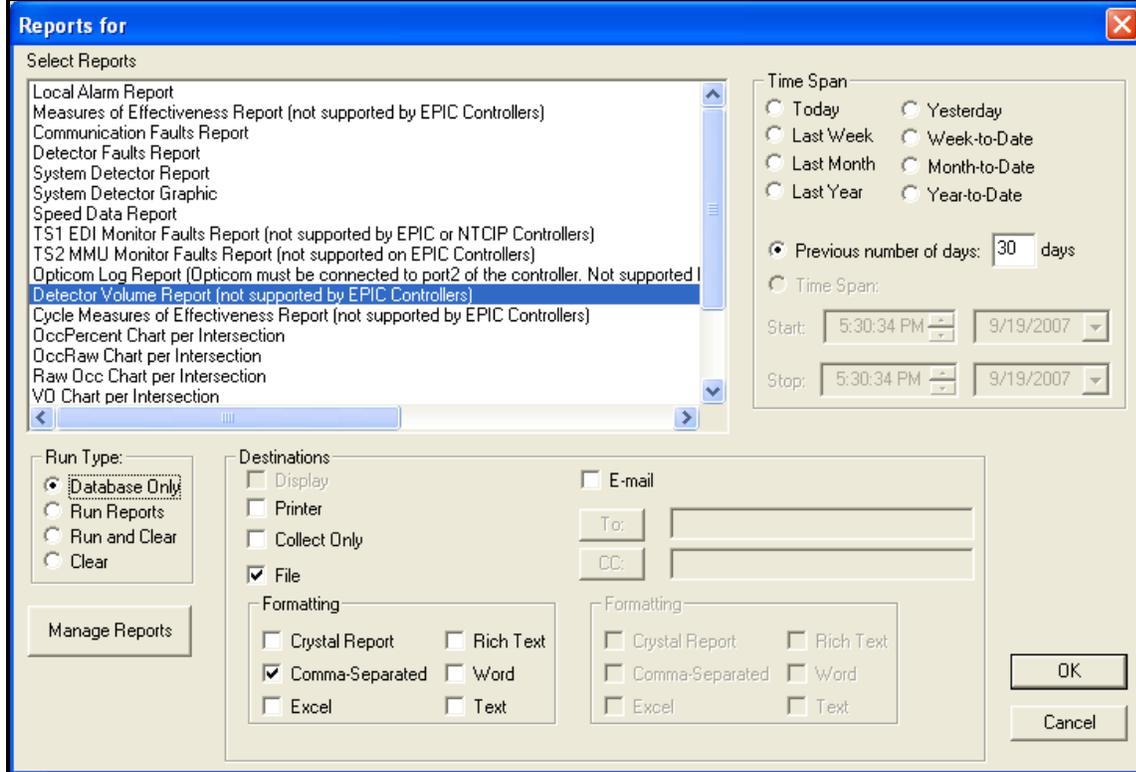
Step 4: Enter the desired Time Span information
Step 5: Select OK

The Detector Volume Report file with be stored in the "C:\Program Files\ITS Software\MarcNX\report output files\{Intersection/signal name} folder and have the following file name: Detector Volume Report from {start date and time} to {end date and time}.csv. This file can now be processed using ATAC's MarcNX Detector Volume Reader.