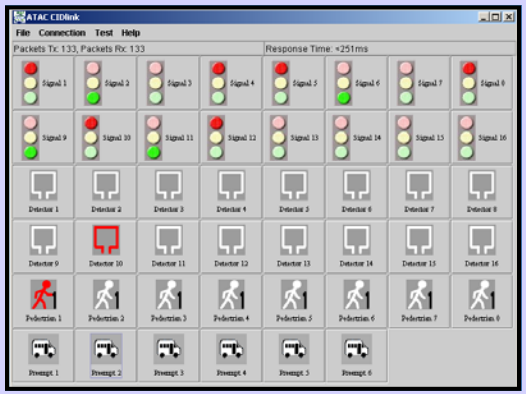


Main Menu from the CIDlink Software
(current CIDlink has 64 vehicle detectors)

Simulation Interfaces

Interfaces with the following microscopic simulation models:

- VISSIM
- CORSIM
- Cube Dynasim

VIRTUAL TRAFFIC LAB

ATACid's Ethernet communication allows users to run analysis on controllers at virtually any location in the world .

To learn more about the ATACid or request a quote, contact

Shawn Birst
(701)231-1063
Shawn@atacenter.org

For more information, visit the following website:

www.atacenter.org/cid/

430 IACC Building
Upper Great Plains Transportation Institute
North Dakota State University
Fargo, ND 58105

Phone: 701-231-8058
Fax: 701-231-6265
E-mail: Info@atacenter.org
Web Site: www.atacenter.org

Advanced Traffic Analysis Center's Controller Interface Device (ATACid)

For supporting

Hardware-In-The-Loop Simulation Using A NEMA TS 2 Traffic Signal Controller

- Low priority preemption
- Coordination recovery methods
- High priority preemption
- Complex signalized intersections

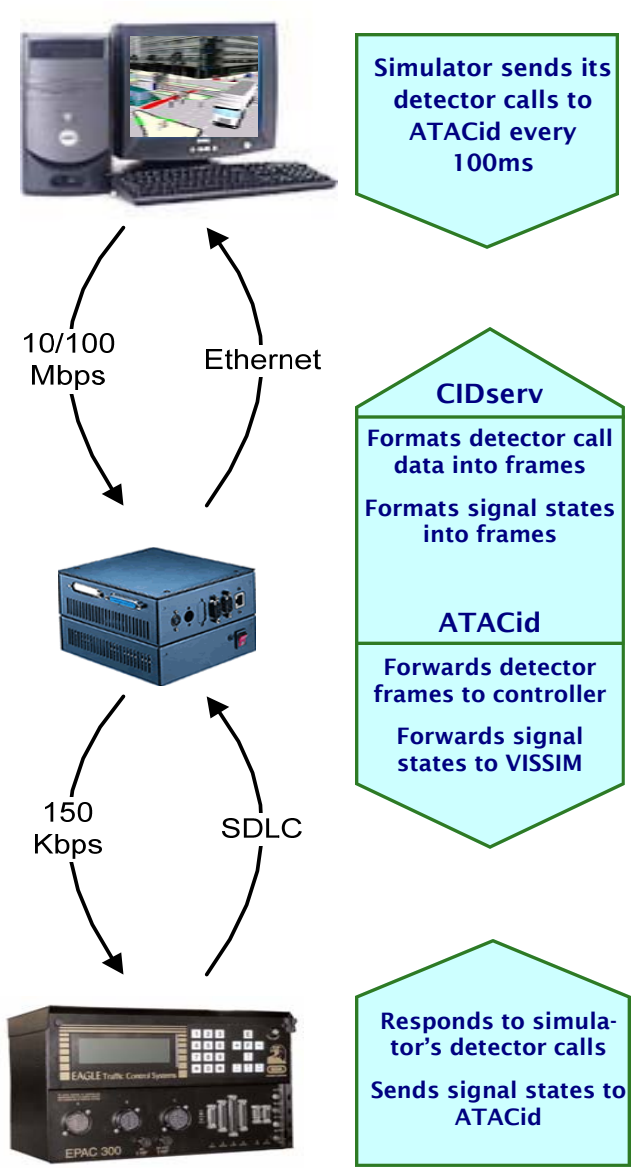
BACKGROUND

A controller interface device (CID) allows users to test and evaluate traffic controller capabilities prior to field installation. Using this simulation method, the emulated traffic signal control logic in the simulation model is replaced by actual traffic controller hardware .

ATACID

The CID developed by ATAC improves upon existing devices in a number of ways, including:

- Works with VISSIM, Cube Dynasim, and CORSIM traffic simulation programs
- Uses current off-the-shelf technology
- More cost effective
- Easy to setup and use
- Small in size (5.9"x5.5"x3.9")
- Ethernet connectivity allows it to talk to controllers virtually anywhere in the world



HARDWARE

- 133 MHz processor, custom operating system
- 64 MB Flash memory
- Ethernet port
- SDLC for connecting to Port 1 on NEMA TS 2 Controllers
- RS-232 Serial port for updating Ethernet settings

SOFTWARE

CIDserv

- Formats detector calls and signal states to frames conforming to NEMA TS 2-2003 protocol
- Performs Malfunction Management Unit functions

CIDlink

- Allows for Ethernet communications with the CID
- Allows user to view status of controller; place vehicle, pedestrian, and preemption calls (manually and automatically).