



Control Office Applications

TMM - Centralized Traffic Control (CTC) Applications

Condor's Train Movement Manager (TMM) – CTC product provides a proven scalable CAD system. The product is customizable to different railway operating environments and provides a comprehensive railroad dispatching feature set including:

Standard Features

- Integrated control center functionality that include SCADA and traction power supporting subsystems
- Industry standard features such as Entry/Exit, Switch, Call-on, Fleeting, Blocking, configurable labels and layers, and I/O monitoring functions
- System logging of all operator activities and Playback for review
- Integrated alarm monitoring for both CTC and SCADA applications in a single user interface
- Executive reporting systems and customizable queries accessible via standard SQL queries
- Standard forms and reports for work permits, operator transfers, occurrence logs, equipment failures, etc.
- Hot standby backup to ensure continuous system availability

Additional Features

- **Automatic Train dispatching** – Import your railway's schedule, set TMM in automatic mode, and signals/switches are automatically requested at scheduled departure times.
- **Automatic Vehicle Identification** – Obtain real-time updates of the train's location, consist, routing info, speed, and schedule adherence and display the information directly in TMM.
- **Synchronized Event/Voice Recording** – In addition to standard event recording, a standalone device records I/O and radio transmissions. Events are then recreated by synchronizing voice, data, and TMM Playback
- **Forms Packages** – Options for dark territory control and customer specific forms requirements. Condor has experience with CROR, NORAC, GCOR, Form M and several transit rule sets.

Benefits

- Improves consistency of dispatch function and provides a strong train management framework
- Easy-to-configure and rapidly adapt to changing and expanding requirements
- Easy-to-learn and maintain

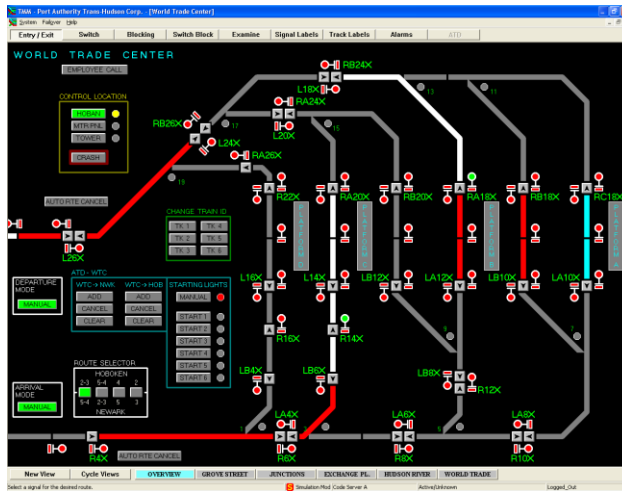
Operating Environments

- Mainline CTC and Commuter Rail
- Yard Control
- Subway
- Rail/Maintenance vehicle tracking



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Port Authority Trans-Hudson (PATH), NY/NJ



Territory: Grove Street– World Trade Center

Install Date: May 2003

Approx Value: \$2 million

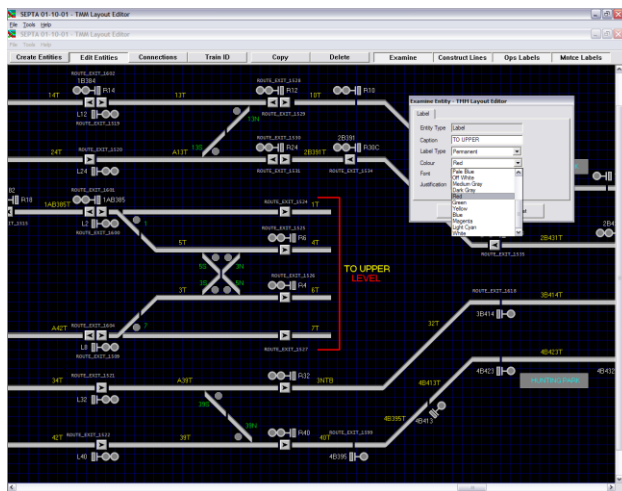
Traffic: 65 million passengers annually

Classification: Subway

Project Scope: Design/install of an integrated control center, Local Control Computers, Design vital fiber optic network.

Site Specific Features: Color Tracking, Centralized Automatic Train Dispatching (ATD), PC-based Local Control Panels, design of vital fiber optic communications system

Southeastern Pennsylvania Transportation Authority (SEPTA)



Territory: Broad Street Subway Line including Fern Rock Yard, Philadelphia, PA

Install Date: Scheduled for 2006

Approx Value: \$5 million

Size: 398 signals, 139 switches

Classification: Subway

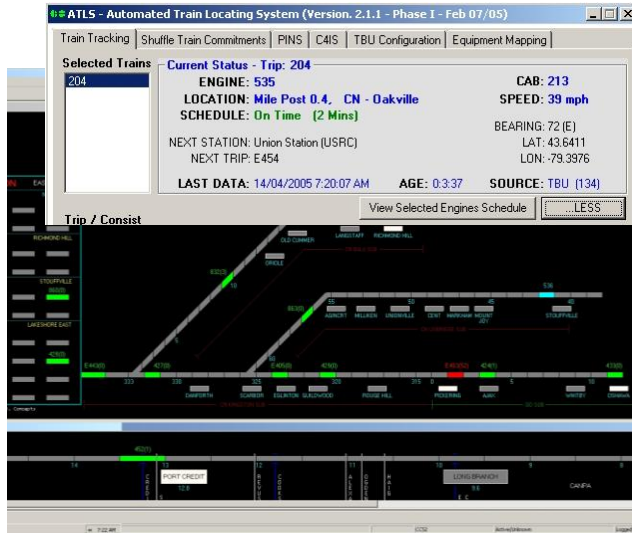
Project Scope: Design/install of an integrated control center, Local Event Recorder computers, Localized Automatic Train Dispatching (ATD), complete Train-to-Wayside communications system

Site Specific Features: Train tracking using Train-to-Wayside interface, transfer of territories between dispatchers, offsite backup control center



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GO Transit



Territory: All GO corridors including 375 route Km, and 55 stations

Install Date: December 2004

Approx Value: \$1 million

Traffic: 38 million passengers annually

Classification: Commuter Rail Authority

Project Scope: Design/install of an Automatic Train Location System

Site Specific Features: GPS locating, Passenger information system interface, advanced schedule adherence prediction, 1x cellular locomotive unit, integrated TMM and geographical displays

Additional Installations

- Amtrak – Washington, DC
- CPR – Montreal, QC
- MBCR – Boston, MA
- Toronto Transit Commission – Toronto, ON
- BNSF – Seattle, WA
- CPR – Toronto, ON
- OC Transpo – Ottawa, ON
- Vermont Railway – Rutland, VT