Pathfinder

Pathfinder is a powerful yard automation platform for real-time switch control, NX routing and yard management.

The Pathfinder Yard Automation Platform is built to deliver long-term performance and measurable results in even the most demanding rail environments. By combining cutting-edge hardware and intuitive rail yard management software, Pathfinder helps rail operators improve productivity and capacity, reduce dwell time, streamline yard operations, and make better use of their assets. Its Linux-based infrastructure ensures rock-solid stability and high-level security, with no need to worry about disruptive OS updates.

> **User-friendly Interface**

> **Product Optimization**

> **First-Class Reliability**

> **Total Cost Reduction**

> **High Level Security**

Pathfinder Yard Automation Software

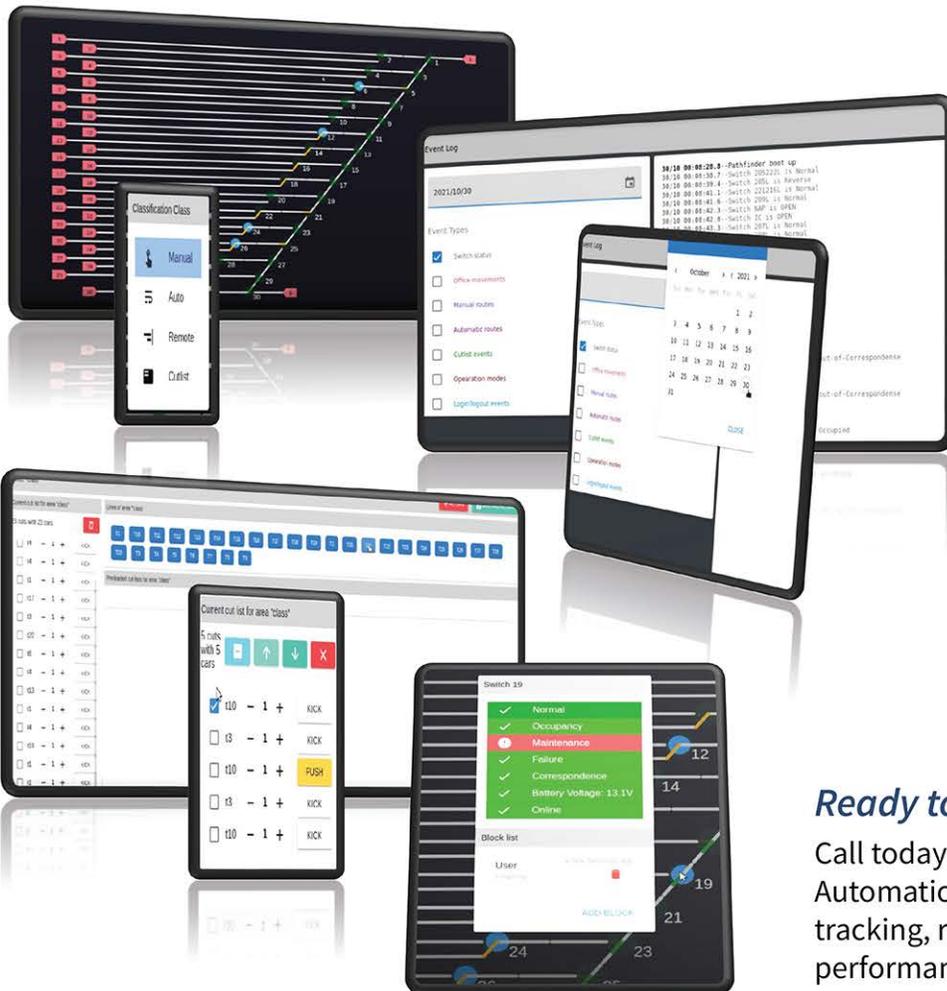*Powerful, Reliable, and Maintenance-Free Rail Yard Software*

Take your operations to the next level with the Pathfinder Yard Automation Platform—a Linux-based rail yard management system designed to enhance productivity, control, and efficiency without the burden of recurring maintenance fees. Unlike other systems, Pathfinder eliminates OS update issues, offering a stable and secure railroad software experience.

Smarter Yard Management

Pathfinder provides seamless, centralized control of multiple rail yard functions through a single local control panel. Its real-time railcar tracking software enables crews to line switches, block routes, and manage switch lists from one user-friendly interface—whether from a central office or via a distributed area network.

Data-Driven Decisions

With detailed event logging and shift-based reporting, Pathfinder empowers maintainers and operators with valuable insights into yard performance and potential issues before they escalate. Integrated with AEI readers, it automatically tracks and reports the number of cars switched and stored, ensuring better planning and decision-making.

Key Features

> Remote Switch Control and Entrance / Exit Routing (NX)

> Blue Flag Protection and Track Blocking

> Route Stacking

> Automatic Classification

> List Building and Importation with Third-Party Integration API

> Real-Time Car Tracking and Inventory Management

Ready to modernize your rail yard?

Call today to learn how the Pathfinder Yard Automation Platform can optimize your railcar tracking, reduce costs, and elevate your yard's performance.

📞 (254) 252-3005

🚃 OCCUPANCY

Occupancy indications are shown in the switch status window. *This indicates when a car or train is occupying a switch.*

⚠ CORRESPONDENCE

Correspondence indications are shown in the switch status window. *This indicates that the switch position does not match the request.*

🔒 BLOCKED / MOW

Blocked indications are shown both on the switch icon and in the switch status window. *This indicates that the switch is locked or protecting a bloced track.*

⚠ OFFLINE

Offline indications are shown both on the switch icon and in the switch status window. *This indicates that the switch is not in communication with the Pathfinder system and the switch status is unknown.*

🛠 FAULT / FAILURE

Fault indications are shown both on the switch icon and in the switch status window. *This indicates that a switch fault has been detected and requires inspection.*

🚃 ACTIVE ROUTE

Active Route indications are shown on the display. *This indicates that all switch locations within the route are lined for the move.*

*All colors and indications are customomizable at customers request.

Pathfinder Versions

Both versions of Pathfinder Yard Automation Software include a yard switch layout with labeled tracks, animated switch indicators, color-coded icons for switch status, active paths, and track occupancy, plus safeguards to prevent movement on occupied circuits. Automatic mode in both displays active paths, occupancy, and blocked tracks.

ARS
ADVANCED RAIL SYSTEMS

Advanced Rail Systems is the leading U.S.-owned and operated company dedicated exclusively to rail yard automation, offering total package solutions that redefine industry standards. Founded by experts with decades of hands-on experience — from maintaining rail lines to designing advanced automation systems — the company combines deep industry knowledge with cutting-edge innovation. Advanced Rail Systems' comprehensive approach integrates powerful, reliable switch machines and advanced automation technologies to streamline yard operations, enhance safety, and maximize efficiency. Committed to excellence in both product and service, Advanced Rail Systems delivers solutions that drive rail yards forward, setting a new benchmark for performance and support in the railway industry.

Contact our Sales Team:

(+1) 254-252-3005