

navis®

**N4**

It's time for more.

**Features &  
Functionality**

The Navis N4 terminal operating system (TOS) is built on a highly scalable fault tolerant architecture and is based on latest J2EE design concepts, advanced metadata driven model and highly configurable business rules. These features give terminals the advantage of having the most modern technology platform available with access to the industry's most advanced optimization modules. N4 also helps terminals avoid expensive customization with functionality that helps to reduce administrative and customer support costs.



**N4 is a modern platform that is easily scalable and the only TOS that supports multi-facility operational visibility and control. Features include:**

- Multiple Platform(OS) and Database Support
- Multiple User Interfaces utilizing powerful Rich Thin Client
- Code extension management
- Data Model Extensions including the ability to add custom features to N4
- Monitor Operational and Performance Data in Real-time
- Historical Reporting and Trend Analysis in Navis Analytics
- General Cargo Management includes Cargo Lot Management and receipt/delivery of general cargo through the gate, by vessel and rail
- Container Freight Station Management
- Service Order Management for terminal equipment, vessels and rail
- Vessel Operations Configuration and Management
- Yard Operations Configuration and Management
- Rail Configuration and Management



**N4 can be tailored to meet specific needs with system options that involve advanced configuration, customization and integration helping terminals avoid expensive customization. This functionality includes:**

- Full multi-terminal operational visibility and control with a configurable topology
- Inventory management web services to automatically synchronize unit, holds and permissions data from other in-house corporate or third party systems
- Configurable reports
- Advanced notifications, messaging and flex fields
- SDK Options enable terminal operators to customize and extend N4 to suit specific needs.
- Gate Automation: integrate third party gate devices through a series of API's
- Automated reefer tracking, monitoring and control
- Equipment Gross Weight API updates individual container weights
- Equipment Real time Locating System API



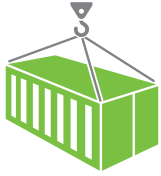
**Flexible and configurable gate functionality enables:**

- Multi-Gate or Multi-Facility Gate Clerk
- Appointments Configuration and Management
- Equipment Delivery Order Management
- Integrate Bills of Lading and Import delivery orders with gate operations
- Integrated Billing Functionality includes invoicing, payments, credits and ED



**Advanced EDI options provide an innovative approach to EDI management that significantly reduces the amount of on-going maintenance with a highly configurable and accessible EDI format, including:**

- Easily configure EDI and the ability to provide this EDI to partners
- Ability to store operator load and discharge lists



**Facility Planning and Control offers real-time features in the XPS client application providing world renowned operational efficiency, including:**

- Detailed yard model, graphical yard views, and real-time yard planning
- Plan, view and check vessel stowage with vessel planning and control
- Complete management of rail operations for terminals
- Efficiently choreograph real-time container moves among Container Handling Equipment (CHE) operators with Equipment Control
- Graphical interface provides a 360 degree, real-time view of the entire terminal operation
- Chassis Tracking in yard



**N4 Mobility Execution Options offer real-time monitoring and management of all equipment.**

- Manage data using handheld devices at the gate, in the yard and at the quay
- Record real-time detailed crane activity
- Inspect rail loads and discharges on and off rail
- Manage reefer maintenance and automate connection work list and monitoring
- Container Handling Equipment Management (CHE)
- General Cargo Support for gate, vessel and rail management



**A complete suite of Optimization Modules provide the ability to automate decisions and improve efficiency and productivity.**

- Advanced Vessel Options offer monitoring and management of vessel activities and berth scheduling.
- Integrated Billing Functionality based on configurable business rules includes invoicing, payments, credits and EDI
- Graphical crane sequencing, berth scheduling and integrated crane shift assignment management
- Quay Commander: Crane planning and real-time monitoring of crane schedules, vessel container moves, vessel activities, and vessel labor assignments.
- Full berth scheduler
- Ro-Ro stowage: define deck layouts using lists
- Vessel hazardous checks
- Vessel AutoStow: automatic and optimized vessel stowage based on user defined requirements



**Advanced Rail Options offer advanced monitoring and management of rail operations.**

- Advanced monitoring and management of rail operations
- Graphically define and display the track plan layout
- Rail AutoStow: automatically plan trail loads based on user defined requirements



### Advanced Yard Options enable optimized use of yard space, CHE's and optimized Equipment Control.

- Yard hazardous checking by class
- Expert Decking: automatically distribute containers throughout the yard with minimal on-going management from yard planners
- PrimeRoute for Straddle Carriers: automatic dispatching of straddle carriers
- PrimeRoute for Terminal Tractors: automated dispatching of internal trucks at RTG terminals
- Schedule the best current job of each straddle carrier
- EC Console: set parameters and view productivity for each point of work
- Equipment Pooling and optimized dispatching
- Supports twin, tandem and quad lifts for straddles move management
- Multi-Lift: automate and optimize quay crane multi-lift operations for straddle and truck sites



### Automated Terminal Option supports unmanned technology, such as automated equipment.

- ASC Manager: centralize control and monitoring of automated stacking cranes
- ASC Stack management with stack status control, yard file configurations and inventory protection



### Reduce administrative and support costs with:

- Community Access Portal (CAP) UI
- Powerful, flexible reporting
- Detailed Reefer, Hazardous Detail, Inventory, Event, Billing and Reporting Management
- Record container guarantees

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