Our product journey continues with N4 3.4. As we learn from previous releases and we get feedback from our customers we find new ways to simplify things and remove friction between users and N4. Our new release is another step in our mission to create products that enable our customers to address complex problems with a set of solutions that embrace simplicity.

N4 3.4 aims to optimize performance in all possible aspects. On the operations side, our proactive and continuous analysis of production data enables our teams to incrementally improve our solutions. On the IT side, N4 3.4 provides better system performance to scale better under heavy workload and high volumes. The new release is the perfect blend of operational and technical improvements to make our solution more reliable, faster and more responsive to the business needs.

**THEMES AND GOALS**

**Automation and Optimization.** Optimizing equipment and operations is an ongoing journey for Navis. Our teams keep pushing the envelope on operations analysis to find new areas to improve, reduce waiting times and increase performance. At the same time, we have started to define the future of the optimization features in N4 to always be ahead of the game.

**Scalability & Platform Consolidation.** Support mega-terminal operations, reduce workload in XPS and consolidate the platform. Our customers will be able to handle high volumes in a more stable and scalable platform. Every new release is a step forward in scalability.

**Performance, Upgrades, Support.** Reduce downtime and maintenance costs for our customers. Container terminals manage a mission critical operation hence providing a solid and easy to manage platform is becoming more and more relevant to our customers.

**Back Office Processing.** Administrative work is a significant part of the day to day work our customers need to carry out. The Business Admin teams are focused on removing obstacles and friction between users and N4.
NEW FEATURES

New features and enhancements in N4 3.4 include:

- Rail operations scheduling by priority and train estimated time of departure. The RGC scheduler now considers track priority and the estimated departure time of the outbound train visit when generating the schedule. If the priority of a track is set to high, the RGC scheduler schedules all moves for that track first. If the priority is not set, the RGC scheduler will schedule moves based on the target completion time set (if any) for the track.

- Rail operations, cross track moves for empty handlers and straddle carriers. This feature focuses on customers which have a yard that is physically split by a track plan. Rail dispatchers will be able to plan a move from a yard stack on one side of the rail track to a yard stack on another side of the rail track. N4 will automatically deck, split and dispatch the moves for the required CHEs. Additionally, users are able to create multiple rail transfer queues and configure which type of move should be placed in which rail transfer queue.

- Automated Horizontal Transport improvements. N4 3.4 includes new enhancements in our equipment optimization modules to reduce waiting time in key areas of the terminal, maximize the fleet utilization and increase performance.

- N4 intrablock decking is now completely integrated with allocations and enables a better yard optimization when decking containers within N4. Better decisions and another step towards consolidating our technology stack.

- Our EDI performance improvements for load list, stow plan, booking and discharge list will enable our customers to process messages in N4 in a more efficient and timely manner.

- Support for additional EDI messages, latest versions of existing messages and handling of new message function in existing messages have been added in 3.4.

- System Troubleshooting Guide: Navis N4 System Troubleshooting Guide is a functional knowledge base of N4 system problems, symptoms, and solutions, based on our experience in the field. This guide is available from the N4 Help menu and also available online outside of N4.

- Purging and archiving is being improved in 3.4. Now N4 is able to purge service events related to active bomb cart units that are more than 7 days old. In addition, our users will be able to find more information about purging in the N4 Help that is embedded in the product.

- The In-Place fallback solution makes the upgrade process reliable and reduce downtime, Navis is offering an externalized capability to fall back as a last resort due to upgrade complications. It is available for the customers upgrading from 2.3/2.4/2.5 to 2.6/3.1.
System Health Monitoring Solution: Navis is building a general monitoring solution for N4 to reduce potential outage time with early detection of critical failures and by generating alerts as quickly as possible. Navis will be using Zabbix as its primary application monitoring tool. Zabbix is versatile, open-source, extensible, scalable, and well-suited to monitor Navis applications. We offer our customers access to our templates, scripts, and data visualization tools along with the Navis Appliance for Zabbix. Available for early (beta) use through your project contacts.

The new N4 System Troubleshooting Guide is an online help file that provides system administrators guidance to help diagnose system problems. The N4 System Troubleshooting Guide is available through the NCC under My Cases>Useful Links>Online Documentation.

The performance improvements made in our Business Intelligence module will deliver a better experience to our users, making sure the information is reliable and displayed in a timely manner. In addition, we are working towards improving our technology to provide an almost real time BI experience.

Navis released BI Portal version 1.3.1 which comes with improved dashboards, ad-hoc analysis performance and improvements in data load processing. BI portal is now also supports N4 version 3.2. In addition, the architectural groundwork for BI Ops Monitoring is complete. BI Portal for Ops Monitoring is a new solution for near real-time operations monitoring and will be built on this framework. It will be released incrementally during the 3.5 release cycle as a limited beta release starting with Vessel Ops monitoring dashboards followed by Gate and Yard Operations. BI Portal for Ops Monitoring will be generally available with 3.5.