



## GOALS

- Upgrade TOS to meet the future expected volume growth, improve performance and scalability.
- Complete implementation with no unplanned disruption to daily port operations.
- Further establish the terminal as one of the best equipped and most technologically-advanced container terminals in the region.

## SOLUTION

- Navis N4 upgrade

## RESULTS AT-A-GLANCE

- PTP became the largest single terminal to make the conversion to N4.
- PTP has become the first port in the world to set 3 back-to-back records for container vessel utilization.
- N4 was successfully implemented on time and with no unplanned disruption to daily port operations.

## Port of Tanjung Pelepas (PTP) – Supersedes Its Own Vessel Utilization Record for Third Consecutive Time Following N4 Launch

### CUSTOMER PROFILE:

- Port of Tanjung Pelepas (PTP) is Malaysia's largest and most advanced container terminal, with capacity to handle up to 12.5 million TEUs annually – ranking among the busiest ports in the world.
- PTP is situated on the eastern side of the mouth of the Pulai River in South-West Johor, 45 minutes from the confluence of the world's busiest shipping lanes.
- The terminal operations are backed by state-of-the-art information technology system with links to all port users. By synergizing all of the port's operations and communication centers, the I.T. network system facilitates a free-flow of real-time information and provides near paperless transactions between shipping lines, forwarders, shipping agents and the port ensuring high productivity.

### ABOUT PORT OF TANJUNG PELEPAS (PTP):

PTP is Malaysia's most advanced container terminal, with capacity to handle up to 12.5 million TEUs annually. PTP is situated on the eastern side of the mouth of the Pulai River in South-West Johor, a mere 45 minutes from the confluence of the world's busiest shipping lanes. PTP has 14 linear berths totaling 5.04 km. The terminal is equipped with 58 Super Post Panamax cranes, 16 of which have a 24-box outreach catering for the next generation of Triple E size vessels. These cranes also have twin-lift capability to further enhance productivity.

### SETTING BACK TO BACK RECORDS WITH N4

In August 2018, PTP set the new record for the largest volume of cargo ever stowed on a single vessel, reporting 19,038 TEU with the Mumbai Maersk. Following that accomplishment, and in the face of rapidly increasing processing needs, the terminal recognized the need for change. Operating on Navis SPARCS and Express for years, the software had reached the "end of life," according to PTP, with no further enhancements or upgrade areas available to meeting growing demands. The time had come to join the majority of other terminals that previously operated SPARCS/Express but had since made the transition to N4.



## SUPERSEDES ITS OWN VESSEL UTILIZATION RECORD FOR THIRD CONSECUTIVE TIME FOLLOWING N4 LAUNCH

While the terminal understood the value that upgrading to a software that would allow it to scale its operations would provide, there were initially some reservations. With a volume of almost nine million TEU in 2018, PTP would become the largest single terminal to ever make the conversion to N4. As with any software migration, there is a risk of operational disruption and as a single terminal dealing in massive volumes of cargo, PTP could ill afford any unplanned interruptions to service. This presented a significant scalability test for Navis and was one that PTP wanted to see successfully completed at another facility before moving forward. PTP got its proof in May 2018 when Tianjin Port Group completed its N4 go live across six terminals in record time, becoming the largest N4 terminal complex by TEU - with an annual TEU of 15 million.

Now that it had seen it could be done, and done successfully, PTP moved forward with its plans to upgrade to N4 in 2019. While on the Navis system, PTP continued its steadfast growth and in June 2019 broke its standing record by loading 19,284 TEU onto Maersk Monaco, a second generation Triple E vessel that has a capacity of 20,568 TEU. But it did not stop there, once live on N4 by July 2019, the port did it again, securing its third back-to-back record for vessel utilization after the MSC Gulsun, the largest container ship in the world, departed with 19,574 TEU. This milestone squarely puts PTP among the limited number of ports world-wide with the capacity and capability to accommodate mega size vessels as it is outfitted with the right facilities and equipment. Its strategic investment in N4 will ensure the port keeps up with rapid changes within the shipping industry and is able to service the latest generation of container vessels designed to handle increasingly bigger volumes.

I have personally been involved in many ‘go lives’, but never one of this size and scale and also never one that has gone so well in so many areas, including change management, adoption of new processes and frontline technology.

Without a doubt, the ownership of this project - from the shareholder level to the hatch clerk front line and everybody in between - has been second to none. This is the result of a lot of hard work from many people, both onsite and globally. Thanks to our great foundation and Navis’ second to none commitment to this project’s success, we have done what many thought was impossible, by migrating one of the single biggest facilities in the world with no unplanned impact to our landside or waterside customers.

— **JOE SCHOFIELD**  
COO, Port of Tanjung Pelepas (PTP)



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