

WHITEPAPER · MARITIME

Steering the Digital Fleet

HPE Networking for maritime, and the architecture behind it

With views from

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THE VOYAGE AHEAD

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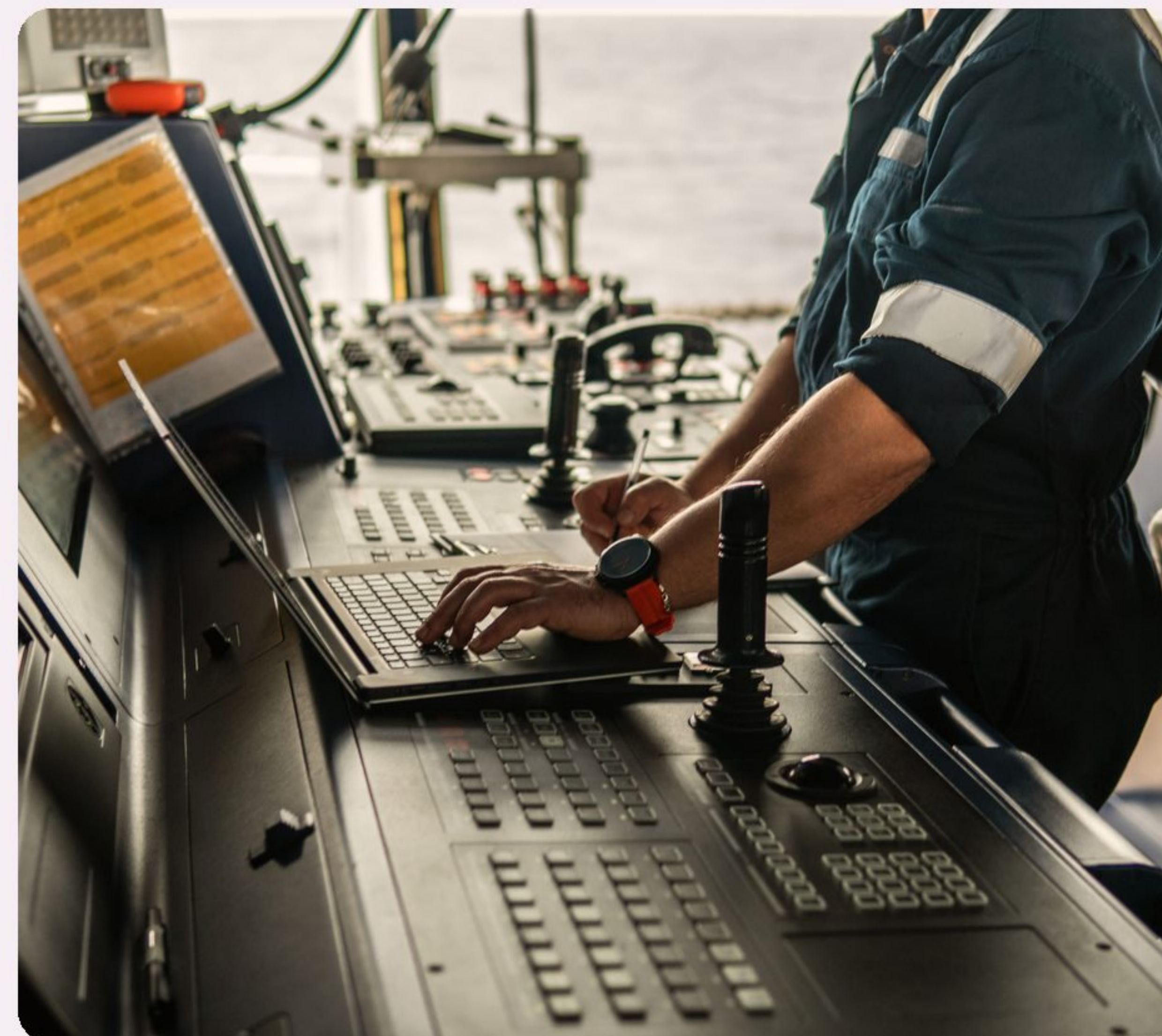


SECTION 01

On the bridge

Maritime is running two clocks at once. One is the operational clock that has always governed the sea: schedules, tides, port slots, crew rotations, fuel. The other is a digital clock that now runs just as fast, driven by guest expectations, regulation, cyber risk and the rising tide of AI.

Ports, cruise lines and ship managers are modernising across both at once, often with lean teams and infrastructure never designed for it. The ones pulling ahead have realised something simple: every digital ambition depends on a network that reaches from ship to shore and holds up in between.



"You cannot bolt digital transformation onto a fragile network and hope it floats. The network is the keel. It is the thing everything else is built on."

Steve Hemmings, Insight Maritime CTO

SECTION 02

Why now: the maritime moment

The pressure to modernise is not abstract. Trade volumes, guest demand, cyber risk and decarbonisation deadlines are all rising at once, and every one of them lands on the network first. The numbers make the case for acting now.

80 %

of world trade is carried by sea, across 50,000+ vessels and 7,000+ ports.

UNCTAD / industry

+103 %

rise in maritime cyber incidents in 2025 versus 2024.

CYTUR, 2026

37.7 M

ocean-going cruise passengers forecast for 2025, a new record.

CLIA, 2025

Net-zero

GHG from international shipping by or around 2050, with 20–30% cuts by 2030.

IMO 2023 Strategy

1,000+ per day

vessels a day experience GPS signal interference in high-risk regions, a direct safety and navigation threat.

+150%

increase in maritime cyber incidents from 2020 to 2024, with OT compromise now the paramount threat.

The demand is real. Whether it converts depends on the network beneath it. That is where this whitepaper begins.

[Explore the Insight Maritime Hub](#) >



SECTION 03

A new era for HPE Networking

In 2025 HPE completed its fourteen billion dollar acquisition of Juniper Networks. Strategic for two reasons that matter to maritime: networking for AI, where a high-performance secure fabric moves the huge data volumes AI demands, and AI for networking, where Juniper's Mist platform was built AI-native to run the network itself. Combined with the AI in HPE Aruba Networking Central, it creates one unified portfolio.

[Read: A New Era for HPE Networking ›](#)

[Watch: Mark Wilkinson on HPE Networking ›](#)

THREE PRINCIPLES, ONE NETWORK



ORCHESTRATE

Zero-touch provisioning. Ship a switch to a vessel or remote terminal and configure it automatically from a central template. IT can say yes, fast.



OBSERVE

Full visibility across the estate, with the Marvis AI engine surfacing root cause before a user raises a ticket. HPE GreenLake is the platform beneath it.



PROTECT

Security built into the core, not bolted on. Aruba's wireless heritage put security first, vital when guest, crew and OT share one hull.

"Aruba Central was the very first application HPE ever put on GreenLake. The unification is real: one AI-native platform, whether you run Aruba today or Juniper Mist tomorrow."

— Mark Wilkinson, Insight CTO

Orchestrate, observe, protect — from the quayside to the bridge.

SECTION 04

The engine room: Aruba, Mist AI, Marvis

An AI-native network is not one product. It is three working parts: the management plane that unifies the estate, the AI platform that learns it, and the assistant that runs it. Together they turn a maritime network from something you firefight into something that largely drives itself.



HPE Aruba Networking Central

The single pane of glass

- One cloud dashboard for wired, wireless, WAN and IoT, across campus, branch, data centre and vessel.
- AIOps insight, IoT device profiling and identity-aware Zero Trust segmentation built in.
- Delivered on HPE GreenLake. A Gartner Magic Quadrant Leader 20 times running.

Manage ›



HPE Mist AI

The AI-native platform

- Real-time visibility down to individual users and sessions, on more than a decade of Mist data science.
- Digital experience twins simulate real user connections and fix issues before anyone feels them.
- An Actions dashboard with driver-assist guidance, or fully automated response when you are ready.

Learn ›



HPE Marvis AI

The conversational assistant

- Ask the network a plain-English question and get a real-time diagnosis and recommended fix.
- Marvis Actions pinpoints root cause and, with permission, self-drives the resolution in real time.
- One assistant across WLAN, LAN, WAN, security and data centre, so a lean crew troubleshoots in minutes.

Meet Marvis ›

Aruba Central
unifies the estate



Mist AI
learns and predicts



Marvis
runs it for you

SECTION 05

Networking at the maritime edge

A maritime network is one of the most demanding environments in enterprise IT. It spans ports and terminals, vessels at sea and the logistics between them, often with intermittent connectivity and a mix of guest, crew and OT traffic on one infrastructure. HPE Networking is built for exactly this, powered by Aruba, Juniper, Mist AI and Marvis.

Guest experience

Personalised, always-on connectivity, kept separate from crew and OT on the same hull.

Operational technology

Cranes, sensors, cargo and safety systems on a network that stays up and stays segmented.

Edge analytics

Real-time insight processed on board or at the port, not waiting for a satellite backhaul.

AI readiness

A high-performance, secure fabric ready for the data movement AI demands.

A cruise ship is a floating smart city. One network, many masters.

[Explore Insight maritime transformation >](#)

SECTION 06

Networking as a utility

Owning and refreshing hardware is a poor fit for maritime economics. HPE Networking as a Service, delivered by Insight, turns static hardware into a scalable outcome. You consume networking through a predictable subscription and the infrastructure stays evergreen.

THE OLD WAY

Large upfront CapEx

Manual, slow deployments

In-house burden

Aging, insecure hardware

THE NaaS WAY

Predictable monthly OpEx

Rapid, cloud-speed scaling

24/7/365 Two-in-a-Box support

Always-current, AI-ready

IS NAAS RIGHT FOR YOU?

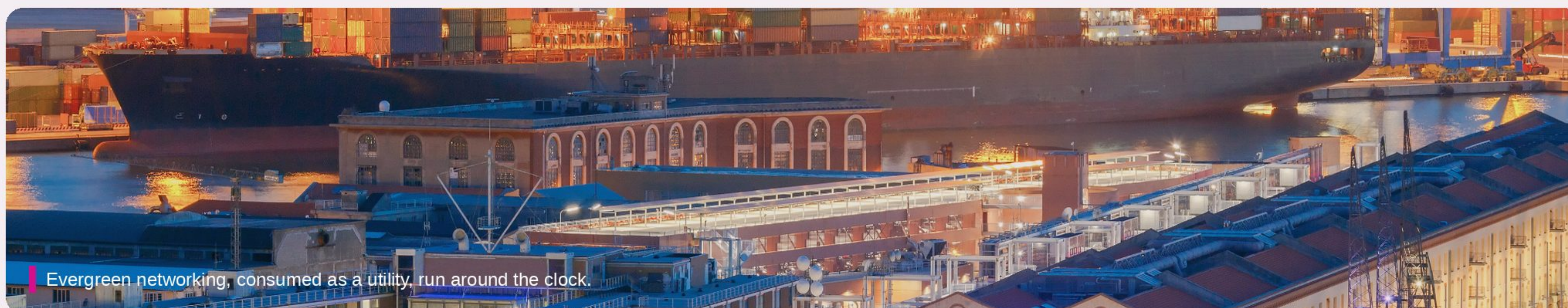
If more than two are true, let's talk.

- ✓ A network refresh is due within twelve months.
- ✓ You are expanding fast through M&A.
- ✓ You want to move CapEx to OpEx and free cash.
- ✓ The team is stretched keeping up with patches.
- ✓ Multiple sites run non-standard hardware.

[Learn more about HPE NaaS](#) ›

"You do not own the power station to turn on the lights. Why own and hand-patch a network across forty ports and a hundred vessels? Consume it as a utility."

— [Mark Wilkinson, Insight CTO](#)



Evergreen networking, consumed as a utility, run around the clock.

SECTION 07

From network to platform: HPE GreenLake

The network is the entry point, but the destination is a platform. HPE GreenLake brings the cloud experience to wherever the data lives, onboard a vessel, at a port or in the data centre. It is the same platform that already underpins HPE Networking, so the network you consume as a service and the platform that runs your compute, storage and AI are one and the same.

Your apps, data and AI

consumed as a service

Private cloud · VMs · containers

self-service

Compute · storage · networking

multi-vendor

HPE GreenLake platform

one control plane

ONE PLATFORM · EDGE TO CLOUD

WHAT THIS MEANS AT SEA

● **Flex with the season**

Capacity scales with demand, not sized for the peak and paid for all year.

● **No new islands of IT**

New vessels or terminals join the same platform, not another silo.

● **One place to govern**

The whole estate visible and controllable, so a lean team runs a global fleet.

"When we talk about the maritime platform, let me be clear what sits underneath it. It is HPE GreenLake. One pay-per-use platform from ship to shore, with one bill and one control plane."

— Steve Hemmings, Insight Maritime CTO

SECTION 08

Five pillars, one architecture

Steve Hemmings' maritime go-to-market: five outcomes on one HPE GreenLake foundation, each backed by named, delivered capability across UK ports, cruise and ship management.

THE GO-TO-MARKET

What's behind each pillar

01

Ship-to-Shore IT Lifecycle

IT infrastructure on tap. From CapEx burden to managed service.

HPE

GreenLake, HPE Networking & NaaS, ProLiant & Alletra as a service.

INSIGHT

Insight Managed Services & FinOps, lifecycle procurement to decommission.

02

AI Acceleration

From pilot to production in 90 days. Architecture-first AI.

HPE

HPE Private Cloud AI with NVIDIA, GreenLake for AI, AI-ready fabric.

INSIGHT

Insight AI practice & accelerators, delivery through the Lighthouse ODC.

03

Cyber Readiness

Beyond the breach. Provable readiness, ship to shore.

HPE

Aruba & Mist zero-trust, Zerto recovery, security in the platform core.

INSIGHT

Insight Managed Security, cyber resilience assessment & vault.

04

ESG & Sustainability

Turn compliance into capital. Turn carbon into currency.

HPE

GreenLake sustainability metrics, energy-efficient ProLiant Gen12.

INSIGHT

Insight data & reporting services, ESG models tied to operations.

05

Experience-Enhancing Execution

Integrate what you have. Unlock what's next.

HPE

GreenLake as the integration platform, unified management.

INSIGHT

Insight software engineering & systems integration.

ENTRY POINT

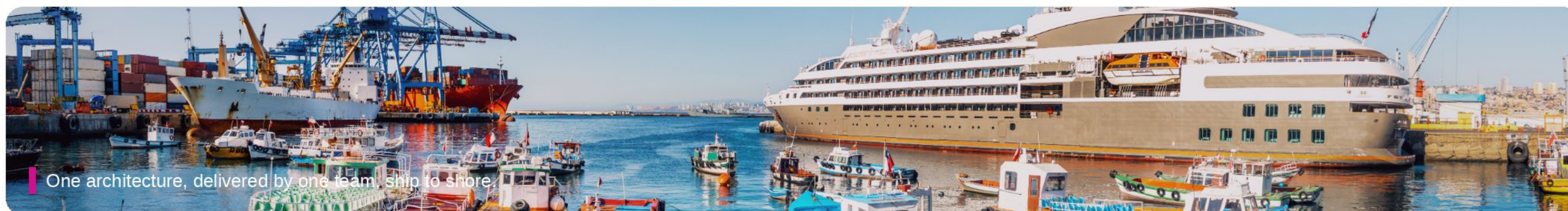
Maritime Discovery Assessment

One day, eight domains. A proven readiness assessment that maps you straight into the five pillars.

DELIVERY ENGINE

Lighthouse ODC

An offshore development centre spanning AI, platform and domain expertise behind all five pillars.



One architecture, delivered by one team, ship to shore.

SECTION 09

What the network unlocks

Once the network is intelligent and the platform is in place, the rest of the HPE portfolio becomes a set of services on the same foundation rather than separate procurements. This is where the network investment starts to compound.

Compute

ProLiant

Secure, energy-efficient servers for edge, port and AI factory, managed the cloud way.

Storage

Alletra

Intelligent storage with built-in resilience, the same cloud model for vessel and port data.

Private Cloud AI

NVIDIA

A turnkey stack for production AI with full private control of sensitive data.

Cyber resilience

Zerto

Continuous data protection and recovery in minutes, so an event at sea is not a fleet crisis.

Sustainability

GreenLake

Efficiency and reporting built into the platform, feeding the ESG pillar.

One partner

Insight

From network to platform to managed operations and FinOps: funded, built and run.

"The network is the thin end of a very valuable wedge. Once a fleet is on the platform, adding AI or storage is a service call, not a new project."

— Mark Wilkinson, Insight CTO

[Explore HPE Networking ›](#)

[See the Captain's Log ›](#)

SECTION 10

Why Insight

HPE builds the technology. Insight makes it real for maritime. As a leading global Solutions Integrator, we bring the pieces together into outcomes, with deep expertise across HPE GreenLake and genuine experience in maritime, hospitality and beyond.

- **Solutions-led, not box-led**

We align technology to guest value, operational resilience and measurable outcomes.

- **Accredited by HPE**

Insight holds HPE GreenLake ASE accreditation and the HPE Certified Sovereign Cloud credential.

- **Proven in maritime**

A proven Maritime Discovery Assessment, and the Lighthouse ODC to scale delivery.

- **One partner, whole journey**

From network, through platform, to managed operations and FinOps: funded, built and run.

The next log entry

Start with a Maritime Discovery Assessment · maritime@insight.com

Steering the Digital Fleet

HPE Networking for maritime, and the architecture behind it. Start with a Maritime Discovery Assessment or a Network Assessment to see whether your infrastructure is self-driving, AI-ready and secure.

FURTHER READING & VIEWING

- › Watch — Mark Wilkinson on HPE Networking
- › HPE Community — Captain's Log
- › A New Era for HPE Networking
- › HPE Aruba Networking
- › HPE Mist AI
- › HPE Marvis AI
- › Enabling Maritime Transformation
- › Insight Maritime Hub