

MARINE REFERENCE ARCHITECTURE

A repeatable UniFi architecture for the connected yacht.

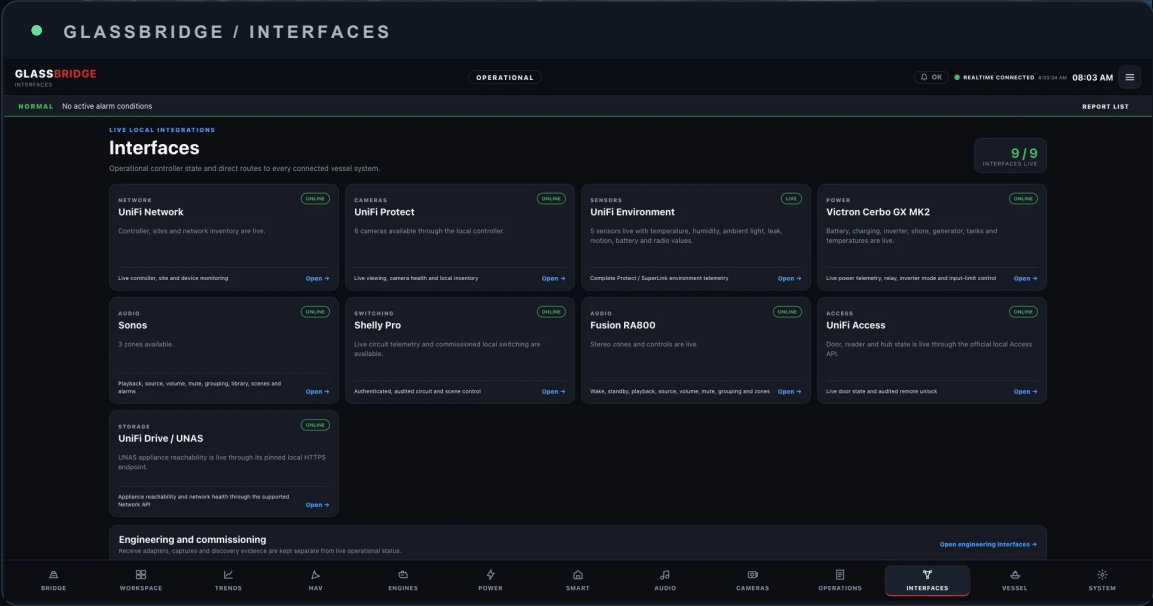
UniFi Network, Protect AI, Access, Drive and SuperLink - unified by a local-first GlassBridge edge and a clear marine safety boundary.

- 01

Current
Controlled live-lab
- 02

Next
First vessel pilot
- 03

Then
Builder / refit programme



One local vessel experience.

Actual product capture

One technical review. One controlled pilot. Evidence before promotion.

Applicant: Platinum Halo (Pty) Ltd trading as OnPointStack | Project: GlassBridge

Peter van Wyk | CEO & Founder | Cape Town, South Africa

ACTUAL PRODUCT / CONNECTED SYSTEMS

Every interface. One place.

Controlled live-lab capture

GLASSBRIDGE / CONNECTED SYSTEMS

GLASSBRIDGE

INTERFACES

OPERATIONAL

OK

REALTIME CONNECTED 9:03:34 AM 08:03 AM

NORMAL

No active alarm conditions

REPORT LIST

LIVE LOCAL INTEGRATIONS

Interfaces

Operational controller state and direct routes to every connected vessel system.

9/9
INTERFACES LIVE

NETWORK

UniFi Network

Controller, sites and network inventory are live.

Live controller, site and device monitoring

Open →

ONLINE

CAMERAS

UniFi Protect

6 cameras available through the local controller.

Live viewing, camera health and local inventory

Open →

ONLINE

SENSORS

UniFi Environment

5 sensors live with temperature, humidity, ambient light, leak, motion, battery and radio values.

Complete Protect / SuperLink environment telemetry

Open →

LIVE

POWER

Victron Cerbo GX MK2

Battery, charging, inverter, shore, generator, tanks and temperatures are live.

Live power telemetry, relay, inverter mode and input-limit control

Open →

ONLINE

AUDIO

Sonos

3 zones available.

Playback, source, volume, mute, grouping, library, scenes and alarms

Open →

ONLINE

SWITCHING

Shelly Pro

Live circuit telemetry and commissioned local switching are available.

Authenticated, audited circuit and scene control

Open →

ONLINE

AUDIO

Fusion RA800

Stereo zones and controls are live.

Wake, standby, playback, source, volume, mute, grouping and zones

Open →

ONLINE

ACCESS

UniFi Access

Door, reader and hub state is live through the official local Access API.

Live door state and audited remote unlock

Open →

ONLINE

STORAGE

UniFi Drive / UNAS

UNAS appliance reachability is live through its pinned local HTTPS endpoint.

Appliance reachability and network health through the supported Network API

Open →

ONLINE

Engineering and commissioning

Receive adapters, captures and discovery evidence are kept separate from live operational status.

Open engineering interfaces →

BRIDGE

WORKSPACE

TRENDS

NAV

ENGINES

POWER

SMART

AUDIO

CAMERAS

OPERATIONS

INTERFACES

VESSEL

SYSTEM

Prepared independently for technical review. No Ubiquiti endorsement or product certification is implied.

02 / 08

STRATEGIC FIT

Why this is worth a technical review

Ubiquiti has already demonstrated the maritime fundamentals. GlassBridge proposes a controlled path to a repeatable commercial yacht architecture.

MARITIME PRECEDENT

RVIB Nathaniel B. Palmer

Ubiquiti's published case study shows UniFi Network and Protect operating on a moving, bandwidth-constrained research vessel.

6 DECKS	Shipwide wired, wireless and video
72 PEOPLE	Scientists and crew supported aboard
MULTI-WAN	Starlink, LTE/5G, Iridium and shore links
LOCAL FIRST	Offline-tolerant administration and a shore-side testbed

GLASSBRIDGE EXTENSION

The next commercial maritime reference pattern

A yacht is smaller than the Palmer, but more fragmented: owner, captain, crew, guests, AV, cameras, machinery context, privacy and intermittent WAN all share the same moving platform.

01 FULL STACK, ONE VESSEL	02 ROLE-AWARE EXPERIENCE
Network, Protect AI, Access, Drive and SuperLink as one governed onboard infrastructure.	Owner, captain, crew, guest and service access remain separate and explicit.
03 UNIFI BECOMES CONTEXT	04 REPEATABLE LIFECYCLE
Network health, AI detections, access events, Drive state and SuperLink sensors join vessel context.	A model-specific path for yacht builders, refit yards, fleets, handover and after-sales.

Working live-lab and public product evidence. No commissioned customer yacht is claimed.

Source: Ubiquiti case study - RVIB Nathaniel B. Palmer; GlassBridge public product and builder pages (accessed 4 September 2026).

REFERENCE DESIGN

From changing WAN to one onboard experience

Current live-lab integrates UniFi Network, Protect AI, Access, Drive and SuperLink. First-vessel scope adds marine RF and commissioning validation.

CHANGING WAN

STARLINK

MARINA / SHORE

5G / LTE

OPTIONAL SAT

UNIFI NETWORK

Gateway + switching + WiFi

- Multi-WAN policy and health
- 10GbE aggregation
- Managed PoE / 2.5GbE
- WiFi 7 and RF planning
- VLANs, roles and isolation

PROTECT + ACCESS

AI vision + physical access

- UNVR and onboard cameras
- AI detections + camera health
- Access credentials and roles
- Gangway / door event state
- Evidence and alarm correlation

DRIVE + SUPERLINK

Storage, sensors and I/O

- UNAS / UniFi Drive storage
- Documents, media and evidence
- Storage health and resilience
- Entry, motion and environment
- Reviewed relay / I/O workflows

GLASSBRIDGE EDGE

One local vessel experience

- Supported APIs / webhooks / SMB
- Source, quality, age and state
- Owner, captain, crew + guest
- Permissions, history and audit
- Selected read-only Cloud status

SEGMENTED NETWORKS

BRIDGE / OT

CAMERAS

OWNER

CREW

GUEST

AV / IOT

SERVICES

MARINE SOURCES

NMEA 2000 / 0183 | engines | Victron / Modbus | power | tanks | HVAC | audio | original switching and alarms

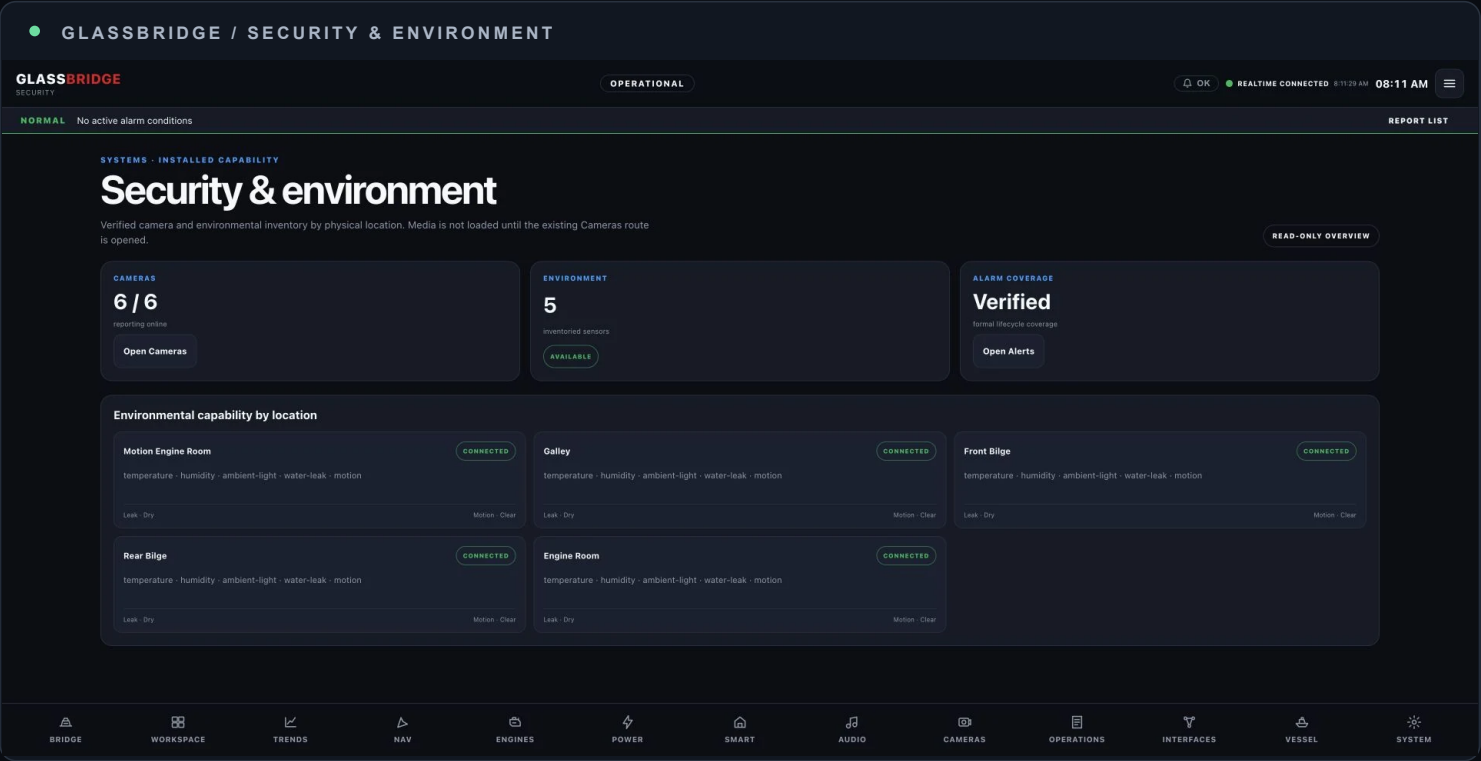
AUTHORITY BOUNDARY

Original navigation, propulsion, fire, bilge and certified controls remain independently authoritative.

PROTECT AI + ACCESS + DRIVE + SUPERLINK

Turn isolated events into vessel context

The vessel pilot validates marine RF, placement, power, supported interfaces and response behavior.



Actual product capture: camera availability, sensors and alarm coverage.

PROPOSED VESSEL ZONES

01 Gangway / transom

Access credential + person event

04 Technical spaces

Heat, humidity, leak + camera

02 Cabins / hatches

Access / entry + motion

05 Tender garage / swim platform

Entry, motion + AI evidence

03 Galley / cold storage

Temperature + leak + record

06 Bridge / comms rack

Network, Drive + environment health

PROTECT AI + ACCESS

Local recording, camera health and supported AI detections combine with credential, door, gangway and visitor access events.

UNIFI DRIVE

Onboard manuals, service records, shared files, incident evidence, backups, permissions and storage health remain local.

SUPERLINK SENSOR + RELAY

Entry, motion, temperature, humidity, ambient light, water leak and reviewed non-safety-critical relay / I/O workflows.

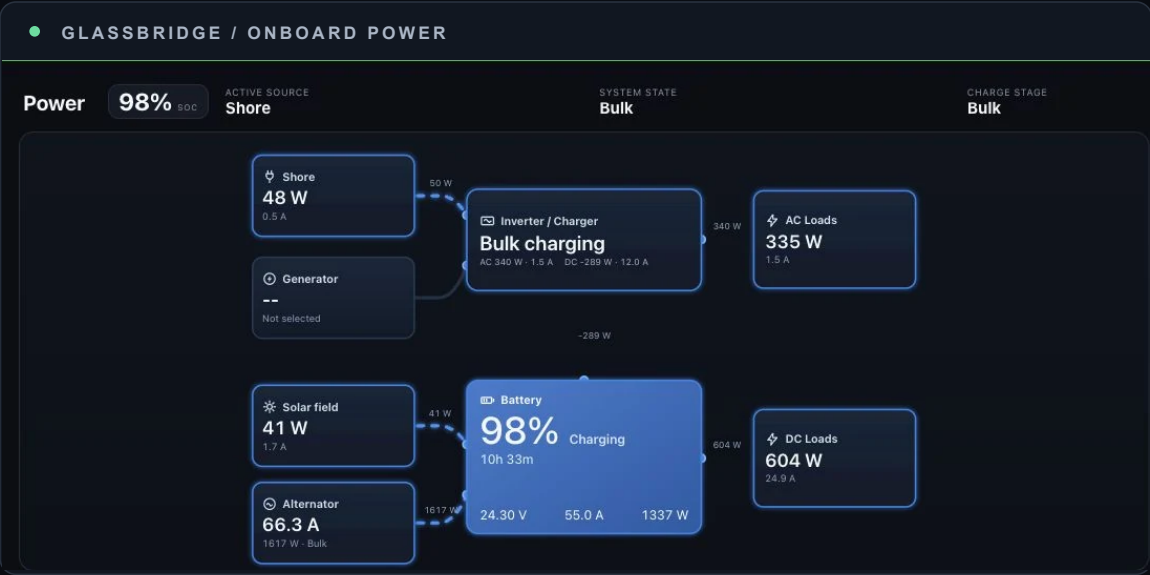
GLASSBRIDGE CONTEXT

Unify Network, Protect, Access, Drive and SuperLink state with source, time, zone, quality, permissions and vessel context for reviewed action.

ACTUAL PRODUCT / LOCAL VESSEL EXPERIENCE

The same interface. Across the systems aboard.

Electrical flow, local alarm state, history and watchkeeping - shown in the GlassBridge product captures published on glassbridge.yachts.



Follow the energy aboard.

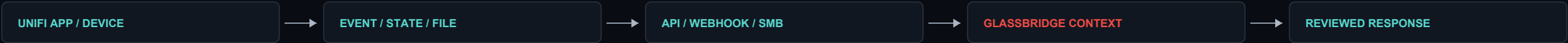
Electrical flow across shore, generation, storage and vessel loads.



Keep local alarm state visible.

Alarm history and an advisory watch timer in one consistent interface.

THE REVIEWED EVENT PATH



Unaltered, controlled live-lab screenshots from glassbridge.yachts. Click any product capture to open its published full-size image.

CONTROLLED PILOT

One vessel. Then a repeatable programme.

Evidence before promotion: help define the smallest technical proof worth commissioning, without endorsing an unvalidated marine installation.

01

ARCHITECT REVIEW

Scope, boundaries, RF and product fit

02

DESIGN + BOM

Topology, VLANs, PoE, WAN and zones

03

LAB VALIDATION

API, webhook, SMB and event paths

04

FIRST VESSEL

Install, document and verify physical truth

05

ACCEPTANCE

Coverage, AI, access, storage, sensors and rollback

06

SCALE / STORY

3-5 vessels or builder demonstrator; case study if earned

ACCEPTANCE EVIDENCE

RF + WIRED COVERAGE

Decks, cabins, technical spaces and exposed areas

WAN BEHAVIOR

Shore, 5G, Starlink and degraded-link transitions

LOCAL OPERATION

Management, recording and vessel interface without public Internet

PROTECT AI + ACCESS

Detections, recording, credentials, privacy and event paths

DRIVE + SUPERLINK

Storage resilience, permissions, RF, sensor and relay response

GOVERNANCE

Source provenance, user roles, audit, failure states and rollback

INTENDED COMMERCIAL SCOPE

1

reference vessel

3-5

vessel / builder pilot

>\$50k

aggregate 3-5 vessel / builder programme, subject to design

First reference-vessel UniFi spend

US\$10,000-US\$50,000

Experts submission uses the first-vessel US\$10,000-US\$50,000 range. The aggregate follow-on programme is expected to exceed US\$50,000, subject to design.

THE REQUEST

One technical review. One controlled pilot.

A case study only after the evidence. GlassBridge is asking for the correct technical and channel relationship - not a marketing endorsement in advance.

01

SOLUTIONS ARCHITECT REVIEW

Validate the topology, product fit, segmentation, RF approach, PoE and multi-WAN assumptions.

02

PRODUCT CONTACTS

Connect us with the Network, Protect, Access, Drive, SuperLink and integrations teams.

03

SUPPORTED INTEGRATION PATH

Confirm supported APIs, webhooks, Drive / SMB services and SuperLink telemetry and relay-control boundaries.

04

EMEA CHANNEL COORDINATION

Align distributor, Partner Portal and Professional Integrator relationships for South Africa and future US activity.

05

FIRST-VESSEL PILOT SUPPORT

Agree acceptance evidence, support boundaries and the smallest vessel installation worth proving.

06

CASE-STUDY CONSIDERATION

After commissioning, consider an evidence-led marine story and a repeatable builder / refit programme.

PROPOSED 45-MINUTE REVIEW

5 min - project and current truth

10 min - Protect AI / Access / Drive / SuperLink

10 min - live-lab and product evidence

10 min - pilot scope and next actions

10 min - topology and safety boundary

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glassbridge.yachts | [OnPointStack](https://OnPointStack.com)

Official references: experts.ui.com | [Palmer maritime case study](#) | [UniFi APIs](#) | [Protect AI](#) / [Alarm Manager](#) | [Access](#) | [Drive](#) / [SMB](#) | [SuperLink](#).