Broadband's Only Ready-to-Deploy and Integrated PNM, PMA & Congestion Management Solution

Automated Actions to Improve Broadband Network Performance & Extend the Life of Your DOCSIS® Network

Only Vantage from OpenVault improves network performance and QoE through proactive and automated capacity optimization and impairment identification with prioritization of network repairs. OpenVault has deployed more PNM, PMA and Congestion Management solutions at more operators and in more countries than any other provider. For over a dozen years, we've been delivering reduced truck rolls, fewer calls to customer care, and improved QoE – all resulting in lower CAPEX and OPEX for DOCSIS broadband operators.

VANTAGE PNM

OpenVault's AI-powered, proactive network maintenance (PNM) solution — enhanced with **Integrated Action AI, Agents**, and **Upstream Monitor Alarming** — empowers broadband providers to optimize network operations, reduce costs, and elevate subscriber QoE.

- Swiftly detect and capture RF impairments
- Automate detection-to-resolution workflows with **Integrated Action AI**
- Enable real-time field decision-making through embedded **Agents**
- Monitor upstream anomalies and trigger fast response with **Upstream Monitor Alarming**
- Optimize workforce and resource allocation for precise issue resolution
- Enhance subscriber quality of experience
- Minimize OPEX and workforce-related costs

50% DECREASE in repeat calls and reduced churn within 1st 60 days

80% REDUCTION in Immediate Action Modems

15% REDUCTION in Critical/Red Modems

25% REDUCTION in Cable Modem Troubles per 100 Customers

VANTAGE PMA

OpenVault's Profile Management Application (PMA) is the only holistic, non-hardware PMA that ensures the highest speeds are available to all subscribers. The dynamic creation of highly optimized modulation profiles with granular application by the CMTS allows providers to maximize the ROI on their DOCSIS 3.1 network, increasing resiliency and delivering higher broadband speeds.

- **VENDOR-AGNOSTIC** — Closed-loop, automated data-driven
- **FULLY INTEGRATED w/PNM** — Capacity optimization & Impairment ID w/prioritization of network repairs
- **WORKS OUTSIDE THE CMTS** — Creates additional profiles, then assigns them to the CMTS
- **OPTIMIZES MODULATION PROFILE** — For each OFDM/OFDMA channel and assigns profiles to modems
- **MAXIMIZES CAPACITY & INCREASES RESILIENCY** — Continual granular analysis, calculation & evaluation of each modem & changing plant conditions

UP TO **40%** IN CAPACITY GAINS

CONGESTION MANAGER

Our flexible solution detects congestion, identifies contributors, and takes automated actions to minimize their impact. By leveraging the DOCSIS standard PCMM protocol, Congestion Manager enforces complex business rules to ensure a fair share environment with markedly reduced congestion. You'll avoid:

- Service disruptions
- Subscribers' upstream speeds not meeting their expectations and needs
- Higher volumes of interaction with customer care and increased number of unnecessary truck rolls
- Unexpected/mistargeted financial investment by adding capacity through re-engineering infrastructure

INDUSTRY LEADERSHIP FOR OVER A DECADE

OpenVault serves 150+ broadband operators in the North America, Europe, Asia Pacific, Latin America and Caribbean markets. We've helped them improve annual revenue by 100s of millions of dollars and we do so for more operators than any other broadband-focused software vendor in the world. No other company knows more about broadband subscriber usage behavior and how to use network data to drive revenue, reduce costs, better manage networks and improve customer satisfaction and retention than OpenVault.

Contact us at sales@openvault.com

OPENVAULT
Unlocking the potential of broadband

VANTAGE

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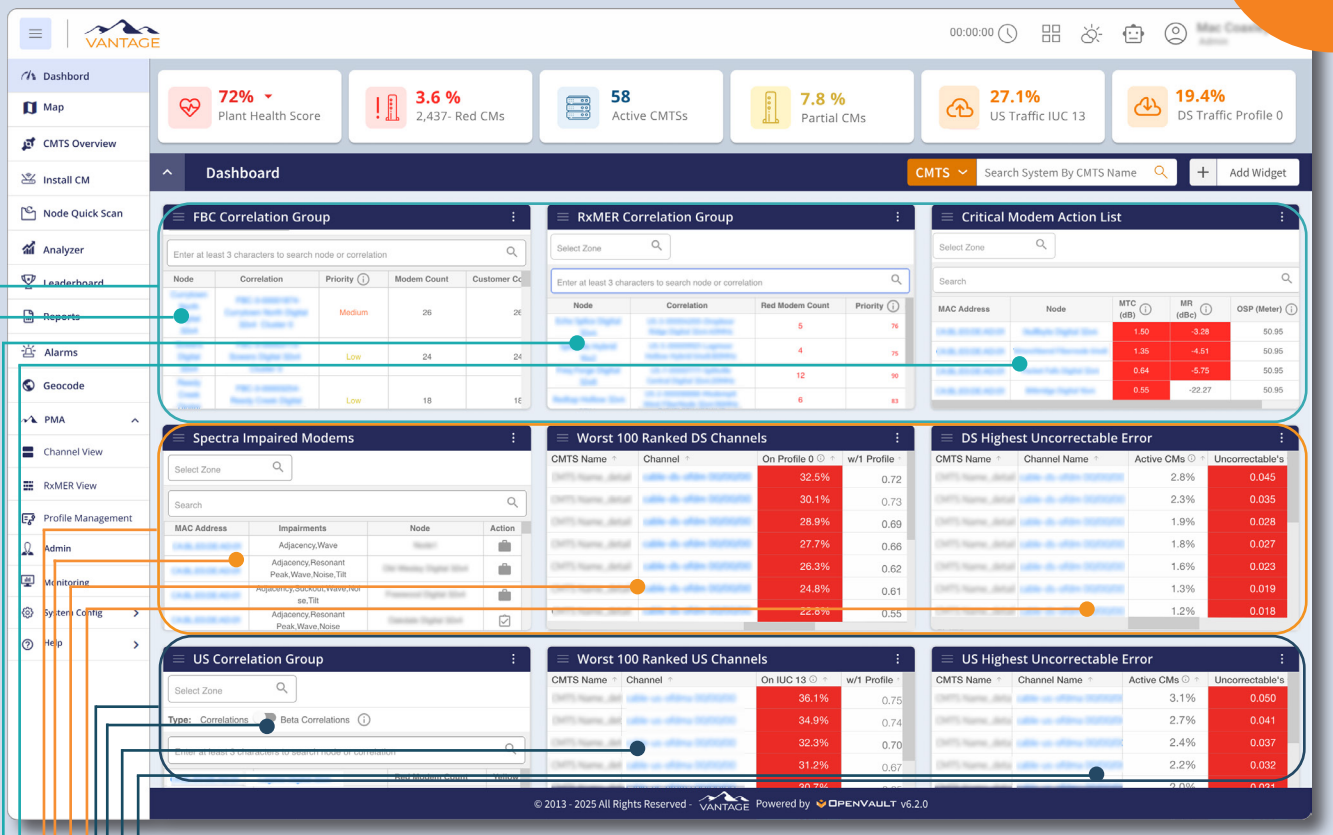
The Vantage Dashboard

The intuitive and customizable OpenVault Vantage interface streamlines adoption across plant technician teams, enabling faster response, fewer truck rolls, and better network health — all powered by actionable AI and automation. In this example, the dashboard is organized by three rows: **Top Row** = Detection (Where is the pain starting?), **Middle Row** = Downstream Diagnosis (How bad is the customer experience?), and **Bottom Row** = Upstream Diagnosis (What's feeding instability back into the network?). Take a closer look:

Customizable with Widgets You Choose
This example features capacity/redundancy, the RXMer correlation and the critical modem action list



Row 1: Provides an Initial View on Network Issues
This view zeroes in on correlated impairments (FBC + RxMER) and puts the most critical modems front and center, impacting customers now.

- **FBC Correlation Group:** Identifies clusters of modems with likely shared plant-level issues. — PNM
- **RxMER Correlation Group:** Flags impairments tied to signal degradation or noise. — PNM
- **Critical Modem Action List:** Instantly shows which devices need immediate attention, sorted by severity. — PNM

Row 2: Downstream Deep Dive "Signal Impairments Meet Channel Efficiency"
After identifying pain points with Row 1, this row explains *why the experience is impaired*, especially in downstream service delivery.

- **Spectra Impaired Modems:** Visual signature issues like tilt, suckout, and resonance. — PNM
- **Worst 100-Ranked DS Channels:** Where modem traffic is stuck on low-efficiency profiles like Profile 0. — PMA
- **Highest DS Uncorrectable Errors:** The channels dropping bits are clear indicators of degraded service. — PMA

Row 3: Upstream Weaknesses Exposed "The Return Path's Worst Offenders"
No view is complete without understanding the upload path – where impairments often hide.

- **US Correlation Group:** Shows upstream clusters experiencing shared degradation. — PNM
- **Worst 100-Ranked US Channels:** Highlights channels over-reliant on IUC 13 (the fallback), with little tuning **flexibility.** — PMA
- **Highest US Uncorrectable Errors:** The "red zone" for upstream instability. — PMA

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