

Fiber | Cable/DOCSIS | Wifi

Data-driven support for Cable/DOCSIS networks

Preventive & Corrective maintenance in DOCSIS networks with DOXray

HFC challenges

HFC/DOCSIS networks are complex and require a lot of maintenance and monitoring to ensure high performance and reliability. Some of the common challenges faced by HFC/DOCSIS network operators include:

 Signal Degradation: As the signals travel along the coaxial cables, they can become degraded by noise, interference, and attenuation, leading to signal quality issues.



- 2. Network Capacity: With the increasing demand for high-speed internet and video services, HFC/ DOCSIS networks need to be constantly monitored and upgraded to ensure they can handle the increasing network capacity requirements.
- 3. Equipment Maintenance: The HFC/DOCSIS network consists of a complex set of equipment, including amplifiers, splitters, nodes, and headends. Maintenance and monitoring of this equipment are essential to ensure reliable network performance.

Introducing QDXray

QDXray is a powerful service assurance product designed for telecom and cable-broadband providers. By bringing together data sources from telemetry stacks, GIS systems, network topology administration, and customer provisioning software, QDXray provides actionable insights and analytics using data science. In this product folder, we will describe how QDXray can help address challenges in a HFC/DOCSIS network by applying quality indicators and KPIs to all elements in the network.



QDXray can help address these challenges by providing a data-driven approach that applies quality indicators and KPIs to all elements in the HFC/DOCSIS network. With QDXray, network operators can gain visibility into the network performance and identify potential issues before they become critical. Some of the key features of QDXray that can help address the challenges in HFC/DOCSIS networks:

• Data Aggregation and Analytics: QDXray aggregates data from multiple sources, including telemetry stacks, GIS systems, network topology administration, and customer provisioning software. Using advanced analytics and data science, QDXray can identify patterns and trends in the data to help operators optimise the network performance.



Feature highlight

DOCSIS 3.0 PNM through preequalization. Graphs are good to visualise per modem PNM, but in addition, segments behind node & amp are analysed and reported.



DOCSIS 3.1 PNM through IUC usage per segment and per footprint, OFDMA RX-MER collection and analysis. QDXray is an essential buildingblock in the PMA architecture, where QDXray can initiate optimisation of OFDMA IUC's.



Just a few of many features. QDXray is one of the few products featuring cloud-based service-assurance for Cable-DOCSIS as well as FTTX network deployments. Let us engage with you and discover your challenges and our solution.

- Quality Indicators and KPIs: QDXray applies quality indicators and KPIs to all elements in the HFC/DOCSIS network, including amplifiers, splitters, nodes, and headends. This helps operators identify potential issues and take corrective action before they impact the network performance.
- Network Visualization and Mapping: QDXray provides a network visualization and mapping feature that helps operators visualize the network topology and identify potential areas of performance issues or disruptions.
- Alerts and Notifications: QDXray sends alerts and notifications to operators when potential issues are identified, enabling them to take corrective action before the issue becomes critical.
- Historical Trend Analysis: QDXray provides historical trend analysis, enabling operators to identify patterns and trends in the network performance over time. This can help identify potential issues and inform network planning and upgrades.



QDXray is a powerful service assurance product that can help address the challenges in HFC/DOCSIS networks by applying quality indicators and KPIs to all elements in the network. With its data-driven approach, advanced analytics, and network visualization features, QDXray provides operators with the visibility and insights they need to optimize network performance, reduce downtime, and improve customer satisfaction. Thank you for your interest in our product. If you have any questions about our company or products, please don't hesitate to contact us. You can reach us at:

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We look forward to hearing from you!