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Pipeline Refinery™ - Network Event Correlation & Service Metrics Engine

The Refinery module provides Pipeline's intelligent stream processing and metrics correlation capability. Massive volumes of low-level DOCSIS network events are fed into the Refinery and transformed into key subscriber, service, and network metrics. The Refinery's derived metrics are made available to other Pipeline modules or third party applications through open interfaces and flexible Service oriented architecture (SOA).

Customer Endorsement

"The Refinery's embedded correlation capability provides us with key subscriber, service, and network metrics in real-time - enabling multiple northbound B/OSS applications with required information while significantly reducing the cost of storage and complexity of our data mediation system."

Network Operations Engineer
Tier-2 MSO

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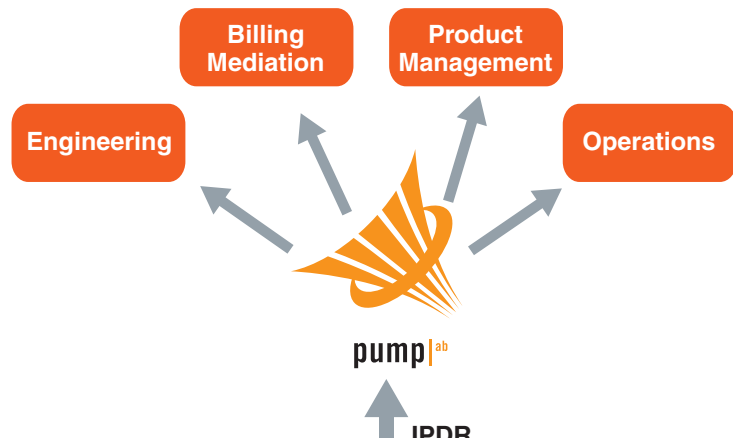
www.appliedbroadband.com



Key Features & Benefits:

Network and Service Aware Metrics Engine

By performing low-level computation on DOCSIS network streams at the broadband edge, a data volume reduction of up to 100x is realized - substantially reducing database load, centralized processing cost and simplifying analysis in downstream systems. The Refinery's stream processor evaluates both inbound and historical network events to calculate key subscriber usage, topology, capacity, and service assurance metrics in real-time. These key metrics are available to all stakeholder groups and applications within the service providers B/OSS infrastructure.



Accurate Subscriber Usage With Real-time DOCSIS Service Flow Event Correlation

Service Flow Event Correlation (SFEC) produces accurate subscriber usage data on the expert analysis of low-level subscriber and service usage events to build Service Flow Transcripts (SFT). These SFTs are then presented to mediation, billing, and service management applications for higher-level correlation, rating, and other processing and analysis.

Service Oriented Architecture

In the cable deployment environment, the Refinery provides a convenient and reliable means for multiple B/OSS applications to concurrently access information derived from network IPDR streams. Using a high performance Web Services implementation, the Refinery offers a rich collection of key metrics to evaluate subscribers, services, and networks.

DOCSIS Topology Layer Discovery

DOCSIS Topology Layer Discovery (DTLD) enables the operator to automatically identify and inventory all devices in their DOCSIS network to define relationships between CMTSs, Interfaces, Fiber Nodes, CM devices and subscriber services. Empowered with this new source of network knowledge, fact-based decisions regarding network asset, capacity, and security management can be made without additional processing or subscriber database and billing system reconciliation.

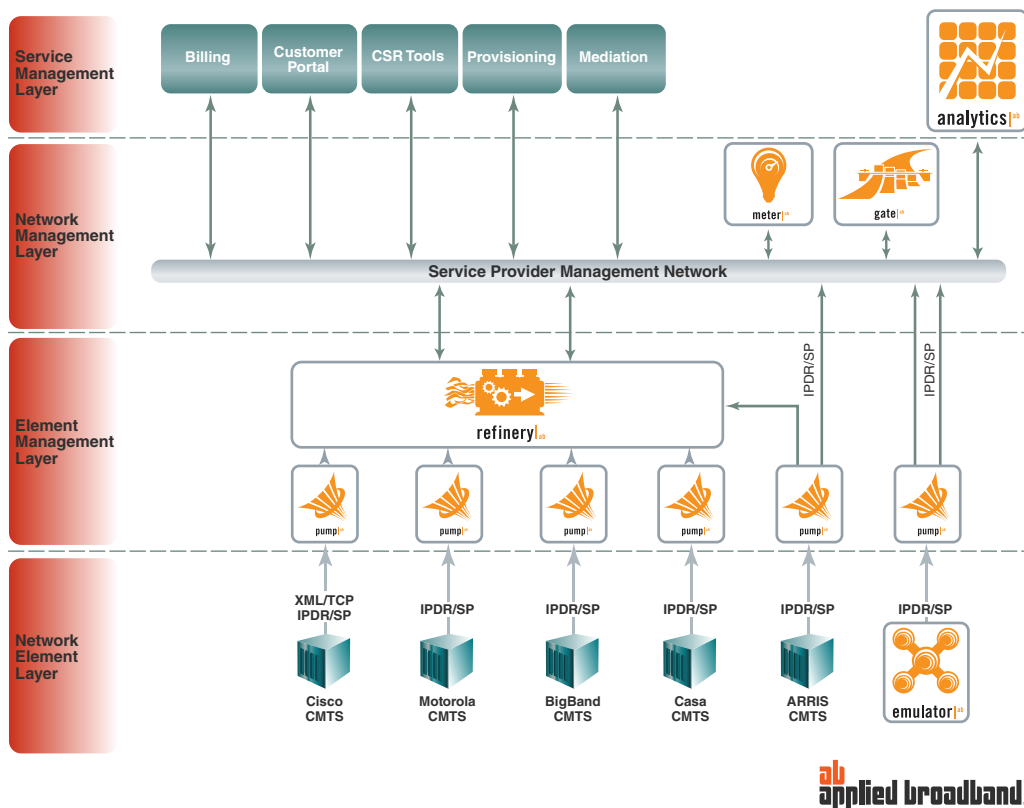
Unrivalled Performance & Scalability

The Refinery's proven best-in-class performance is unrivalled by any other IPDR stream collection and processing technology in the marketplace today. Designed from the ground up, to address the unique needs of Cables' scale and data network architecture, the Refinery fits perfectly into the Cable B/OSS. Refinery's highly optimized software enables operators to collect IPDR streams representing millions of CM devices in a small hardware footprint, resulting in as much as a 10:1 reduction in hardware costs, data center rack-space, and power consumption.

High Availability for Critical Data

With important use-cases, such as metered billing, subscriber usage monitoring, and policy enforcement, it is critical that IPDR data is not lost. Refinery, and Pipeline, implement a robust high availability architecture that protects important information.

Pipeline's role within Cable's OSS/BSS



Pipeline Related Products:

- Pipeline Pump™
- Pipeline Refinery™
- Pipeline Meter™
- Pipeline Gate™
- Pipeline Analytics Toolkit™
- Pipeline Emulator™

Pipeline Refinery Minimum Systems Requirements:

- Operating System – Redhat EL 5; Solaris 10 (x86-64)
- Hardware – 64-bit quad-core 1.6GHz
- Disk Space – 500GB (2x250GB 10K RPM, SATA or SAS)
- Memory – 2GB per CPU core

Pipeline Refinery Part Number:

PIPE-REF4.0-SW

Contact Us:

To learn more about the Pipeline and its modular components including the Refinery, visit our website at www.appliedbroadband.com or email us at sales@appliedbroadband.com

Pipeline's flexible modular design allows for implementation of stand-alone applications such as the Refinery, or bundled solutions that offer a robust range of functionality, security, and business intelligence to the Cable industry.