



eVolution

Virtual Experience Probe for Real-Time Big Data Enablement

EVOLUTION

KEY BENEFITS

- The most accurate identification of network data traffic through weekly DRDL signature updates
- High performance virtualization on Intel-based COTS hardware
- Multi-Access and Multi-Vendor support to simplify integrated network deployments
- Most complete and enriched view of the subscriber experience by Perspectives integration
- Designed for NFV & Orchestration as standards mature

eVolution is the industry's first purpose-built virtual subscriber experience probe based on native DPI technology for multi-access broadband operators.

eVolution is an all virtual data enablement solution that empowers fixed, cable, mobile, and WiFi operators to run their networks more efficiently and profitably. eVolution delivers a unique approach to providing structured data that can be used in real-time to enhance the subscriber experience for broadband subscribers.

ENGINEERED FROM NFV-READY PACKETLOGIC TECHNOLOGY

eVolution is based on industry-proven PacketLogic technology that has been engineered to run as individual Virtual Network Function Components (VNFC) as part of an ETSI-defined Virtual Network Function (VNF) environment. eVolution runs on Commercial Off the Shelf (COTS) hardware leveraging Intel processors, and can run on VMware or KVM hypervisors. The eVolution VNF will support NFV orchestration standards as they mature, and includes a VNF Manager and License Manager that support creating new instances of eVolution that can be deployed when and where the operator needs data collection.

eVolution utilizes the Datastream Recognition Definition Language (DRDL) signature database to identify applications, with weekly updates to keep unknown traffic at a minimum. DRDL supports over 2500 signatures (Nov 2015) with over half of those signatures covering encrypted applications, a key requirement from network operators as encryption becomes pervasive on networks, limiting the effectiveness of current data probes. Procera's Perspectives can also be layered onto the eVolution VNF - including Subscriber and Score - to add structure to the data.

The data in eVolution can be accessed through multiple mechanisms depending on the use case for the deployment. LiveView™ can be used to view the network traffic in real-time, with drill down from all network traffic to a single subscriber flow. LiveView™ APIs can be accessed by OSS/BSS systems for integration into engineering and customer care systems. Industry standard IPFix can stream flow records to real-time or historical mediation systems decorated with valuable Perspective structure. The data can also be stored in the Insights Storage system where it can be accessed via ODBC for integration into Hadoop or other large scale Big Data solutions. Any or all of these options are available to network operators to leverage the data provided by eVolution.

The use cases for the eVolution data in real-time include Customer Care Alerts, Network Troubleshooting and Forensics, feeding Threat Management Systems, Congestion Management, or Real-Time subscriber offer solutions. Historical use cases include Capacity and Service Planning, Regulatory Compliance with ScoreCard's experience scoring, and targeted data wholesaling of aggregated subscriber data.

eVOLUTION PLATFORM

NETWORK DEPLOYMENT & INTEGRATION

Network operators are turning to virtualization in order to reduce hardware dependencies, optimize capital expenditures, and accelerate their ability to deploy new services and generate revenue. eVolution enables network operators to utilize common hardware platforms throughout their infrastructure, simplifying the dynamic deployment of probes when and where they are needed.

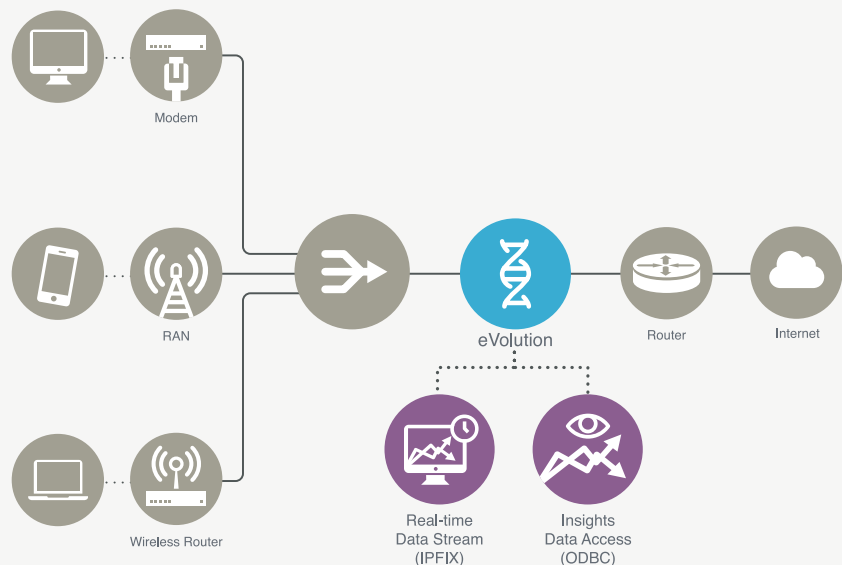
The eVolution platform can be integrated with additional PacketLogic Perspectives to provide a more complete view of the network and further enrich network traffic data intelligence:

- **Traffic:** Application awareness, including encrypted applications
- **Subscriber:** Mapping of IPs to subscriber or account and subscriber attributes
- **Score:** Scoring of Experience for Web, Video, Social, Voice, Messaging, and UL/DL
- **Route:** Peering visibility at the flow, application and QoE awareness
- **Topology:** Network Topology location and link speed awareness
- **Content:** Content categorization for up to 100M URLs over 100+ categories
- **RAN:** Mobile location awareness integration for real-time subscriber updates
- **Device:** Device-type awareness: Phone, Tablet, or PC for usage insights by type

The eVolution platform can be deployed anywhere in the access, aggregation, core, or peering point to gather the data desired. Multiple tunnel encapsulation technologies are supported across mobile, cable, DSL, WiFi including GTP, MPLS, MobileIP, MPLS, VLAN, IPinIP, L2TP, Teredo, and EoMPLS to gather data where it makes sense for the operator.

Figure 1

FLEXIBLE eVOLUTION DEPLOYMENT



ABOUT PROCERA NETWORKS

Procera Networks, the global Subscriber Experience company, is revolutionizing the way operators and vendors monitor, manage and monetize their network traffic. Elevate your business value and improve customer experience with Procera's sophisticated intelligence solutions.

For more information, visit proceranetworks.com or follow Procera on Twitter at @ProceraNetworks.



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