CISCO SCE MIGRATION

PROCERA

Migrate your SCE Network to Procera Solutions

USES CASES FOR PROCERA'S SUBSCRIBER EXPERIENCE INTELLIGENCE

Procera's unique combination of network and subscriber experience metrics enables advanced network. subscriber and policy use cases:

Network Management:

Manage traffic on your network by location, subscriber, application, or peering session.

Network Experience Scoring:

Monitor the subscriber experience and ensure customers are receiving a high QoE - and discover the root cause of network degradation.

Service Creation:

Targeted subscriber service offerings to create competitive differentiation and enable pricing creativity to meet user needs

Customer Care:

Proactively determine what issues subscribers may have experienced and resolve issues on the 1st call.

Executive Dashboard:

Present network status and performance to Executive Management in a simple, easy-to-understand GUI.

Network Planning:

Predict network congestion and CAPEX needs based upon the locations identified as low performance

Churn Prediction:

Predict churn based on subscribers or groups consistently receiving bad scores.

INTRODUCTION

Cisco has announced the End-of-Life (EOL) for the SCE 8000 product line in April of 2015. As a result, many Cisco customers are seeking a solution to migrate their existing functionality onto a new platform for future services and network growth.

Procera can simplify your migration from the SCE to PacketLogic solutions. Our solutions are designed to ease your migration by offering equivalent functionality to the SCE that can be deployed in your network. Procera has worked with other customers to migrate from the SCE to PacketLogic, so we have real-world experience making the transition successful.

SOLUTION OVERVIEW

Procera's Solutions are built on providing fine-grained visibility into network and subscriber behavior using our Deep Packet Inspection (DPI) capability with our Datastream Recognition Definition Language (DRDL) engine to provide Traffic Perspective. DRDL is designed to quickly identify the application being used to generate traffic on the network, whether the traffic is encrypted or not, to give the operator the ability to perform subscriber and application layer analytics and policy enforcement. With Traffic Perspective, network operators can gain equivalence to the SCE DPI engine for performing traffic management and analytics on their network.

However, in today's networks just using DPI to recognize applications is not sufficient for an operator to build differentiated network offerings. In order to offer subscriber-based policy offerings, tight integration with policy systems is required. Subscriber Perspective integrates with BSS/OSS and Policy systems, including Cisco's Policy Suite and enables the operator to implement subscriber-based service management. Services can include advanced Fair Usage traffic management, usage-based service plans, zero-rating, or subscriber analytics using the Insights solutions or an external Big Data system.

In addition to the standard Cisco SCE use cases, Procera can enable operators to gain greater visibility into the subscriber experience that is being delivered by their network. As part of our migration offer, customers can take advantage of new solutions like ScoreCard from Procera. ScoreCard measures all traffic for every subscriber, all the time and measures throughput, latency, and packet loss using sub-second measurement intervals which guarantees that we see the quality even for very short sessions, such as a web page download. A score is given to each application category based on a matrix based on current application needs, and the scoring matrix will be updated yearly. The data can be captured anywhere in the network, minimizing the number of measurement locations needed for a network-wide deployment.

SOLUTIONS COMPONENTS

Mandatory

PRE Platform

Traffic Perspective

Optional

| Topology Perspective | |
|----------------------|--|
|----------------------|--|

- Route Perspective
- RAN Perspective
- Device Perspective
- Subscriber Perspective
 - Score Perspective
 - Engineering Insights
 - Executive Insights

SOLUTION COMPONENTS

PRE PLATFORM

The PRE acts as the DPI engine and enforcement point on the network. The PRE can be deployed in either passive or active mode (depending on the use case) and can be deployed as either virtual or a packaged appliance from Procera. The PRE will inspect all subscriber traffic on the network and stream it to the Insights database for storage and visualization.

TRAFFIC PERSPECTIVE

Traffic Perspective is based on Procera's industry-leading Datastream Recognition Definition Language (DRDL) DPI engine, and provides visibility into the applications running on the operator's network. Over 2,500 unique applications are included like Messaging, VoIP, Video Streaming, Audio Streaming, File Sharing, Gaming, and many other applications.

SUBSCRIBER PERSPECTIVE

Subscriber Perspective is the integration point with the BSS/OSS to glean subscriber-specific information to associate with each flow on the network. With Subscriber Perspective, each subscriber is associated with their IP address, service plan, location, device, and other information available in the operator's OSS and BSS or through the Cisco Policy Suite.

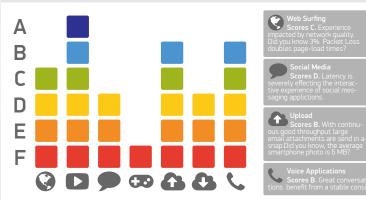
SCORE PERSPECTIVE

Score Perspective measures each subscriber's throughput, latency, and packet loss at sub-second intervals to gauge the ability of the network to deliver a high quality experience to the subscriber. The scoring reflects the performance during peak usage applied to the expectations for each application class - Web Surfing, Streaming Video, Social Media, Realtime Gaming, Upload, Download and Voice Applications. The measurements include location, device, and service plan to provide context for each subscriber's traffic if available from other deployed Perspectives.

Figure 1

Score Card Metrics

ScoreCard rates the experience that the operator's network is capable of delivering in categories that matter to subscribers.



Improve the Subscriber Experience and prioritise investments for maximum ROI. Break down analytics by device, location and subscriber tier with ScoreCard.

SOLUTIONS CAN BE PURCHASED DIRECTLY FROM PROCERA OR THROUGH YOUR LOCAL CISCO SALES REPRESENTATIVE

Let Procera partner with you to migrate your network to PacketLogic solutions from the SCE. We will ensure that the transition is seamless and you do not lose any functionality that you have already deployed on your network.

TOPOLOGY PERSPECTIVE

Topology Perspective integrates the subscribers location with their traffic. For mobile subscribers, this can include the cell, SGSN, GGSN, Gateway, and APN, as well as any other logical geographic grouping. In Fixed networks this can include the CMTS port and/or channel, DSLAM and/or BRAS Port. In WiFi networks it can include the Access Point name and location. Location is extremely important for capacity planning and QoE monitoring.

ROUTE PERSPECTIVE

Route Perspective provides visibility into peering connections for the operator. Each connection is mapped to the peering path that the traffic is originating from (or going to) so that the performance and quality on the peering link can be measured. Route Perspectives also enables peering management for international links where quality and cost are important factors in an operator's business model.

RAN PERSPECTIVE

RAN Perspective adds the exact cell location in real-time for a mobile subscriber as well as the RAN Signal Strength and Quality for the subscriber's device. The real-time location information is sent to the Subscriber Perspective where it is provisioned in the PRE to capture the subscriber's location for the analytics or enforcement. This information is extremely powerful for ensuring the quality of the RAN for a mobile operator, and identifying which cell sites are contributing to a poor subscriber experience.

DEVICE PERSPECTIVE

Device Perspective is a mobile-centric perspective that adds device-specific information for each subscriber. In addition to the device manufacturer and type, the database includes screen size, resolution, access type, and many other metrics that can identify if a subscriber is receiving the level of service that matches the expectation for the device that they have purchased and is part of their service plan.

ENGINEERING INSIGHTS

Engineering Insights (EI) is one of Procera's role-based visualization and decisioning platforms. Designed specifically with Engineering and Network Operations as the target audience, Engineering Insights visualizes the subscriber experience intelligence collected by the PRE. Each Perspective is represented as a different view of network activity, so each additional Perspective purchased adds to the overall value of the data. Engineering Insights contains the drill down capability to help Engineering isolate the root cause of a bad score for ScoreCard.

EXECUTIVE INSIGHTS

Executive Insights visualizes the overall ScoreCard for the network, traffic, devices, and subscribers. It is tailored to meet the needs of an operator's executive management by simplifying the network status into an easy to understand ScoreCard. Executives will be able to gauge the status and performance of their network at a single glance, and explore what areas of their network need investment in order to improve the overall experience for their subscribers.



Procera Networks delivers
a unique solution with
ScoreCard that drastically
simplifies the measurement
of the Subscriber Experience

PROCERA'S UNIQUE SOLUTION VALUE

NETWORK SCORING CAPABILITIES

Procera's ScoreCard is the operator's answer to Over-The-Top broadband service ratings, enabling prioritization of investments to get maximum subscriber experience ROI. It rates the experience that the network is capable to deliver, segmented per service type as perceived by the subscribers: Web, Social, Video, Gaming, VoIP, etc... ScoreCard is quick to implement, monitors all data traffic and provides actionable matrix with break down to root cause.

EASY MIGRATION FROM SCE

Procera's will work closely with you to ensure that you keep the functionality that you are using with your SCE deployment intact. This includes support for the most popular SCE reports as well as simple integration with Cisco's Policy Suite. Our Professional Services team can customize your deployment to ensure that you don't miss a beat during the installation and turn-up of the Procera solutions.

PURCHASING THROUGH CISCO

Procera can deliver these solutions to you from the Cisco price list. The PacketLogic products are available on the Cisco price list and delivered through the Cisco supply chain and existing Cisco contracts.

HIGH PERFORMANCE VIRTUALIZATION

The PRE platform is available in either Procera hardware or running in a virtualized environment as a virtual probe. The PRE has demonstrated up to 155Gbps on a standard COTS server, with no trade-off in features or scalability between COTS and packaged hardware. This gives operators the flexibility to deploy the right-sized solution and drive towards a full NFV deployment using the Cisco NFV solution.

CONCLUSION

Procera is ready to work with you to migrate your network from the SCE to PacketLogic. If you need your network migrated immediately, we have experience and can accelerate your transition. If you want to implement over time and deploy Procera side-by-side with Cisco, we can work with you to ensure that the deployment proceeds at the pace you need it to. Let us be your partner going forward, whether you work with us directly or work through Cisco for your network deployment.



Contact your Procera sales representative to find out more about this solution and how it can help you transform your business.

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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