Score Perspective
Network Experience Scoring

SCORECARD

Measure the Quality of Experience your network is capable of delivering to your subscribers for key application types

Procera's Score Perspective maximizes the ROI of an operator's investment in improving the Subscriber Experience.

When combined with Procera's Insights products, Score Perspective delivers unparalleled visibility into your subscriber's actual experience.

Procera's Score Perspective enables a unique solution, Network Experience Scoring. It simplifies the visualization of network quality metrics, making it easier for Engineering and Executives to make the right investment decisions to improve their subscriber's experience.

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, Real-time Gaming, Upload, Download and Voice Applications. The measurements include location, device, and service plan to provide context for each subscriber's traffic.

Score Perspective can be deployed on any PacketLogic Real-Time Enforcement platform - virtual or hardware-based - in active or passive mode in the operator's network. The performance impact of deploying Score Perspective on a PRE is minimal, enabling pervasive deployment throughout an operators network.

The intelligence collected in Score Perspective is visualized in the PacketLogic Insights product family. **Engineering Insights** has an interactive drill-down capability to enable root cause analysis for why a score is bad and where the optimal investments can be made to improve network quality for subscribers. **Executive Insights** displays a high level score that aggregates all subscribers scores with a highlight on the specific score that is degrading the subscriber experience the most.

HIGH VALUE USE CASES

- **Maximize ROI for CAPEX for Improving the Subscriber Experience –** Interactive drill-down to determine the root cause of low network scores. Scores can be filtered by "problem contributors" to display how many subscribers are affected by network issues

- **Executive Dashboards –** Gain insights into your overall network performance in easy to understand metrics for executives.

- **Service Plan Creation –** Target your marketing towards the applications that your network excels at delivering a high QoE to subscribers

- **Network Quality Assurance –** Ensure that your network is delivering a high quality of experience for your subscribers

- **Service Marketing –**Market your services based on the Score for specific application types - "Our network delivers an A for Video!"

Measuring networks based solely on instantaneous throughput is not an indication of the quality of the subscriber's experience.

SCORE METHODOLOGY

Score Perspective is based on Procera's 15 years of experience with applications and their peformance on broadband networks. A network that has a high throughput may not meet the needs of a subscriber that is interested in gaming or voice applications, as they require low latency and low packet loss. Score Perspective measure the three most important factors in a consumers broadband experience at sub-second intervals:

- **Throughput –** Measured at all times, scored at peak, not a instantaneous "Speed Test" that can be affected by congestion or other network policies

- **Latency –** Measured for each connection to detect the round trip time for delay sensitive applications like gaming and voice applications

- **Packet Loss –** Measured to determine efficiency of network and impact on loss sensitive applications like interactive audio and video

The scoring methodology is updated yearly to account for changes in broadband technology and in application behavior. Encryption has no effect on scoring, as the same metrics apply to traffic whether it is encrypted or not, and Procera's Traffic Perspective has advanced heuristics to identify applications using encryption technology. A network score is comparable anywhere in the world, and comparable between fixed and mobile networks, enabling a consumer to assess if a mobile connection can meet their needs to replace a fixed line connection for their preferred applications. Network Operators using Scorecard will be able to maximize the ROI for their network investments for improving the subscriber experience.

Example Score Perspective Application Breakdown

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.
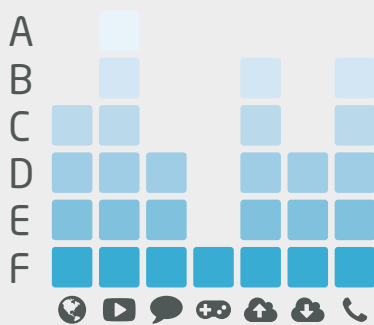
Web Surfing
Scores C. Experience impacted by network quality. Did you know 3% Packet Loss doubles page load times?

Social Media
Scores D. Latency is severely effecting the interactive experience of social messaging applications.

Upload
Scores B. With continuous good throughput large email attachments are sent in a snap. Did you know the average smartphone photo is 6 MB?

Streaming Video
Scores A. With very high throughput available this network is ready for HD and even 4K streaming.

Real Time Gaming
Scores F. Due to the high latency gaming is not viable. Fixed is better than mobile for real time gaming.

Download
Scores C. Expectations are higher and simultaneous downloads happen more frequently than uploads.

Voice Applications
Scores B. Great conversation quality. Modern voice applications benefit from a stable consistent latency.

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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