PROCERA

Regulatory URL Filtering

Carrier Scale URL Filtering Solution for Telecom Operators

KEY SYSTEM BENEFITS

- Up to 100M URLs supported across multiple databases, with each URL potentially classified in multiple categories

- Performance of up to 600Gbps on a single PL15000 system to drastically reduce the power and space footprint for URL filtering

- Supports custom database integration for local governmental regulatory compliance

- Multi-use case deployments provide greater ROI than URL filtering only solutions by the addition of Analytics, Traffic Management, Policy Enforcement, or other Regulatory Compliance Use Cases

Operators that are required to filter content from their networks by governmental regulations are struggling to find solutions that can keep up with the explosive bandwidth growth of the past few years. Many telecom operators are required to invest several racks worth of equipment for a single use case with no return on investment through additional ARPU from subscribers. To reduce the amount of equipment required for URL filtering, deployments often require deep packet inspection and load balancing systems to more surgically send traffic to the URL filtering solution.

In addition to the performance challenges, the URL lists and categories are changing constantly, including certain countries that require custom databases that need to be manually or dynamically integrated into a URL filtering solution. This requires a solution that can scale to tens of millions of URLs with a flexible update system.

URL FILTERING FOR TELECOMMUNICATIONS REGULATORS
SOLUTION OVERVIEW

Procera's ContentLogic solutions provide the highest performing URL filtering solutions that can be loaded with multiple databases designed to meet the regulatory needs as they evolve in countries around the world. Custom databases can be added to the system in real-time and all are updated as frequently as an hour, and up to 100M URLs can easily be supported in PacketLogic. Performance on the PRE can range from a low-end PacketLogic/V solution to a high end PL15000 with up to 600Gbps of throughput. This unique combination of performance, scalability, and flexibility makes Procera's regulatory URL Filtering solution deliver greater value for telecom operators

Figure 1

CONTENTLOGIC SCREENSHOT FROM THE PACKETLOGIC CLIENT

PACKETLOGIC™ URL FILTERING WITH CONTENTLOGIC

CONTENTLOGIC TECHNOLOGY FOR URL FILTERING

ContentLogic is the foundational technology that powers Procera's regulatory compliance URL Filtering solution. ContentLogic operates as an extension to Datastream Recognition Definition Language (DRDL), Procera's industry leading DPI engine, processing only hostname identifiable traffic that is identified by DRDL and passed to the ContentLogic software. This mimics the function that is often handled externally by URL filtering solutions that use load balancers and DPI systems to reduce the amount of traffic sent to a URL filtering system, but PacketLogic handles this internally rather than requiring more power and rack space.

Once the HTTP traffic is sent to ContentLogic, it will classify the URL into the approporate categories (depending on the database(s) being used). The categories cover pornography, social networking, news, anarchy, botnets, malware, and over 100 other potential classifications for sites. ContentLogic will return to DRDL and the PacketLogic software the categories for the traffic, and PacketLogic will make a policy decision on how to handle the traffic - drop, reject, log, or redirect the user to a landing page with a policy notification.

URL FILTERING DEPLOYMENT AND LICENSES

ContentLogic solutions can be deployed anywhere in the network - on a virtual CPE, provider edge, core, or peering point. ContentLogic is traditionally placed in-line, enabling the solution to natively block traffic or redirect users to a landing page that is deemed to be non-compliant with the regulatory polices. ContentLogic can run on any PacketLogic Real Time Enforcer (PRE) - the PL7000, PL8000, PL9000, PL15000, or PacketLogic/V as an additional software license that can be added to the base system licenses. If subscriber-aware or location-aware policies are required for regulatory compliance, the subscriber enrichment license is also required.

Figure 2

CONTENTLOGIC DEPLOYMENT ARCHITECTURE
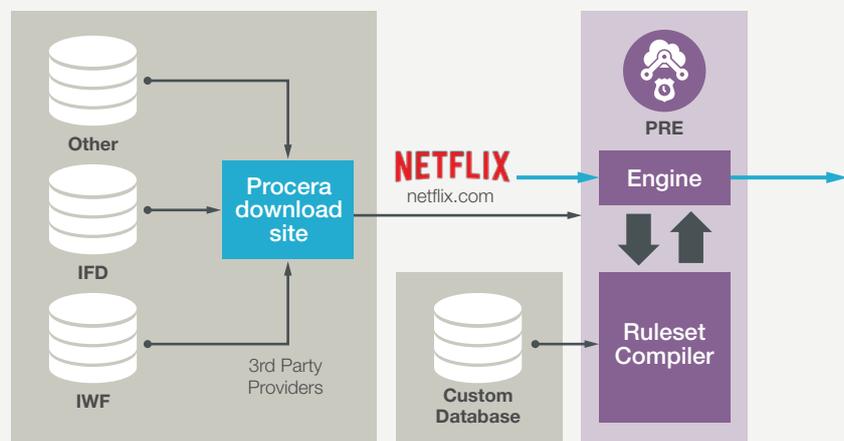
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ABOUT PROCERA NETWORKS

Procera Networks, the global Network Intelligence 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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