Service Exchange Architecture

Service Exchange Architecture delivers a faster and safer experience to subscribers without cluttering network infrastructure. Rather than constrain the network with disparate, incompatible point products from multiple vendors in a proxy chain of network elements, it replaces them with a multi-service proxy or policy router single node acting as a traffic policeman directing traffic to fully consolidated and interoperable IP services such as Web, IP TV, Third-party data solutions, advertising … all delivered fast.

Service Exchange Architecture simplifies the network in a highly intelligent and cost-effective way using IP optimization. Adding new subscriber services now get to market at internet speed. And what's more, they can be added in parallel.

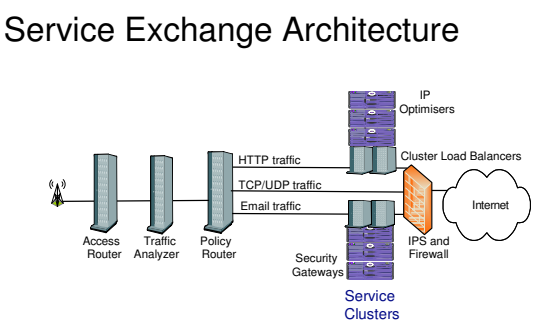
More than just an infrastructure solution, the multi-service proxy or policy router is installed in the core data path, where it monitors all traffic and inspects packets only once, selectively applying IP services while improving reliability and service quality. It supports all network technologies and virtually all mobile devices, letting you

- Enhance and personalize the user experience
- Boost data plan adoption
- Increase average revenue per user (ARPU)
- Generate ad revenue in addition to service revenue
- Fuel subscribers' appetite for new services
- Build brand loyalty and reduce churn
- Accelerate time to market through rapid, cost-effective deployment
- Integrate third-party mobile services
- Reduce total cost of ownership
- Improve ROI in network infrastructure
- "Future-proof" your network with an optimized IP services roadmap

The Service Exchange Architecture through the use of IP optimization accelerates even the fastest networks, dynamically enhancing capacity and performance by containing latency as traffic grows. You can add whatever services you want, at your own pace, without increasing network cost and complexity or compromising performance. And because the service exchange architecture runs on industry-standard hardware platforms from multiple vendors, you can scale to support tens of millions of subscribers.

Solving the Point Product Problem

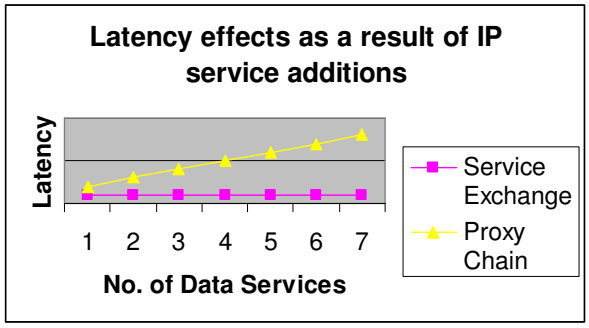
While striving to enhance network performance, operators continually add new IP and data services as a way to fuel growth and differentiation in an extremely competitive market. However, adding more services also makes a network more complex and — when new services consist of point products — more redundant and less efficient. As a result, network performance can suffer, degrading subscribers' online experience and creating customer dissatisfaction. Adding more services also tends to increase capital expenditures and operating expenses (CAPEX and OPEX), leading to higher total cost of ownership.



Operators can resolve this difficult balancing act with Service Exchange Architecture, which avoids the point product problem by offering multiple IP services from a single policy decision point with a multi-service proxy or policy router. The Service Exchange Architecture also reduces computational redundancy by efficiently consolidating IP services and integrating data functions.

Addressing Latency and Inefficiency

The Service Exchange Architecture addresses the problems of latency and inefficiency in the operator's network. "For example, to process data packets, the typical IP service must perform a series of basic processing functions, which typically include packet inspection, flow characterization, service selection, load balancing, and TCP processing." Some services may also need to access a subscriber database.



Unfortunately, each processing function adds latency to the network. And if each function must be repeated for every service that an operator offers, then problems quickly arise.

Computational redundancies, operational inefficiencies and latencies are all compounded until a latency threshold is reached. After that, new services can no longer be deployed efficiently.

In contrast, the Service Exchange Architecture results in a streamlined network with constant, minimal latency, easier service deployment and more efficient operations. Because the Service Exchange Architecture classifies packets only once, operators can add services at any time without increasing overall network latency.

Benefits

- **Reduces operating expenses (OPEX).** As a multi-service solution, the Service Exchange Architecture offers multiple IP and data services from a single platform. Consolidating services makes more efficient use of hardware and network resources and helps operators reduce OPEX.
- **Enables market-leading data services.** These include protocol acceleration, content optimization, streaming optimization, content filtering, …
- **Ensures a more usable, subscriber-friendly network.** With Service Exchange Architecture, operators can add services without increasing network latency. Each service processes only the required data — not the entire data stream. The result is a more positive user experience.
- **Enables accelerated service deployment and delivery.** The Service Exchange Architecture enables operators to deploy new services quickly and easily.