



Scalable DNS for Growth of IP Data

As subscribers demand more high-bandwidth content and IP traffic grows, communication service providers' (CSPs') networks are being overwhelmed. Network attacks, specifically to Domain Name System (DNS), have become more prevalent, flooding DNS servers, exhausting network resources, and damaging applications.

To overcome these challenges, CSPs need to adapt their business models and redesign their networks. Because DNS provides subscriber access to services and applications, CSPs need a carrier-grade DNS infrastructure that is intelligent, available, scalable, and secure. A stable DNS infrastructure is critical to deliver high quality of experience (QoE), deploy revenue-generating services, and cut costs.

Key benefits

Support millions of subscribers on the network

Enable linear scaling to meet the most arduous network demands.

Align technology to business needs

Reduce DNS infrastructure costs while preserving ARPU and reducing churn.

Reduce complexity and cost

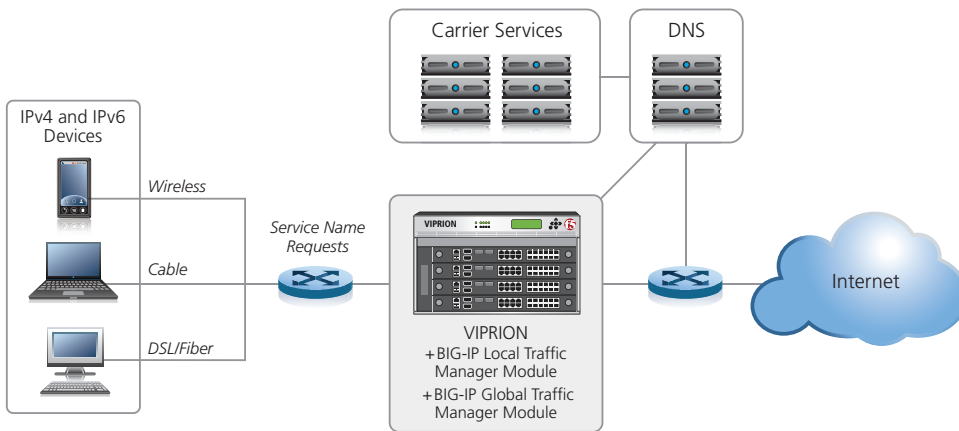
Use network intelligence and scalability for better management of CapEx.

Provide a seamless transition to new business models

Transition from IPv4 to IPv6 while fully supporting today's applications and services.

Protect users, applications, and data

Extend security beyond the network to protect apps and subscribers with real-time DNSSEC.



BIG-IP DNS products offer global and local service delivery to users and devices over service provider networks.

As CSPs respond to market demands, their need to scale and manage application services increases significantly. Standard DNS architectures as deployed by most CSPs today can't deliver the level of performance and security required to meet the growing rate of DNS requests.

Carrier-grade DNS services require a complete end-to-end global application delivery solution that provides a more intelligent way to manage, secure, and respond to DNS queries. F5 DNS Services exponentially improve DNS query response time, enabling consolidation of DNS servers. At the same time, expanded attack absorption and mitigation capabilities protect applications and data from complex DNS-based attacks.

The F5 DNS architecture enables the DNS query load to be distributed across many locations for dynamic application delivery. User application requests and application services are distributed based on business policies, data center conditions, network conditions, and application performance.

F5 DNS Services can enable flexible, reliable, and secure IP networks that meet immediate and future traffic demands, reduce complexity and costs, and help CSPs continue to deliver high QoE for subscribers.

To find out how F5 service provider solutions can help your business, visit the [Service Provider Solutions](#) page.

F5 Services

F5 Services offers world-class support, training, and consulting to help you get the most from your F5 investment. Whether it's providing fast answers to questions, training internal teams, or handling entire implementations from design to deployment, F5 Services can help you achieve IT agility. For more information about F5 Services, contact consulting@f5.com or visit f5.com/services.

Learn more

To find out more about F5's solutions for service providers, use the search function on f5.com to find these resources.

White papers

[High-Performance DNS Services in BIG-IP Version 11](#)

[Service Delivery Networking](#)

Solution profiles

[Scaling DNS Services with BIG-IP Devices](#)

Deployment guide

[Deploying the BIG-IP System v11 with DNS Servers](#)

News, press, and events

[F5 Delivers Essential Solutions Enabling Service Providers to Cost Effectively Support Mobile Traffic Growth](#)