Product Overview

Interoute’s Load Balancing and Application Delivery services provide high availability, security and increased performance to your critical business applications.

Based on the industry-leading F5 BIG-IP appliances, Interoute’s solutions offer advanced connectivity features for workload distribution to servers within a single geographical location or spread across different data centres.

Figure 1: Sample deployment scenario for optimized web services delivery with the F5 Local Traffic Manager.
Example Implementations

**SaaS Delivery**: As many SaaS deployments offer an entry level “freemium” service or offer clients a “no lock in” contract, the satisfaction of users is paramount to the success of this business model. If the SaaS application is slow and unreliable, subscriber revenue can disappear overnight. Utilising the Interoute Application Delivery service ensures that your SaaS deployment provides users with a consistent and great application experience.

**ICT Consolidation**: ICT consolidation leverages the benefits of centralising IT systems into core datacentres providing greater scale, efficiency and cost benefits. To avoid creating performance bottlenecks for users accessing key business applications and assets, Interoute Application Delivery solutions are used to provide a performance driven architecture. Using this technology you are able to deliver a manageable, consistent and scalable service to users.

**Web Presence**: As owner, operator of a significant part of Europe’s core Internet capability, Interoute are a popular service provider with customers who operate business critical Web facing environments. Whether the site is delivering e-commerce or services to your clients user experience is essential, especially when demand is difficult to predict and very dynamic. Interoute Application Delivery solutions are a key component to maximise uptime, managing demand and delivering a great user experience.

Technical Product Details

**Load Balancing of Web Services**

The most common scenario for application delivery involves load balancing web services across two or more front-end servers. Interoute’s load balancing services are able to distribute traffic across web servers in an efficient and secure manner, using a variety of methods:

- **Round robin** – requests are evenly distributed to all available servers.
- **Least connections** – traffic is sent to servers with the lowest number of active connections.
- **Fastest** – connections are distributed based on the server response times.
- **Predictive** – the load balancer dynamically ranks servers according to whether their performance is improving or declining over time. The servers with improving performance rankings are being sent a higher proportion of the incoming requests.
Load Balancing in Microsoft Exchange Environments

A properly implemented load balancing infrastructure provides several benefits for your Microsoft Exchange environment:

- Reduced CPU and memory load on your Outlook Web App (OWA) servers by offloading the HTTPS connections directly on the load balancer.
- Simplified certificate management and lower operational overheads.
- Ensured high availability across multiple OWA servers using a variety of load balancing methods.
- Improved overall performance by using content compression features between clients (e.g. Microsoft Outlook) and servers.

Figure 2: Sample deployment of load balancers with SSL offloading in a Microsoft Exchange 2010 environment.
SSL offloading relieves a web server of the processing burden of encrypting and/or decrypting traffic sent via SSL, the security protocol that is implemented in every web browser.

The processing is offloaded to a separate device designed specifically to perform SSL acceleration or SSL termination.

The Interoute deployed F5 LTM appliances provide an excellent solution for offloading and accelerating SSL traffic.

Dedicated hardware is used to perform the SSL handshakes on behalf of the back-end servers, ensuring an increased performance of your websites and applications.
Key Features and Benefits

Local Load Balancing and Traffic Management

- Greatly improves the performance of business applications and web services by distributing client traffic across two or more servers.
- Intelligent load balancing using distribution algorithms that ensure your clients access the most responsive and robust resources at any given time.
- Easy to deploy, modular and highly-scalable infrastructure.
- SSL and TLS encryption offloading.
- Application monitoring and health-checking.

Local Load Balancing and Traffic Management for Clouds and Virtual Platforms

- The same code, application delivery services and features as their physical counterparts.
- Flexible deployment options for clouds and virtual environments.
- Software only solution, reduces deployment and operational costs.
- Leverages the resiliency and high-availability features of clouds and virtual platforms.

Global Traffic Management

- Improves the performance and availability of your applications by intelligently directing users to the closest or best-performing physical, virtual, or cloud environment.
- Global load balancing and application delivery across multiple geographical locations and data centres.
- High-performance DNS services.
- Increased security and DDoS protection for your critical applications.
Related Products & Services

Interoute provides a number of additional products & services which can be integrated with ‘Managed Backup Recovery and Storage Services’ in order to deliver a unified ICT solution, providing customer communication and IT infrastructure in one secure place. This includes the following:

- Managed Servers & Virtualisation
- Managed Storage & Backup
- Managed Security Services
- Unified Connectivity
- Unified Communication

Options & Product Codes

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<th>Description</th>
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How to order

To order Interoute’s Managed Load Balancing and Application Delivery Services please contact your account manager.

Further Information & Support

- For product queries please consult your Account Manager.
- For further features and description of products, refer to the Interoute website.