



Next Generation Load Balancing – The ADC

A Look at the Application Delivery Controller  
Market Growth



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## The Application Delivery controller Market Growth

Old generation load balancers such as Cisco CSS, Nortel Alteon, Radware WSD and Foundry are today lacking much of the functionality required by demanding business applications - so what happens in a few years time when these demands for increased performance inevitably grow?

In July 2006, Joe Skorupa, Research VP at Gartner, published the latest market statistics and worldwide predictions for the load balancing market. Gartner predicts that customers will be upgrading to the advanced platform ADCs (Application Delivery Controller) in preference to the older generation Server Load Balancers such as Cisco CSS, Nortel/Alteon, Radware WSD, Foundry, Coyote Point, Kemp, etc.

### Gartner's Definition of an ADC

ADCs are designed for data centre applications and improve the performance of Web-based and related applications by providing a suite of services at the network and application layers. Server load balancing (SLB) ADCs, also called Layer 4 to Layer 7 switches, typically perform a basic set of functions, including load balancing, basic health checks and Secure Sockets Layer (SSL) offload processing.

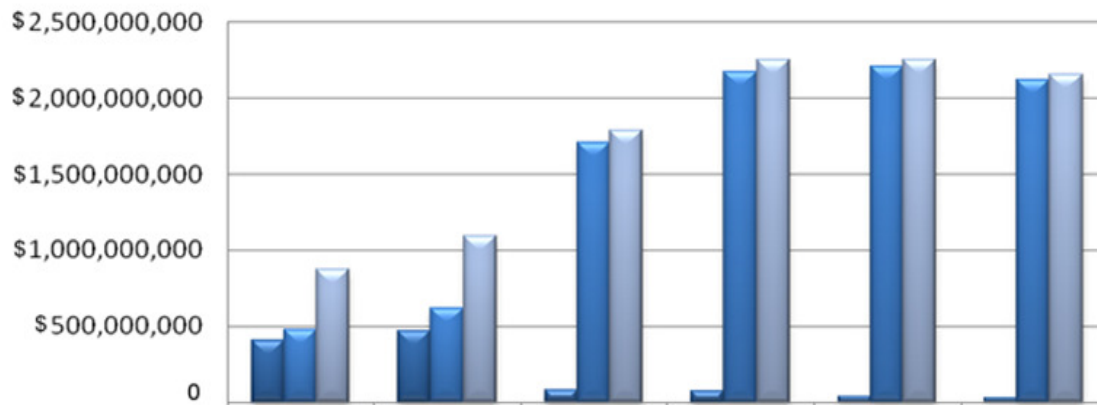
### Advanced Platform ADCs

Advanced platform ADCs provide the basic SLB functionality and add support for real-time protocol manipulation (for example, Transmission Control Protocol [TCP] connection management and HTML optimization), data compression, network address translation, traffic shaping, quality of service (QOS), DOS protection, SSL offload and resiliency/failover. These devices are being enhanced by the addition of new protocol intelligence and new services, such as content transformation and transaction assurance.

jetNEXUS Technology belongs to the advanced Platform ADC Group



## Application Delivery Controller End-User Spending, Worldwide, 2005-2010



		2005	2006	2007	2008	2009	2010
■	Server Load Balancing (\$)	401,050,000	470,239,486	75,992,732	74,877,172	39,047,225	28,762,890
■	Advanced Platform (\$)	473,730,000	618,509,126	1,709,846,119	2,174,209,926	2,211,225,120	2,122,776,115
■	Total ADC (\$)	874,780,000	1,088,748,613	1,785,838,851	2,249,087,098	2,250,272,345	2,151,539,005

From 2007, Gartner predicts that customers will be upgrading to the advanced platform ADCs in preference to the older generation SLBs. Customers will strive to simplify their infrastructures yet achieve higher performance and better management of their application traffic.

Older generation SLBs (Cisco CSS, Nortel/Alteon, Radware WSD, Foundry, Coyote Point, Kemp, etc.) do not provide any benefits of acceleration from TCP offload, HTTP multiplexing and request/response buffering that the advanced platform ADCs provide as application proxies. This benefit can be as much as 18x increase in sustained transaction rate (of Apache) and 40x better utilisation when high-latency is encountered.

Furthermore, the need is growing for advanced traffic shaping, flexible routing policies based not just on request headers but also on request data, transformation of request and response content, more powerful monitoring and bandwidth management – all of which are generally beyond the scope of the SLB architecture.

Gartner predicts that the older generation SLB market will decrease by 41% CAGR while the advanced platform ADCs will grow by 35% CAGR.