6 Reasons You Need an Application Delivery Controller Now

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Application delivery controllers, and load balancing in general, are often seen as solutions waiting for a problem to solve. We know what those problems are, but until we experience them we often don't feel a sense of urgency in acquiring and deploying an application delivery controller.

While it's certainly true that an application delivery controller can solve many problems that arise, it's also true that there are benefits to acquiring and deploying an application delivery controller ***before*** it becomes absolutely necessary in order to save your application, your site, or your job.

So here are six good reasons to consider deploying an application delivery controller now rather than waiting until the next emergency.

6. Efficiency

> An application delivery controller (ADC) can improve the efficiency of the servers for which it manages application requests. By offloading compute intensive processing like SSL or TCP/IP connection management an ADC reduces the overhead associated with assembling and serving responses to application requests and makes better use of the resources (RAM, CPU, I/O) on each server. Making your infrastructure more efficient is also a great way to "go green".

5. Performance

> The performance of your applications can be improved dramatically through the deployment of an ADC. Whether it's because of compression, caching, protocol optimizations, connection management or intelligent load balancing algorithms, an ADC improves the overall performance of your applications.

4. Reliability

> If you rely on applications for business processes or as a revenue stream, the last thing you want is for those application to be unavailable. An ADC provides reliability by ensuring that requests are sent only to available servers, redirecting requests when a server is down for maintenance or finally hit the wall and died.
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> If you're large enough to have two data centers, an ADC with global load balancing capabilities furthers assurance of reliability by redirecting requests from the primary data center to a secondary in the event of a disaster - whether that's a natural disaster (earthquake, fire, flood) or man-made (oops - was that our DS3 I just ripped out?).

3. Security

> We're not talking about advanced security options like web application firewalls or secure remote access products such as an SSL VPN, we're just talking basic security here. DDoS protection, rate limiting, blacklisting, whitelisting, authentication, resource obfuscation, SSL, content encryption - the bare minimum security you need to protect your applications and the servers on which they're deployed. An ADC provides the core security functions you need to ensure your site is safe.

2. Capacity

> Capacity is about how much throughput, how many requests, how many users you can support. It's nearly impossible to support thousands of concurrent users with a single server, unless it's one really really really big server. You need more than one server, and in order to architect a solution that uses a pool of servers you need something to mediate and direct those requests - to balance the load across those servers. That means you need an ADC, because the core purpose of an ADC is to perform load balancing and ensure that you can serve everyone who wants to be served.

1. Scalability

> Scaling up to meet demand is difficult, doing so without re-architecting your infrastructure or scheduling down-time is even more difficult. By including an ADC in your architecture from the very beginning, the process becomes a simple one. Add a new server, add it to the ADC and voila! You've just scaled up and can instantly support more users and more requests without requiring downtime or moving around network cables.

Imbibing: Mountain Dew

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