Application Service Optimisation

✔ **Responsive**   **Ensure applications & websites are consistently responsive**

✔ **Scalable**   **Respond to demand fluctuation with flexible scalability**

✔ **Dynamic**   **Assign the infrastructure resources in real-time as demand changes**

✔ **Specialised**   **Toranet is a layer 4-7 specialist**

Application performance really matters, whether it is a website or ERP applications like SAP and Oracle. When the difference between excellent performance and okay performance (or worse!) can be measured in monetary terms, then it is time to take action to ensure customers get a good user experience.

Fast applications rely on the right blend of resources being available. Virtualisation makes it easier to adapt the infrastructure to provide the required capacity in the various components. Virtual servers, virtual storage, virtual desktops and virtual networks are all used now to a lesser or greater degree.

Application Delivery Controllers (ADCs) can automate the allocation of infrastructure resources in a virtualised environment.

Control the *speed* of your websites and applications and optimise the user experience.

Application Delivery Controllers – ADCs (also known as load balancers) are responsible for provisioning the infrastructure resources needed to meet the demands from application users. The processing of SSL encryption and decryption can also be offloaded onto ADCs.

Dynamic VM Provisioning - ADCs can automate the creation of new virtual machines when they are needed. This prevents queues from forming that would otherwise affect response times.

eCommerce – If you transact business on the web you need ADCs if you want your customers to receive a consistently good service. When websites stop working due to greater demand than expected it can make headline news. In these situations the lost business is exacerbated by the damage to reputation that loss of service can cause. ADCs prevent this happening.

Microsoft LYNC / OCS – Expanding deployments of LYNC Server or Microsoft Communications Server will rapidly need assistance from ADCs to manage the allocation of resources.

Low Latency – Application delivery control should not be at the expense of increased latency. The best ADC has the features required and no more. Unnecessary features can lead to increased latency and this should be avoided.

Toranet – As a former Alteon partner prior to the Nortel acquisition and now a Brocade ServerIron© ADX partner, Toranet has the knowledge and experience to propose a solution to ensure application performance keeps up with demands.
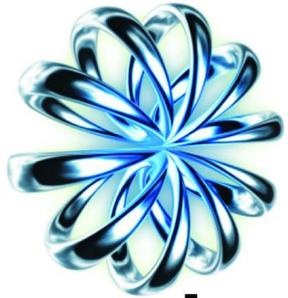
Brocade ServerIron ADX – The Industry's Lowest Latency ADC

Brocade, is one of the industry's leading networking manufacturers. It is the undisputed leader in storage networking and following its acquisition of Foundry Networks in 2008 is committed to leading the innovation at layers 4 - 7 as well as layers 2 - 3. The Brocade ServerIron ADX product line is a family of application delivery controllers with the lowest latency; up to 1000 times less latent than products available from other manufacturers.

Scalability – In-Box Bandwidth Upgrades from Brocade Protects Investments

It is tough to predict how needs will change. When a 2Gbps ADC is outgrown and a 4Gbps ADC is needed, unplanned costs will be incurred. This is a reality with most ADC manufacturers. In contrast Brocade have a family of ADCs in which each model can cover a bandwidth range. For example the Brocade ADX1000 can scale from 500 Mbps to 9 Gbps by licensing the bandwidth required.

Automation – Dynamic Creation of Virtual Machines to Meet Demand

Brocade's **Application Resource Broker** will mean a sudden increase in user or customer demand will not affect the service levels they receive. The Application Resource Broker will initiate the provisioning of new VMs as they are needed. When the need goes away the VMs will be decommissioned. This is an example of how Brocade provides meaningful benefits through innovation.

Cost Effective – Only Pay for the Features You Need

The industry's most expensive ADCs provide the fullest feature-set at the expense of high latency. Brocade's belief is that 80% of organisations with an ADC need do not require such a comprehensive feature set. For these customers, the significantly lower cost of ownership and lower latency from Brocade ADX products will be very welcome. For example application manipulation and scripting is a stipulation of only a minority of ADC customers.

Future Proof Legacy Infrastructure – Brocade ADX provides an IPv6 to IPv4 Gateway

There are no more IPv4 addresses available. In fact the only way to get hold of IPv4 addresses is to buy them from liquidated companies. The solution is IPv6 which will provide more IP addresses but most infrastructures in use today is not IPv6 aware. Brocade's ADX will make legacy infrastructure compatible with new IPv6 addresses.

Brocade ADX 1000

- 1 RU Fixed Configuration
  - 16 x 1 Gb + 2 application cores
  - 16 x 1 Gb + 4 application cores
  - 16 x 1 Gb + 2 x10 Gb + 4 application cores
- Industry only 10GbE capable highest-performing 1 RU ADC
- 2 GB of memory/core
- Dual-management cores

Brocade ADX 4000

- 4 RU Chassis
- Up to 2 ASMs
- Each ASM = 8 App Cores (BPs)
- Up to 16 application cores
- 2 GB memory per core
- 4 x 10Gb and 12 x 1 Gb line cards
- Dual-core management module

Brocade ADX 10000

- 10 RU Chassis
- Up to 4 ASMs
- Each ASM = 8 app cores (BPs)
- Up to 32 application cores
- 2 GB memory per core
- Same cards as SI 4000
- Redundant management modules

Please contact your Toranet account manager for further details.

Toranet Service Brief