

Learn Your A-D-Cs:

Useful Definitions for Modern Enterprise Application Delivery



The Internet is a far more complex entity than the “series of tubes” image that is often invoked. Similarly, keeping up with the current solutions for your IT infrastructure and modern application delivery, such as the Application Delivery Controller (ADC), may seem equally daunting if you’re not staying current with the key terminology; fortunately, Akamai is here to help you navigate the current atmosphere:

- ✓ **Application Delivery Controllers** are part of the hardware-based solutions currently in use that are designed to load balance and manage the delivery of applications while preserving the performance of servers in the data center for end-users located within the private network.
- ✓ **Bandwidth constraints** can happen when WAN users incur monthly recurring charges for bandwidth provisioned. Since few companies are able to provision their private WAN to support peak loads due to the high costs involved, the majority of WANs have bandwidth constraints that lead to packet loss and compromised application delivery.
- ✓ **“Defense-in-Depth”** is a strategy which provides comprehensive defenses to easily thwart even the largest of attacks at both the network and application layer that safeguards critical web assets while reducing demands on their core infrastructure.
- ✓ **Dynamic routing** is a platform that chooses the end-to-end path with the least delay and the least packet loss, which improves the performance and availability of the Internet by circumventing congestion, outages, or peering inefficiencies.
- ✓ **Global traffic management** enables intelligent routing decisions to be made based on real-time data center performance and global Internet conditions to ensure end user requests are routed to the most appropriate data center using the best possible Internet route for that end user at that moment.
- ✓ **Hybrid cloud** is a “best of both worlds” solution, in which an enterprise supplements its private cloud with resources from a public cloud, with some degree of integration between the two.
- ✓ **Market fragmentation** is caused by differences among mobile devices that can impact the end user experience, such as operating systems, processor speeds, screen sizes and resolutions, browser capabilities, and supported technologies such as Flash and JavaScript and protocol support. These variations make delivering high-quality mobile experiences particularly tricky.
- ✓ **Network latency** is the time it takes for a round trip data exchange to occur between the sender and the receiver. Latency is directly proportional to the distance between the sender and receiver of content and application data.

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- ✓ **Origin offload** keeps traffic among resources distributed around the world and across the Internet, essentially eliminating traffic jams. Offload can, for instance, prevent patch downloading sites of various companies from getting crushed beneath the weight of heavy demand when a fix arrives.
- ✓ **Outsourced private cloud** involves using a third-party service provider such as a systems integrator or IT outsourcer to deliver applications and services via a cloud-computing model, either as part of an IT outsourcing contract or as a managed service.
- ✓ **Platform-as-a-service (PaaS)** provides a platform that makes it easier to develop and run applications, which will be delivered via the cloud using programming languages and tools supported by the PaaS provider.
- ✓ **Public cloud** involves the use of standard third-party, hosted cloud services and applications such as Amazon Web Services or Salesforce.com.
- ✓ **SLAs or “Service Level Agreements”** investigate and take advantage of the service provider’s guaranteed SLA.
- ✓ **Software-as-a-service (SaaS)** combines application functionality delivered via a Web browser and open published APIs with access, transmission, data encryption, and storage services.

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