

# Application Delivery Challenge

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## Welcome to the Application Delivery Challenge

- Chance to learn what the industry is doing to solve an important problem
- What is the Application Delivery Challenge?
  - Web based conference session
  - Important and Hot topic
- Two parts
  - Vendor Presentations
  - Vendor's answers to the Challenge



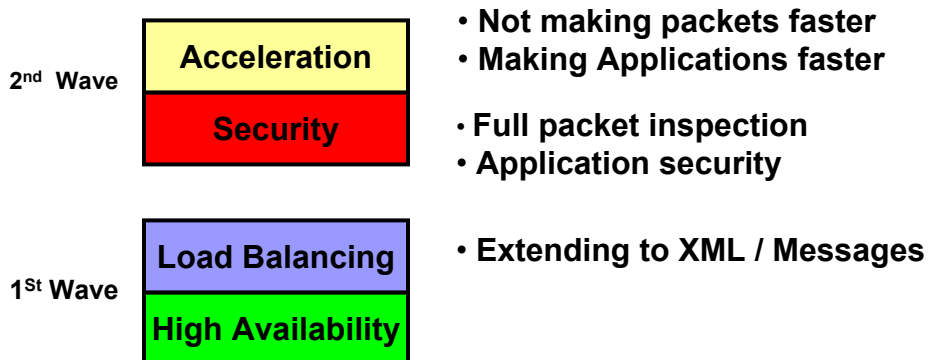
# Application Delivery Architecture: Application Front End (AFE)

## What is it

- Represents an evolution
  - 1<sup>st</sup> Wave: Server Load Balancers (SLB), Layer 4-7 Switches
  - Application spread across multiple servers
  - Provided High Reliability / High Availability
- Most Layer 1-3 problems solved
  - Many Layer 4 (TCP) problems solved
  - Action has moved up to attacking the problems at the application layer



# Application Delivery Architecture



## Benefits

- Applications run faster
  - Move to Web -HTTP / XML- increase transaction size
  - Application protocol problems
  - Reducing the number of packets is the key
  - 3 to 10 times improvement
- Security
  - New level of threats – application attacks
  - Malware, new DoS, ....
  - Addresses new security view – no inside and outside
- Server Off-load



## Application Acceleration: The How

- Compression
- Caching of objects
- Message path reduction
- TCP
  - Connection polling / multiplexing
  - Flow control and shaping
- SSL Off-loading



## Security: The How

- Authentication
  - Encryption
  - IDS / IPS
  - Virus & Worm detection
  - Malice code & Spyware
  - Modeling behavior
  - Application specific
- } VPN

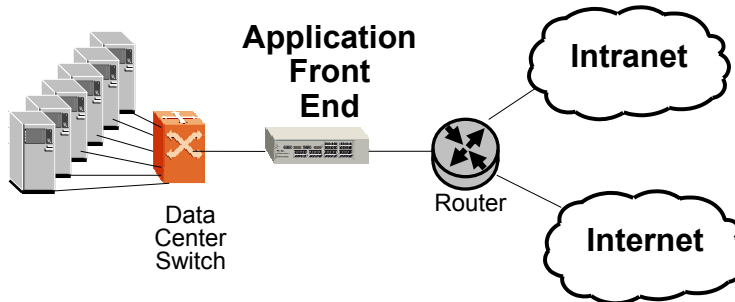


## Unifying technology

- Proxy
  - Terminating connection
  - Allows examination of encrypted traffic
  - Provides authentication point
  - Controls application protocol
- Full packet inspection
  - Deep packet inspection to next level



# The Where Question?



Overtime: Application Delivery architecture rolls out to remote sites, internet gateway, wireless gateway and even clients



# Application Delivery:

What do we call it?

- Application Front End
  - Data center box
- Application Delivery Controller
  - More general name
- Data Center Controller
- May go by lots of names but functions stay the same



## Vendor Presentations

- Following are vendor presentations
  - Like a trade show conference
  - Each vendor emphasize a different aspect of the issues
- Learn something from each of them
- Highly recommended to take time to listen to each one



## Comments or Questions

- New comment and question section provided
- Ask your questions
- Challenge the vendors

