

Sizing BoostEdge



Pure HTTP Performances

Model	Hit/s	SSL/s	Zip T.P. Mb/s	Users
BESMB	1 000	300	70	10-50
BE608	4 000	700	290	50-500
BE1208	7 000	1 050	455	50-1000
BE2408	15 000	2 500	595	100-2000
BE4808	30 000	4 200	1085	500-20000
BE6208	50 000	12 000	2 750	+10000
BE9608	140 000	26 000	6 000	+50000



- **Sizing a BoostEdge is not an exact science**
- **There is no accurate relationship between the number of users and the actual HTTP traffic**
 - It depends on the activity of the users
 - There may be activity bursts
- **A very active user clicks every 70 seconds**
 - This is the time needed to read and find the next link when discovering a site
 - No one can keep so much active for a long time!
 - Most of the time the users are less active
 - But bursts at login time must be taken in account
- **This gives a max rates of:**
 - Up to 3 hit/s per user
 - Up to 50kb/s per user
 - For such an active user
- **The best sizing information are**
 - Average and max hit/s
 - The available bandwidth



Max Transaction per Seconds

Hit/s

- The maximum number of null HTTP transaction directly processed
- BoostEdge sends a 204 status-code with no content
- 10 transactions issued per connection
- This is an absolute max speed of the HTTP engine.

SSL/s

- The actual number of full SSL negotiation, the session key is exchanged using the RSA algorithm.
- Cipher suite: (RSA,MD5,RC4).
- One SSL negotiation per TCP connection
- Do not confuse with “TPS in SSL” which is the hit/s while SSL is used (10 HTTP Transactions/connection)



ZIP T.P. (Throughput)

- The maximum throughput of the compression. The compression ratio is 3.5 applied to an actual bunch of text (not a zero buffer!)
- The compressed output is $TP/3.5$. This gives the actual bandwidth saturation capability.
- The Text bunch are generated internally without any request forwarding

SSL T.P.

- The maximum throughput user SSL RC4 encryption

Users

- An estimated range of users
- Based on actual implementations of BoostEdge
- Keep in mind that the measures give absolute maximum ratings!



■ All the measures have been done in our lab

- Max throughput are obtained through two 1000baseT aggregated Ethernet links.
- Up to 10 loaders

