

IxLoad 5.20 Performance -- Data Performance

NOTE: [1] All numbers quoted in the table below are measured using a pair of Appliance nodes, one node acting as client and another as a server. In some cases, per node server performance is the limiting factor.
All the values are calibrated with IxLoad 5.20 EA with IxOS 6.00 EA Patch 2.

Protocols	Objectives	IPv4 Scalability	IPv6 Scalability	Comments
AppReplay	CC	6000000		AppReplay Initiator and Respoonderwith capture file httpwith1user.cap
AppReplay	PC	6000000		AppReplay Initiator and Respoonderwith capture file httpwith1user.cap
AppReplay	TPUT (Mbps)	18700		AppReplay Initiator and Respoonder also with TCP buffer size of 10484 bytes in both Initiator and Responderwith capture file 1MBhttpcap.cap
AppReplay	CPS	750000		AppReplay Initiator and Respoonderwith capture file httpwith1user.cap
AppReplay	TPS	2400000		AppReplay Initiator and Respoonderwith capture file httpwith1user.cap
HTTP	CC	6000000		HTTP 1.1 or HTP 1.0 with keepalive, maximum possible transaction over a connection, 256 concurrent connections per user, 1 Server IP, 1 byte GET, TCP: Send/Recv buffer 1024
HTTP	SU	6000000		HTTP 1.1 or HTP 1.0 with keepalive, maximum possible transaction over a connection, 1 concurrent connections per user, 2 Server IP, 1 byte GET, TCP: Send/Recv buffer 1024
HTTP	TPUT (Mbps)	18800		HTTP 1.0 without keepalive, 1048576 byte GET, 256 concurrent connections per user, TCP: Send/Recv buffer 4096/32768.
HTTP	CPS	750000		HTTP 1.0 without keepalive, 1 byte GET, 256 concurrent connections per user.
HTTP	TPS	1800000		HTTP 1.1 or HTP 1.0 with keepalive, maximum possible transaction over a connection, 256 concurrent connections per user, 2 Server IP, 1 byte GET
HTTPS - RC4-MD5	CC	300000	270000	HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 1 concurrent connections per user, TCP: Send/Recv buffer 1024, SSLv3.0, Sequential Session Reuse 0.
HTTPS - RC4-MD5	SU	300000	270000	HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 256 concurrent connections per user, TCP: Send/Recv buffer 1024, SSLv3.0, Sequential Session Reuse 0.
HTTPS - RC4-MD5	TPUT(Mbps)	5000	5000	HTTP 1.1 or HTTP 1.0 with keepalive, 1048576 byte GET(SSL), 1 concurrent connections per user, TCP: Send/Recv buffer 1048576, SSLv3.0, Sequential Session Reuse 0.
HTTPS - RC4-MD5	CPS	100000	5000	HTTP 1.0 without keepalive, 1 byte GET(SSL), 20 concurrent connections per user, SSLv3.0, Sequential Session Reuse 0.
HTTPS - RC4-MD5	TPS	400000	200000	HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 20 concurrent connections per user, SSLv3.0, Sequential Session Reuse 0.
HTTPS - AES-256	CC	300000		HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 1 concurrent connections per user, TCP: Send/Recv buffer 1024, SSLv3.0, Sequential Session Reuse 0.
HTTPS - AES-256	SU	300000		HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 256 concurrent connections per user, TCP: Send/Recv buffer 1024, SSLv3.0, Sequential Session Reuse 0.
HTTPS - AES-256	TPUT(Mbps)	3000		HTTP 1.1 or HTTP 1.0 with keepalive, 1048576 byte GET(SSL), 1 concurrent connections per user, TCP: Send/Recv buffer 1048576, SSLv3.0, Sequential Session Reuse 0.
HTTPS - AES-256	CPS	82000		HTTP 1.0 without keepalive, 1 byte GET(SSL), 20 concurrent connections per user, SSLv3.0, Sequential Session Reuse 0.
HTTPS - AES-256	TPS	400000		HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 20 concurrent connections per user, SSLv3.0, Sequential Session Reuse 0.
HTTPS - 3DES	CC	300000		HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 1 concurrent connections per user, TCP: Send/Recv buffer 1024, SSLv3.0, Sequential Session Reuse 0.
HTTPS - 3DES	SU	300000		HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 256 concurrent connections per user, TCP: Send/Recv buffer 1024, SSLv3.0, Sequential Session Reuse 0.
HTTPS - 3DES	TPUT(Mbps)	800		HTTP 1.1 or HTTP 1.0 with keepalive, 1048576 byte GET(SSL), 1 concurrent connections per user, TCP: Send/Recv buffer 1048576, SSLv3.0, Sequential Session Reuse 0.
HTTPS - 3DES	CPS	72000		HTTP 1.0 without keepalive, 1 byte GET(SSL), 20 concurrent connections per user, SSLv3.0, Sequential Session Reuse 0.
HTTPS - 3DES	TPS	335000		HTTP 1.1 or HTTP 1.0 with keepalive, 1 byte GET(SSL), 20 concurrent connections per user, SSLv3.0, Sequential Session Reuse 0.
FTP	CC	800000	800000	SU: 10min 20 Sec, TCP: Send/Recv buffer 1024; FTP: Login, Qu
FTP	TPUT (Mbps)	18000	16000	SU: 10min 20 Sec, TCP: Send/Recv buffer 1048576; FTP: GET /#1048576
FTP	CPS	60000	60000	1 byte Get
FTP	TPS	215000	180000	1 byte Get
IMAP	CC	1180000	1188000	{Get Mails} 1 byte mail size and mail count 1.
IMAP	TPUT (Mbps)	5000	5000	{Get Mails} 1024000 byte mail size and mail count 10000.
IMAP	CPS	49000	43000	FETCH 1 byte 1 mail.
IMAP	TPS	200000	179000	FETCH 1 byte 1 mail.
POP3	CC	570000	570000	Get Command, user/password authentication, Mail Count is 1, Mail size is 100byte, no attachments, TCP: Send/Recv buffer 1024;
POP3	TPUT (Mbps)	5500	5000	Get Command, user/password authentication, Mail Count is 10000, Mail size is 1024000 bytes, TCP: Send/Recv buffer 1048576;
POP3	CPS	46000	40000	Get Command, apop, Mail Count is 1, Mail size is 1, no attachments, only the "from" and "to" headers.
POP3	TPS	250000	200000	Get Command, apop, Mail Count is 10, Mail size is 1, no attachments, only the "from" and "to" headers.
SMTP	CC	900000	900000	Open, Send, Quit sequence, Mail Count is 1, Mail size is 100byte, no attachments, TCP: Send/Recv buffer 1024;
SMTP	TPUS (Mbps)	5500	4000	Open, Send, Quit sequence, Mail Count is 10000, Mail size is 1024000 bytes, TCP: Send/Recv buffer 1048576;
SMTP	CPS	49000	38000	Open, Send, Quit sequence, Mail Count is 1, Mail size is 1, no attachments, only the "from" and "to" headers.
SMTP	TPS	245000	220000	Open, Send, Quit sequence, Mail Count is 10, Mail size is 1, no attachments, only the from and to headers.
TFTP	TPS	253000	213000	GET 1 Byte file.
TFTP	SU	900000	900000	GET 1 Byte file.
CIFS	CC	818000		Only ScanAll Command
CIFS	SU	818000		Only ScanAll Command
CIFS	TPUT (Mbps)	10000		Only ScanAll Command
CIFS	CPS	60000		Only ScanAll Command
CIFS	TPS	460000		Only ScanAll Command
DNS - UDP	SU	1600000	1600000	1 Type A Query; Query Timeout = Number of users/rate of transactions.
DNS - UDP	TPUT (Mbps)	280	280	1 Type A Query
DNS - UDP	TPS	300000	260000	1 Type A Query
DNS - UDP	QPS	300000	260000	1 Type A Query
DNS - TCP	SU	200000	200000	1 Type A Query; Query Timeout = Number of users/rate of transactions.
DNS - TCP	TPUT (Mbps)	220	220	1 Type A Query
DNS - TCP	TPS	55000	50000	1 Type A Query
DNS - TCP	QPS	55000	50000	1 Type A Query

IxLoad 5.20 Performance -- IPSec Performance

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Protocol	Performance Indicator	XTS16	XTS40	Comments	
IPsec Stateless Peer	Throughput	7.9 Gbps	19.6 Gbps	16 tunnels, 1428 Bytes frames, Phase 2 algos: AES-128 with SHA1	
IPsec Stateful Traffic	HTTP Goodput	7.2 Gbps	5.2 Gbps	16 tunnels, 1024 HTTP pages, Phase 2 algos: AES-128 with SHA1	
IPsec Capacity	Stateless Traffic	500,000	500,000	IKEv1 and IKEv2, Site-2-Site, Preshared Key authentication, AES-128, SHA1, DH2	
IPsec Capacity	Stateful Traffic	250,000	250,000	IKEv1 and IKEv2, Site-2-Site, Preshared Key authentication, AES-128, SHA1, DH2	
IPec Setup Rate	Static Mode	2000/s	2000/s	IKEv1 and IKEv2, Site-2-Site, Preshared Key authentication, AES-128, SHA1, DH1	