

## Manage and Verify End-to-End Network Performance!

**Are you a CIO or Network Manager with business-critical applications being accessed by users at remote office locations? Are the applications performing well? If not, is it the network???**

- Do you know the true bandwidth usage levels and availability across all of the LAN / MAN / WAN links between the data center and your end-user locations over the business day?
- Do you know when your backup data transfers start and end? Are they conflicting with business day traffic?
- You know that latency affects application performance... but do you know what the routing and latency really *is* between your hosts and remote user locations? Or if it changes? (it does...)

**You CAN know with *confidence* how your network is performing across the entire path between hosts and end-user locations – not just the individual links and devices – and ensure that the performance is optimal / acceptable... and what to do if not.**

**You need a [Network Performance Analysis](#) by PacketIQ!**

A **Network Performance Analysis (NPA)** is a detailed investigation of network link usage levels that leverages PacketIQ's advanced analysis tools to provide an extremely accurate, statistically-derived accounting of bandwidth levels and patterns across the 24 hour business day based on multiple days of data exported from your existing SNMP or NetFlow / sFlow Network Management Systems (or collection tools can be arranged).

Usage data from LAN/MAN/WAN links is merged in our specialized tools to reveal **true bandwidth availability to user locations across multiple links and time zones** over the 24-hour business day utilizing the unique Time of Day Analysis™ feature of the [PacketIQ Bandwidth Statistical Analyzer](#).

This is coupled with a comprehensive routing, latency, and average effective throughput analysis from the data centers to each end-user location.

Network End-Points		Network Routing Illustrations		Link Bandwidth Values are in Kbps				RTT Delay times are in ms	
User Loc	Access Data Center	LAN Links	Network Routing Illustrations	Min Phys Link Speed	Min CIR	Effective Available BW	Total Path	Queueing	Delay ms
In	Out	In	Out	In (A<Z)	Out (A->Z)	RTT ms	RTT ms	Delay ms	Delay ms
LAN User	SPRINT	2	LAN User-----LAN	100,000	100,000	77,500	77,500	1	0.02
LAN User	SPRINT	2	LAN User-----Sprint	40,860	40,860	28,198	34,235	34	0.83
LAN User	SPRINT	2	LAN User-----Sprint	40,860	40,860	28,198	7,119	60	2.96
LAN User	SPRINT	4	LAN User-----Sprint	40,860	40,860	18,106	34,235	138	4.92
LAN User	SPRINT	3	LAN User-----AT&T	3,070	3,070	1,906	2,411	78	13.06
LAN User	SPRINT	3	LAN User-----AT&T	3,070	3,070	1,906	2,411	56	11.06
LAN User	SPRINT	5	LAN User-----Sprint	3,070	3,070	1,906	2,411	188	11.45
LAN User	SPRINT	3	LAN User-----AT&T	3,070	3,070	1,906	2,412	95	2.23
LAN User	SPRINT	3	LAN User-----AT&T	3,070	3,070	1,906	2,412	88	7.32
LAN User	SPRINT	5	LAN User-----Sprint	3,070	3,070	1,906	2,412	189	0.15
LAN User	SPRINT	2	LAN User-----AT&T	12,360	12,360	8,324	9,734	57	3.79
LAN User	SPRINT	2	LAN User-----AT&T	12,360	12,360	8,324	9,734	39	2.70
LAN User	SPRINT	4	LAN User-----Sprint	12,360	12,360	8,324	9,734	158	5.70

Min Phys Link Speed		Min CIR		Effective Available BW		Total Path	Queueing	Delay ms
In	Out	In	Out	In (A<Z)	Out (A->Z)	RTT ms	Delay ms	Delay ms
100,000	100,000			77,500	77,500	1	0.02	
40,860	40,860			28,198	34,235	34	0.83	
40,860	40,860			28,198	7,119	60	2.96	
40,860	40,860			28,198	34,235	138	4.92	
3,070	3,070			1,906	2,411	78	13.06	
3,070	3,070			1,906	2,411	56	11.06	
3,070	3,070			1,906	2,411	188	11.45	
3,070	3,070			2,016	2,270	91	2.23	
3,070	3,070			2,016	2,270	74	5.49	
3,070	3,070			2,016	2,270	194	5.40	
3,070	3,070			1,543	2,412	95	2.10	
3,070	3,070			1,543	2,412	88	7.32	
3,070	3,070			1,543	2,412	189	0.15	
12,360	12,360			8,324	9,734	57	3.79	
12,360	12,360			8,324	9,734	39	2.70	
12,360	12,360			8,324	9,734	158	5.70	

These metrics are combined into a 'Network Path Performance' report which reflects bandwidth availability and latency over each server-to-user path, and whether that performance is reasonable / acceptable.

**The focus and result is clear visibility and confirmation of the end-to-end performance of the network as experienced by your end-user applications.**

