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To: T&M experts Date: May 2011

From: JM Caballero (Pepe)

Answer to: pca@albedo.biz

Subject: QoS and BW measurements in GbE / IP / MPLS

Dear All,

There is a good number of reasons to state that Testers and Routers are not the right tools to measure the QoS, SLA, and Performance of Ethernet / IP networks because they assume wrong testing criteria, and use inadequate methodology.

We believe Net. Audit is the right tool and this is why:

Feature	Routers	Testers	ALBEDO Net.Audit	Benefits
End-to-End	NO	NO	YES	Net.Audit can measure Quality and Performance from any point of the Network, beyond NATs to local addresses
In-Service	YES	NO	YES	In Ethernet / IP out-of-service measurements of QoS are not valid, because traffic conditions change continuously
Long Term	YES	NO	YES	IP results are correlated i.e. most Mondays are similar and different to Sundays. A week often is a min test period
Technology	Ping	Synthetic Traffic	OWAMP	Ping is a low priority, testers are too intrusive, OWAMP is the new standard to measure IP that soon everyone will use
One-Way	NO	NO	YES	Up & downstream measurements is a must because IP is asymmetric. It is useless round-trip or loop-back!
Synchronized	NO	NO	YES	A tool GPS synchronized has an accuracy better than < 1ms
Results	Browser	Screen	Browser, CSV, email	Browser results allow remote monitoring, CSV permit customized reports, while email is fine for alerts & alarms
Multipoint	YES	NO	YES	If IP network are multipoint, why hand-held instruments are still executing point-to-point tests?
Independent	NO	YES	YES	It is not fair a router SLA application to be used to measure the quality of the routers of the same manufacturer
Simulator	NO	NO	YES	Only Net.Storm can generate real traffic impairments to simulate Internet and find out the limits of the Network

Look and Compare, and you will find out this solution is very unique in the Test & Measurement niche. However, if you find something missing, or want to adapt something please tell us.

We can do it for you!

Jose M Caballero – ALBEDO Telecom (Barcelona)