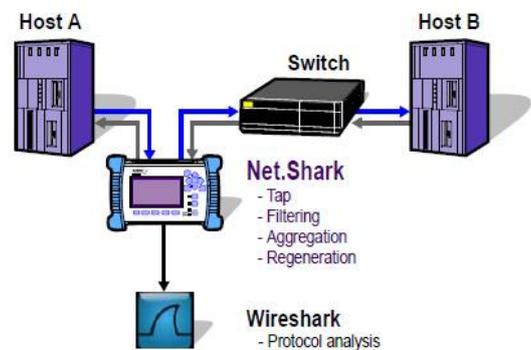| From: ALBEDO Technical Support	To: Protocol Experts	Date: Jan 2012
Subject: Why Network Analyzers require Advanced Taps		Answer to: rbt@albedo.biz

Dear Customer,

Why do you need to use a hand-held Tap -such as ALBEDO Net.Shark- with your Network Analyzer?

Mirror ports may not provide 100% of network traffic if they are over-subscribed because this process works in background in low priority; moreover it may not even be available for use when necessary. It may also occur that to monitor multiple network channel or VLAN simultaneously and aggregate the data to your network analysis cannot be possible because of the complexity of the set up and execution process.

PCs executing protocol analyzers like Wireshark lack power capacity and traditional taps cannot be moved easily and always depend on another external device because are not self contained. Once you get the traffic there are still limitations such as FDX capture, jitterless timestamp, or field storage of captured data that may only be overcame with a hand-held field tap such Net.Shark:

Feature	Labtop	Tap	Net.Shark	WHAT – WHY – HOW
Wirespeed	NO	✓	✓	*Laptop and PCs captures are CPU driven impossible to scale up to Gbit/s*
Mobility	✓	NO	✓	*A field engineer should be ready to sniff at any point of the network*
Full Duplex	NO	✓	✓	*Engineers are forced to select a port despite protocols are full duplex*
Transparent	NO	✓	✓	*No MAC, no IP address then cannot be hacked*
FCS frames	NO	✓	✓	*Errored frames (FCS, runts, fragments) are discarded then can't reach PC*
Carrier Grade	✓	NO	✓	*Fault tolerant if power goes down NS continues with batteries*
Storage	✓	NO	✓	*NS can capture and storage compliant traffic on the SD card*
Time Stamp	✓	NO	✓	*NS can storage in PCAP format without liant traffic on the SD card*
Aggregation	NO	✓	✓	*Copied packets from both Ports can be aggregated before to be dropped*
No Disturb	NO	✓	✓	*PCs generate delays, loss, and a lot of jitter when are used as taps*
Screen+Keybrd	✓	NO	✓	*Because NS is tap and also a proper hand held computer with Linux*
Remote Control	✓	✓	✓	*NS can also be managed remotely using standard VNC*

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

We can do it for you!

Ramon Boncompte – ALBEDO Telecom