



# Carrier-grade Ethernet tester in Enterprise, Utilities and Industrial Ethernet

## UniPRO MGig1 & UniPRO SEL1



### Are you getting enough? Police your WAN SLAs

Every time you order a WAN service or leased line, you negotiate a service level agreement or SLA. Usually all is well for the first few weeks or months.

But then users start to complain that “things are going slow” and you begin to wonder if certain WAN links and services are actually being provided at the SLA levels you agreed with the service provider.

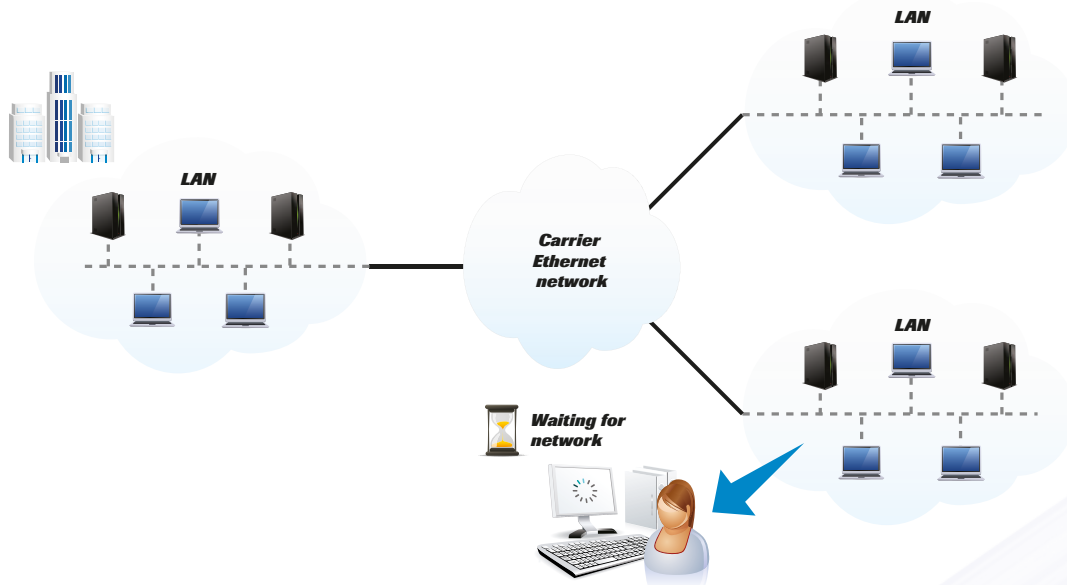
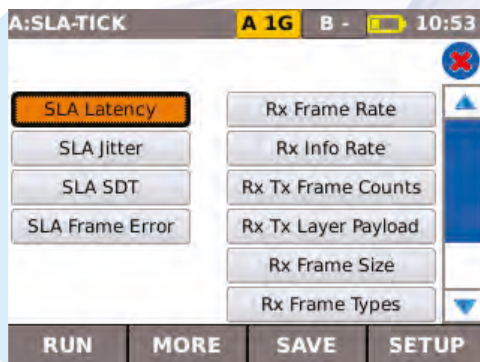


Figure 1 - Network slowing down

But for many network managers, there is no simple way to tell.

PC or laptop-based speed tests are affected by far too many external factors to be at all reliable. In fact, most service providers will not accept PC-based measurements as legitimate evidence in SLA disputes.

And with a PC, you can't measure the critical difference between the SLA's Committed Information Rate (CIR or guaranteed bandwidth) and its Excess Information Rate (EIR or non-guaranteed additional bandwidth).



However, now you can!

IDEAL Networks' UniPRO MGig1 PLUS and UniPRO MGig1 PRO dual port models all have the capability to check whether all of your SLA conditions are being met - and if not will give you the exact figures to raise your SLA trouble ticket and compensation claim.



### Anyone can test

At its simplest, UniPRO MGig1's SLA-Tick test really is plug and press. Simply insert the UniPRO MGig1 tester into the service provider's network demarcation point or UNI (User Network Interface point). Get someone else to plug in a UniPRO SEL1 (or a second UniPRO MGig1) at the far end of the link. That's all they need to do - the testing is all controlled from your end.

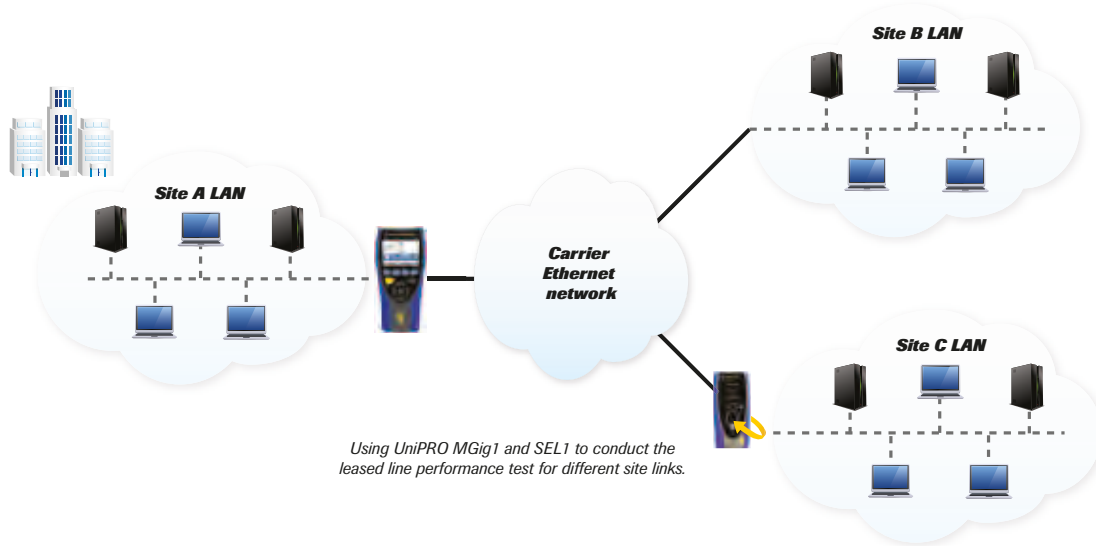


Figure 2 - Testing the WAN network quality

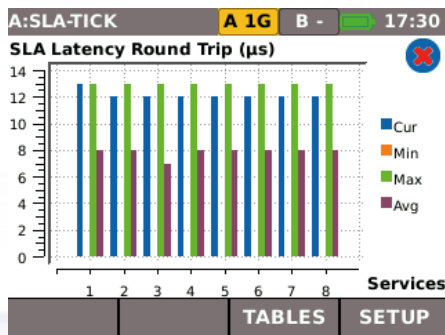
You can now run the very same tests your service provider runs – to check ALL the SLA parameters.

Within a few minutes you'll have exact figures for all your SLA parameters:

- Multi service (stream) Committed Information Rate (CIR) or guaranteed bandwidth
- Excess Information Rate (EIR) or non-guaranteed 'best efforts' additional bandwidth
- Frame loss percentage
- Delay or latency
- Jitter or delay variation
- Service Disruption Time (SDT)
- Bit Error Ratio

You can even run extended tests to see how the service performs over approximately 24 hours.

Now you know whether your service provider is providing the service promised or not!



SLA-Tick failed on latency

A:SLA-TICK A 1G B - 17:32

SLA Frames

Srv	Lost	%Lost	Out Of Seq	%OOS
1	87	0	0	0
2	84	0	0	0
3	59	0	0	0
4	176	0	0	0
5	187	0	0	0
6	234	0	0	0
7	281	0	0	0
8	187	0	0	0

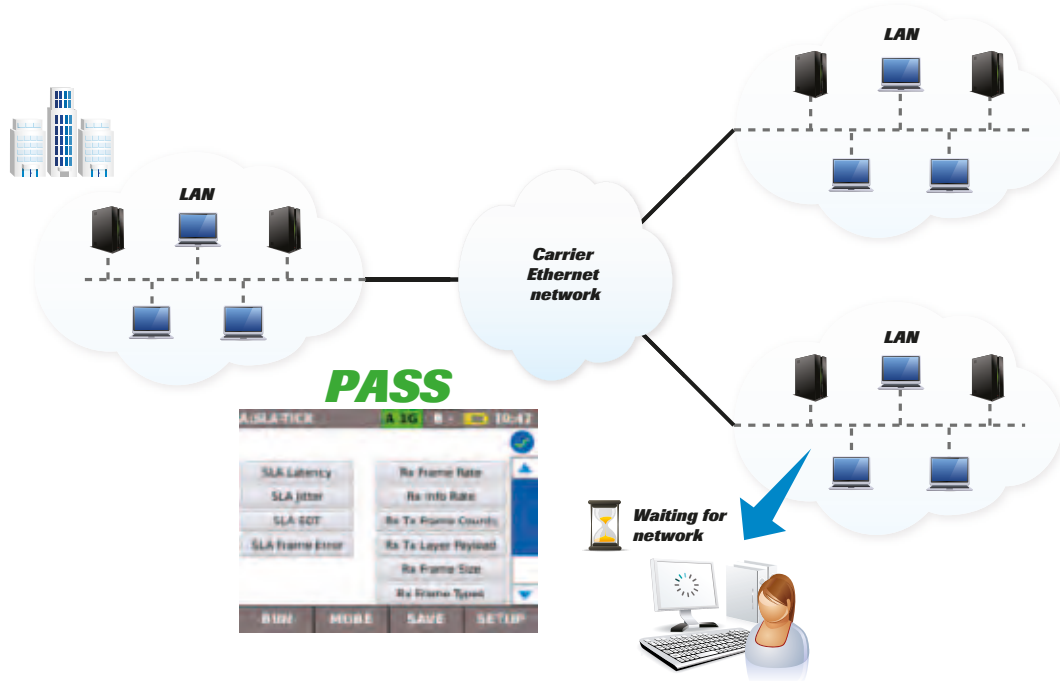
SETUP

SLA-Tick failed on packet (frame) loss



**Are you buying enough bandwidth? Or too much? How can you tell?**

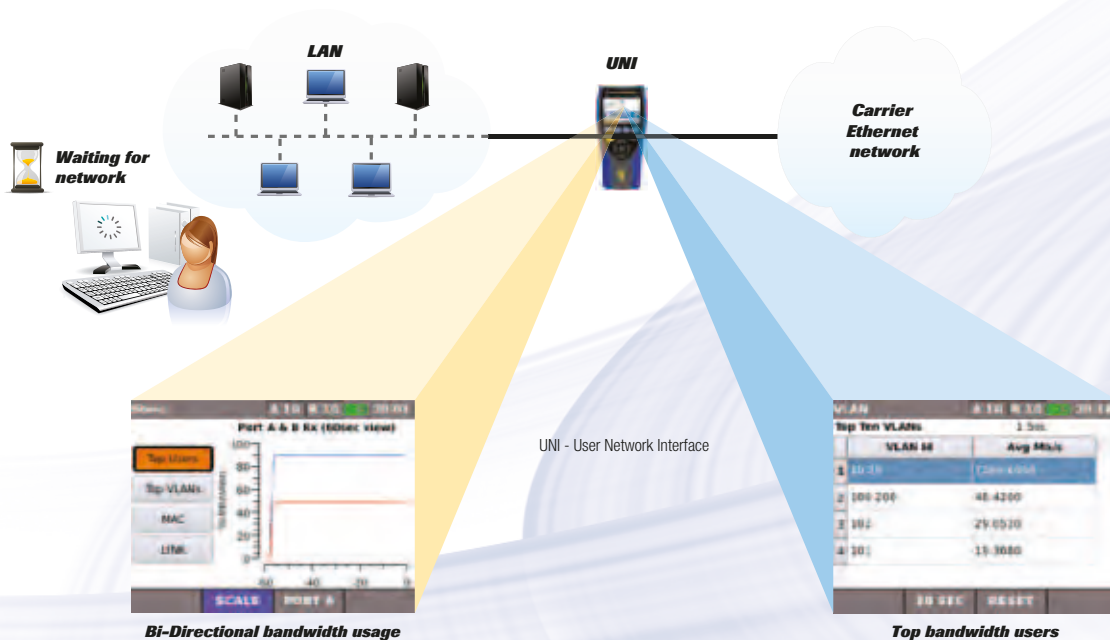
What if your SLA testing proves that the service provider is meeting the SLA – but you’ve still got users complaining the network is ‘slow’ ?



*Figure 3 - SLA pass, but the network is still slow*

Frequently this turns out to be overloading of the link’s available bandwidth - because user traffic or perhaps server-to-server or some other background traffic has become ‘invisible’ without the network manager’s knowledge.

Use UniPRO MGig1’s top ten bandwidth users test function to easily see which users (servers or PCs) are hogging the bandwidth.



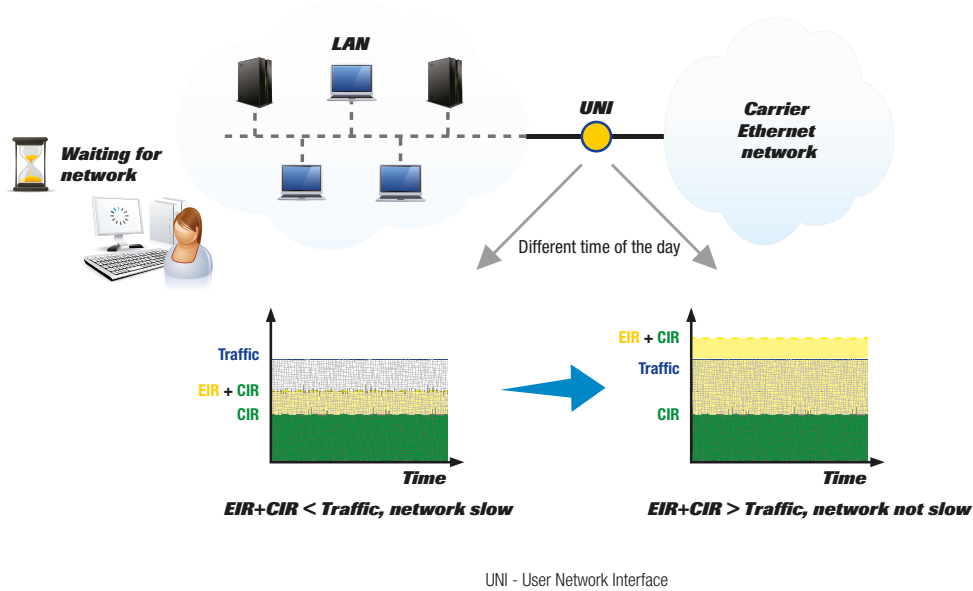
*Figure 4 - Check the bandwidth usage at UNI*





Often, networks are struggling because they outgrow the Committed Information Rate (CIR). They seem to operate satisfactorily for parts of the day but then slow down at other times. This is usually because the level of traffic comes to rely on using the extra bandwidth available under the EIR (Excess Information Rate) provision. The trouble is, this EIR is only available when the service provider's network is not busy.

When the network operator's busy time comes each day – so your IT users begin to complain that “everything is going slow!”



**Figure 5 - Network speed impact of available EIR on traffic**

Once UniPRO MGig1 has identified the true traffic scenario, you can take management action.

Now that you can see the true level of traffic, you might decide to upgrade your SLA CIR/EIR bandwidths with your carrier or service provider to coincide with your organisation's true needs.

Alternatively, if cost is your priority, UniPRO MGig1 is the ideal tool to avoid costly bandwidth upgrades - by helping you to manage your organisation's bandwidth requirements. For example; by scheduling non time-critical processes, such as backups and database synchronisation, to consume bandwidth during quiet times instead of the busy hours to stay within your existing CIR.