

Sniffter100™ Case Study

March 2004

Key Findings:

- 1 Immediate circuit & network parameters
- 2 Gives technician troubleshooting confidence
- 3 Gives technician autonomy in the field
- 4 Productivity payback in under 2 months
- 5 Eliminates need for laptop PC as tester

Survey of Sniffter100™ Users conducted between March 16 and March 31, 2004.

Summary of findings prepared by Ed de la Fuente, Principal, Planning Innovations Group, Phoenix, AZ. (480) 585-6112

For more information on the Sniffter100, contact:

Tom Collins
Tom Logic LLC
1031 Jefferson St., #B
Napa, California 94559
(707) 265-6622
sales@tomlogic.com

User Survey: Impact on Technical Operations

By Ed de la Fuente,
Planning Innovations Group

Introduction

With the Sniffter100™ test set in use by ten telecom service providers, and with over 250 units in the field, Tom Logic felt it was time to conduct a formal survey of its users. This survey would help get an aggregate understanding of what impact this 'new-to-the-world' device has had on technical operations. The findings are summarized in this 'case study' to help others understand what current users are experiencing.

User Expectations

Users expected to increase technician productivity and had these expectations in common:

- 1) The technician would be able to quickly and easily confirm circuit and network parameters, including VDSL signal levels and SNR, test DHCP functionality, data rates, Internet access, and operation of customer's NIC.
- 2) They would be able to eliminate the need for a laptop PC as a test tool.

When asked to rate how well using the Sniffter had met their expectations, all respondents rated it at or above the maximum of "10".

In the Field

Technicians installing video and data services on the Motorola Next Level platform can run into circuit issues anywhere from before the crossbox to the wiring in the premise. Knowing that all aspects of the circuit are functioning correctly without lugging test and CPE equipment from point to point can save the technician valuable time. The Sniffter100 test set is being used for both Installation and Repair job functions.



For example, as part of an installation procedure, some companies have the technician check all circuit parameters at the NID before setting up any equipment in the premise. Since this test takes just a couple of minutes as the technician steps through the menu-selected tests, he/she can then move to the location where the equipment will be placed and test the circuit from there.

Continued on next page

Whenever a problem is encountered, the technician can break the circuit and use the Sniffter100 device to check the circuit or cabling in either direction to locate the cause of the problem. A field technician described his experience as "its compact size is impressive for what it can do, and is much easier to use instead of a laptop and other test tools".

We learned that the technicians using the Sniffter feel they can quickly and confidently prove to themselves that the circuit is working, and if not working they know where the problem is - even testing and identifying the customer's NIC as the source of the problem.

Having the Sniffter100 test set was often described as "taking the guesswork out of troubleshooting" in the field.

Operational Results

As you know, it is difficult to quantify a 'typical' installation or repair time or cost, given all the variability between jobs and companies. We can, however, summarize that productivity is improved for both installation and troubleshooting operations when the Sniffter100 is used, and the tool clearly provides the technician confidence in easily identifying circuit issues. Since the Sniffter can read and display the necessary VDSL signal parameters to the technician, there is no need for him/her to contact the head-end for assistance in testing. Giving the technician autonomy in getting the

job done efficiently eliminates that bottleneck.

Most users reported a 10 to 30 minute reduction in Installation job times on average when using the Sniffter100, and saved anywhere from 20 to 60 minutes on average for troubleshooting jobs. Using these figures we can estimate a simple payback in productivity impact for the investment made by putting a Sniffter100 in the technician's tool kit.

If we assume 20-minutes savings on average for Install and Repair jobs, a loaded hourly technician rate of \$50, and a unit price of \$650, the tool investment is paid back in approximately 40 jobs. Depending on a provider's dispatch rate, the payback time can range from just 2 weeks for a 4-job per day tech, to 4.5 weeks for a 2-job per day technician.

About one-half of users utilize the network testing capabilities of the Sniffter100 in place of a Laptop PC, as all of the network test functions can be handled in the test set. This replaces what is typically a \$3,000 expense with a \$650 expense. Note that some companies have the technicians continue to carry a Laptop PC for other uses.

Technician Training

The training that a technician needs to be able to use the Sniffter100 is minimal in comparison with other circuit test equipment. As the users told us "it is intuitive and walks you through the menus".

About a third of users felt that training wasn't necessary and just

made sure the technicians were given the instruction manual. The remaining two-thirds held a 2-4 hour training session. The training that fits right in the middle is a 1-hour session over pizzas in the shop to review the Sniffter100's menus and test capabilities while connected to a network. This sounds like a very productive team-building session!

Conclusion

The Sniffter100™ test set has developed a strong technician following since being introduced 2 years ago. While it was originally designed specifically for the Motorola Next Level VDSL platform, several users are using its network and cable test capabilities for ADSL technicians as well.

The overall impact of deploying the Sniffter100 test set was best described by one user who said it brings "customer smiles" as the tech can quickly isolate the problem, typically within 15 minutes of being on-site.

Ed de la Fuente of Planning Innovations can be reached at (480) 585-6112.

For more information on the Sniffter100 Network Tester, please visit www.sniffter.com or call Tom Logic LLC at (707) 265-6622.