A Challenge for Some Household Cleaners – But not for EtherSchrubb! [1]

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***Abstract*—Throughput of optical networks degrades over time. Packet and light deposits may congest the fiber-optic cables. We present EtherSchrubb™ to restore the initial performance of an optical system.**

I. Introduction

It is well-known that throughput of optical networks degrades over time [2]. Packet and light deposits may congest the fiber-optic cable over time, thus impacting performance. We present EtherSchrubb™, a specialized fiber-optical cleaning tool which can restore the initial performance of a system. EtherSchrubb™ generates a torrent of optimal bit patterns to free congested fibers. A study, performed by questioning the tool's original author, confirms that EtherSchrubb™ can boost the performance of optical network by over 9000 units of measurement.

II. Related Work

Using several patterns of noise to improve the performance of technical systems is widely used in other domains. It is comprehensively accepted that "burning in" of headphones leads to an improved sound experience [3]. The same is true for other data transmissions.

III. Implementation

We use our scriptable high-speed packet generator MoonGen [4] as basis for EtherSchrubb™. MoonGen can be extended with Lua scripts to schrubb ≥ 10 GbE fiber cables.

We generate a specific pattern of *bit-packets* by varying the bits, packet size and inter-packet spacings. We measured shininess and schrubbability of different patterns. For the best pattern, our patent is pending. We will publish it soon™.

IV. Evaluation

We evaluate applicability, performance, and effect.

A. Applicability

Also, it is not only applicable to fiber optical networks, it can also successfully utilized for legacy, copper-based Ethernet networks. However, the optimum packets differ for different wire types. Future work includes porting EtherSchrubb™ for the use with avian carriers [5] and MPLampS [6].

B. Performance

We used two off-the-shelf pre-y2k evaluation laptops. It shows that those evaluation machines get hot and noisy, thus EtherSchrubb™ must use the available resources efficiently. A modeling-approach shows – using `exfalso` [7] – that this solution is ideal.

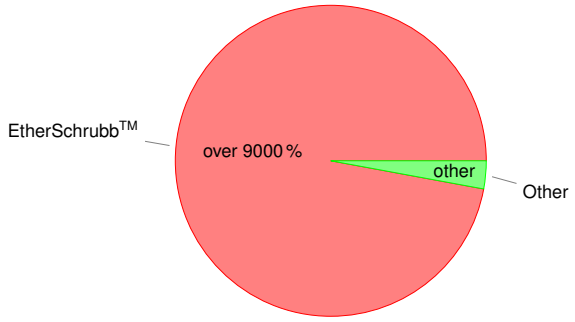

Fig. 1. Effect of EtherSchrubb™

C. Effect

We empirically asked the original author of EtherSchrubb™ about the performance gains it provides. The author confirmed an performance gain of over 9000 units of measurement We illustrate the effect of EtherSchrubb™ in Fig. 1.

V. Conclusion

Look at this cable! Look at this cable! Good as new! Good as New! G-G-G-G-Good as New! Schrubb, Schrubb, Scrubb Schrubb Schrubb! [1]

Acknowledgment

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