

# WizardGap

## The "Wizard Gap"

The *Wizard Gap* is an expression coined by Matt Mathis (then PSC) in 1999. It designates the difference between the performance that is "theoretically" possible on today's high-speed networks (in particular, research networks), and the performance that most users actually perceive. The idea is that today, the "theoretical" performance can only be (approximately) obtained by "wizards" with superior knowledge and skills concerning system tuning. Good examples for "Wizard" communities are the participants in [Internet2 Land-Speed Record](#) or [SC Bandwidth Challenge](#) competitions.

The Internet2 [end-to-end performance initiative](#) strives to reduce the Wizard Gap by user education as well as improved instrumentation (see e.g. [Web100](#)) of networking stacks. In the GANT community, PERTs focus on assistance to users (case management), as well as user education through resources such as this [knowledge base](#). Commercial players are also contributing to closing the wizard gap, by improving "out-of-the-box" performance of hardware and software, so that their customers can benefit from faster networking.

## References

- M. Mathis, *Pushing up Performance for Everyone*, Presentation at the NLANR/Internet2 Joint Techs Workshop, 1999 ([PPT](#))

– Main.SimonLeinen - 2006-02-28 - 2016-04-27