

### Laboratoire d'Analyse et d'Architecture des Systèmes du CNRS

### **"WHAT SHOULD WE LEARN FROM 25 YEARS OF THE INTERNET: A DNS CASE STUDY"**

par

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## résumé de l'exposé

# **l'orateur**

There are several "definitive" Internet histories, and there will be more.

While there are many reasons to study history, this talk concentrates solely on finding lessons that will have value looking forward, and uses several examples from naming and DNS as its case study.

While many argue that a clean slate is the best way forward, we beg to differ. We begin by looking at the general problem of extracting useful ideas from Internet history.

#### The DNS case study has three foci.

The first is the long and flexible "food chain" that comprises today's DNS industry and dataflow.

The second is the roots and implications of securing the DNS infrastructure. Lastly we look at what it will take to vastly expand the role of naming in the Internet, either by DNS evolution or replacement.



**Paul Mockapetris** is an Internet advocate and investor, with interests ranging from high speed switching systems to applications.

At present, he is a visiting scholar the University of Pierre and Marie Curie, Paris and is Chairman and Chief Scientist for Nominum.

In the past he was CTO at Urban Media, Siara, Fiberlane, Software. com and director of engineering at @Home.

He has been IETF chair, program manager at ARPA, and did 15 years of research at the University of Southern California's Information Sciences Institute, and 10 years at UC Irvine with the DCS project.

He is best known as the creator of the Domain Name System (DNS), and wrote the first implementation of SMTP.

He received his learner's permits in Physics and Electrical Engineering from the Massachusetts Institute of Technology in 1971, and his Ph.D. in Information and Computer Science from the University of California, Irvine, in 1982.

He is the recipient of the IEEE 2003 Internet award and the ACM 2005 Sigcomm award, and is a member of the US National Academy of Engineering.