In Favour of Posting

THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Seminar

Challenges and Opportunities in the Design of TRILL: a Routed layer 2 Technology

by

Dr. Radia Perlman
Fellow
Sun Microsystems

Date : 11 November, 2009 (Wed.)
Time : 10:30am-11:30am
Venue : Room 833, Ho Sin Hang Engineering Building
The Chinese University of Hong Kong

Abstract

IP as a networking technology has the disadvantage that every link must have a unique prefix. That means that routers must be configured with prefixes for each port, and nodes that move to a different link must change their IP address. In contrast, bridges (Ethernet switches) can glue many links together into what looks to IP to be one big Ethernet. However, bridge technology has disadvantages such as suboptimal routes, lack of features such as load-splitting, and fragility. TRILL (TRansparent Interconnection of Lots of Links) is a working group in IETF standardizing a echnology that fits between layers 2 and 3, giving the advantages of both. This talk gives an overview of TRILL, but also covers some of the contentious issues, some of the surprising technical problems, and some potential research problems.

Biography

Radia Perlman is a Fellow at Sun Microsystems. She designed the spanning tree algorithm that is the heart of bridge technology, the routing algorithm IS-IS, which will be the heart of TRILL, and did the design from which TRILL has evolved. Her research interests also include network security protocols. She is the author of two textbooks: "Interconnections" (about layer 2 and 3 technology) and (with 2 coauthors) "Network Security: Private Communication in a Public World". She has a PhD in computer science from MIT.

**** ALL ARE WELCOME ****

Host: Professor Dah-Ming Chiu (Tel: 2609-8357, Email: dmchiu@ie.cuhk.edu.hk)
Enquiries: Information Engineering Dept., CUHK (Tel.: 2609-8385)