Table of Contents

Characterization of Routing and Forwarding	
Revisiting Route Caching: The World Should Be Flat	3
Quantifying the Extent of IPv6 Deployment	13
Analyzing Router Responsiveness to Active Measurement Probes Mehmet H. Gunes and Kamil Sarac	23
Topology and Delay	
Inferring POP-Level ISP Topology through End-to-End Delay Measurement	35
Triangle Inequality and Routing Policy Violations in the Internet Cristian Lumezanu, Randy Baden, Neil Spring, and Bobby Bhattacharjee	45
Methods for Large-Scale Measurements	
Queen: Estimating Packet Loss Rate between Arbitrary Internet Hosts	57
Fast Available Bandwidth Sampling for ADSL Links: Rethinking the Estimation for Larger-Scale Measurements	67
Multi-layer Monitoring of Overlay Networks	77

Wireless

Understanding Channel and Interface Heterogeneity in Multi-channel Multi-radio Wireless Mesh Networks	89
Access Point Localization Using Local Signal Strength Gradient Dongsu Han, David G. Andersen, Michael Kaminsky, Konstantina Papagiannaki, and Srinivasan Seshan	99
Management Tools	
Extracting Network-Wide Correlated Changes from Longitudinal Configuration Data	111
Clarified Recorder and Analyzer for Visual Drill Down Network Analysis (Demo)	122
Data Gathering in Optical Networks with the TL1 Toolkit (Demo) Ronald van der Pol and Andree Toonk	126
Audio and Video Traffic	
A First Look at Media Conferencing Traffic in the Global Enterprise	133
Supporting Enterprise-Grade Audio Conferencing on the Internet Krishna Ramachandran and Sunitha Beeram	143
Peer-to-Peer	
PBS: Periodic Behavioral Spectrum of P2P Applications	155
Measuring Mobile Peer-to-Peer Usage: Case Finland 2007	165
Monitoring the Bittorrent Monitors: A Bird's Eye View	175

Bernhard Tellenbach, Martin Burkhart, Didier Sornette, and

Author Index

Thomas Maillart

239

249