Essentials of Home Networks *

Xuzi Zhou and Kenneth L. Calvert
Laboratory for Advanced Networking
University of Kentucky
Lexington, KY, USA 40506-0633
{xuzizhou, calvert}@netlab.uky.edu

ABSTRACT

Home data.

1. INTRODUCTION

SIGCOMM 2016
ICNP 2016
INFOCOM 2016
Story line:

1. It was hard to measure traffic in and out home networks. Most home network flows are transformed by NAT. Have no device level traffic data.

2. Measuring home networks is a battle between utility and privacy. Either one is hard to measure. Although Our data collected from household has been highly aggregated and anonymized, we still want to exploit interesting and useful information from the data.

3. Deployment: onsite installation of local households and mailed self-installation for other US households. Our router is acting as the only gateway of internet access in participant households. Automatic system maintenance and package update through over-night update system.

4. Explain the data we are collecting: edges and their parameters

5. Discompose home networks: performance stat, device summary, usage pattern, traffic distribution of applications, and corroborate findings of previous publications and public traffic traces. "Reality if relative. Normal is just the middle of the mess." – a quote from TV series, Grimm

2. CONCLUSION