Skylines: Pragmatic, Perspective-Based Internet Mapping

Marc Anthony Warrior
Northwestern University
warrior@u.northwestern.edu

Romain Fontugne
IIJ Innovation Institute
romain@iij.ad.jp

Randy Bush
IIJ Innovation Institute
randy@psg.com

ABSTRACT

Existing mapping systems and measures used to describe Internet location fail to account for complexities introduced by DNS-based content allocation schemes. With DNS redirection, in particular, clients residing in the exact same network location may potentially be served by completely different content sources. Likewise, distant clients may be directed to the same servers. The existence of such scenarios challenges the validy of some common assumptions about network behavior: the relationship between a client's network location and its "view" of the Internet, independent of performance, is neither predictable nor consistent across clients.

In this paper, we introduce skylines, a distance measure that describes variation in Internet resource allocation between clients. TODO: finish list of contributions

CCS CONCEPTS

• **Networks** → *Application layer protocols*; Naming and addressing; Location based services;

KEYWORDS

DNS, CDN, replica server, subnet

ACM Reference Format:
Marc Anthony Warrior, Romain Fontugne, and Randy Bush. 2018. Skylines: Pragmatic, Perspective-Based Internet Mapping. In ,. ACM, New York, NY, USA, 2 pages. https://doi.org/0.0/0.0

1 INTRODUCTION

bla bla

IMIC '18, IMC '18: ACM Internet Measurement Conference 2018, October 31–November 2, 2018

ACM ISBN 0-0-0-0-0/0/0…$15.00
https://doi.org/0.0/0.0

REFERENCES