draft-tsou-behave-ftp46-00
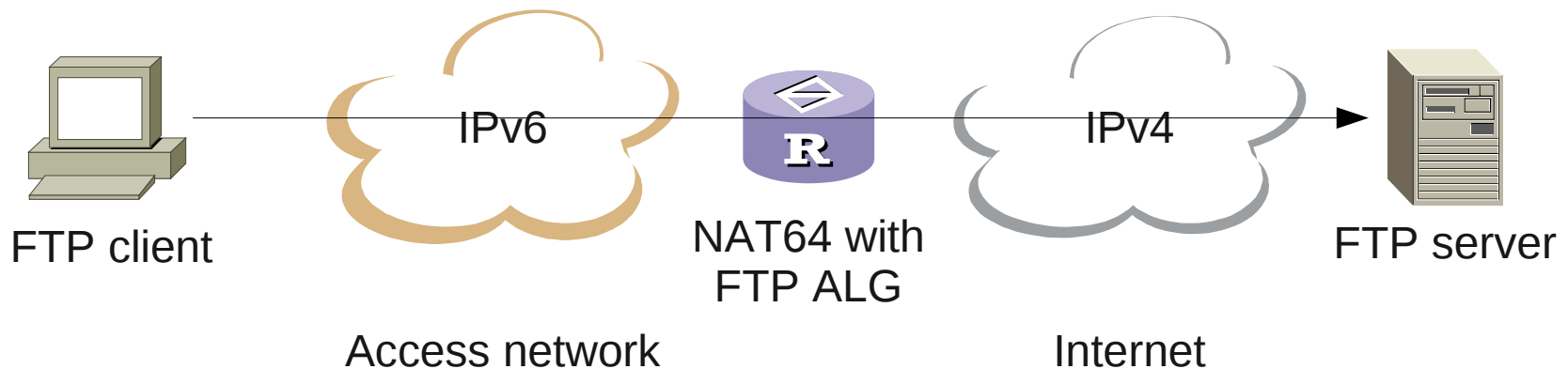
Tina Tsou <tina.tsou.zouting@huawei.com>
Simon Perreault <simon.perreault@viagenie.ca>
Jing Huang <James.huang@huawei.com>

IETF 84, Vancouver
BEHAVE meeting

2012-08-02

Introduction

- BEHAVE made RFC 6384
  "An FTP Application Layer Gateway (ALG) for IPv6-to-IPv4 Translation"

- Use case considered:

FTP client — Access network — IPv6 — NAT64 with FTP ALG — IPv4 — Internet — FTP server

Problem

- Current situation:
  - IPv4-only ISP
  - Subscribers run IPv4-only FTP servers

- With NAT64:
  - Subscribers' FTP servers will become IPv6-only
  - Port redirection on NAT64 allows incoming connections to FTP servers (out of scope)

- Problem:
  - NAT64 FTP ALG does not work in this direction

Problem

- Existing NAT64 FTP ALG needs to be extended to handle IPv4-to-IPv6 connection establishment.

- Problem is encountered as part of the regular "IPv6 network to IPv4 Internet" deployment scenario.

FTP server   IPv6   NAT64 with FTP ALG   IPv4   FTP client

Access network   Internet
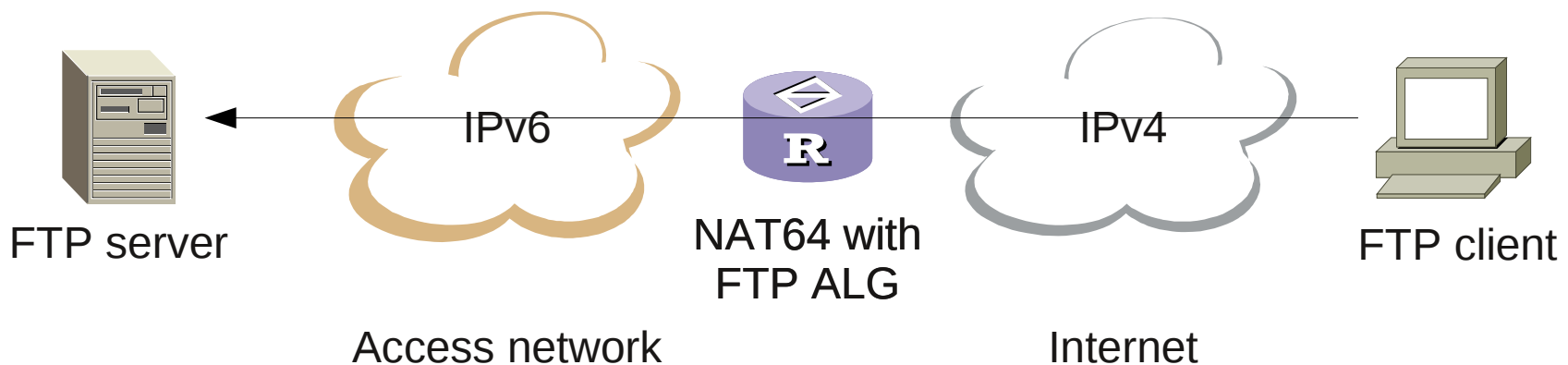
When to activate the ALG?

- When external port is 21.

- Or when internal port is 21.

- Or when PCP requested external port is 21.
  (even if PCP assigned a different port)

- Or as indicated by an out of band mechanism.
  (web interface, proprietary signaling, etc.)

Our draft

- draft-tsou-behave-ftp46-00

- Specifies ALG behavior for the IPv4-to-IPv6 direction.

- Updates RFC 6384.

- Seems straightforward (to us, at least).

Next steps

- Please read and give us feedback!
- WG draft? AD sponsored? Individual?