

RADIUS Extensions for NAT Forwarding Port

draft-cheng-behave-nat-fwd-port-radius-ext-00

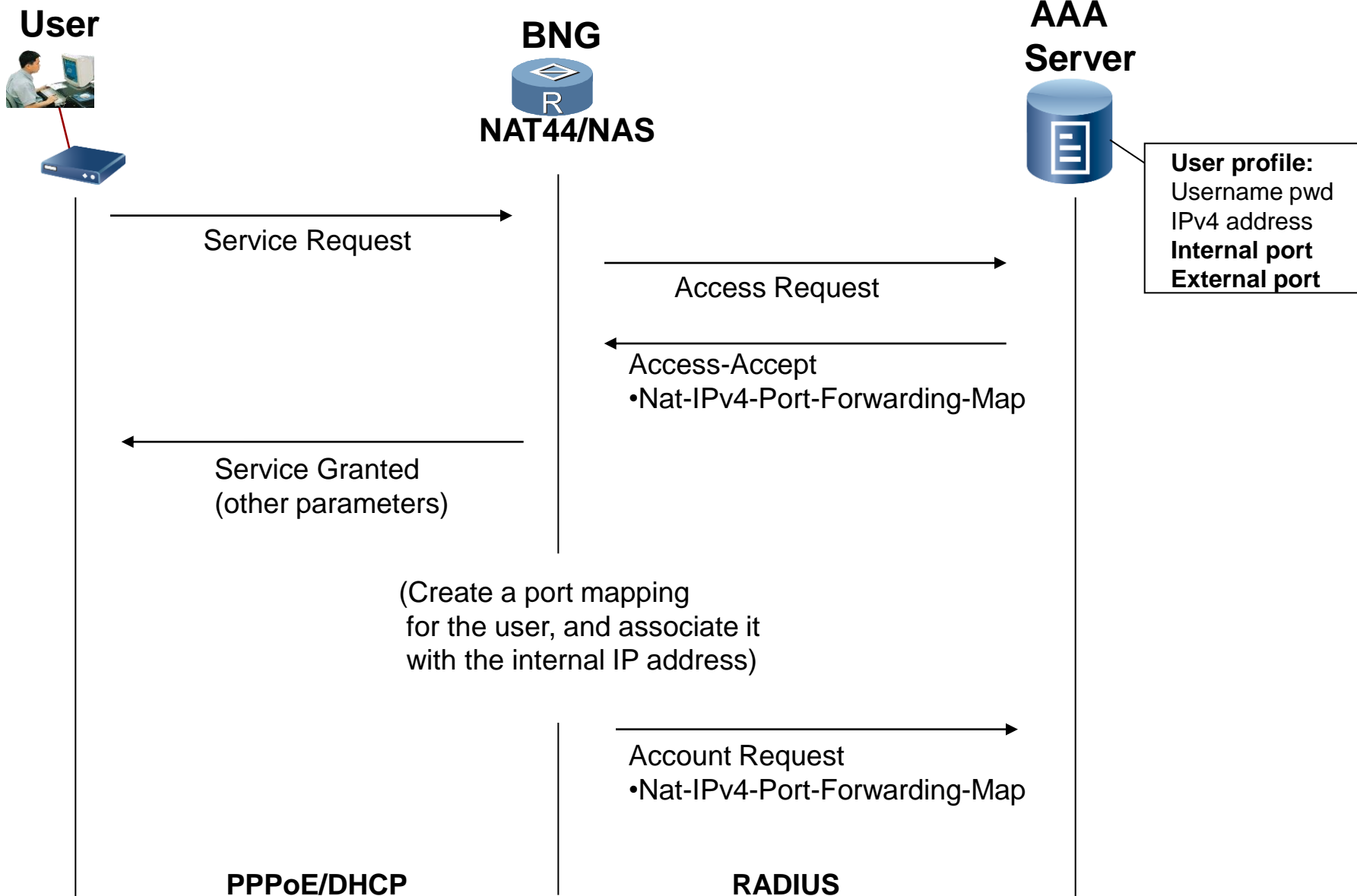
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Motivation

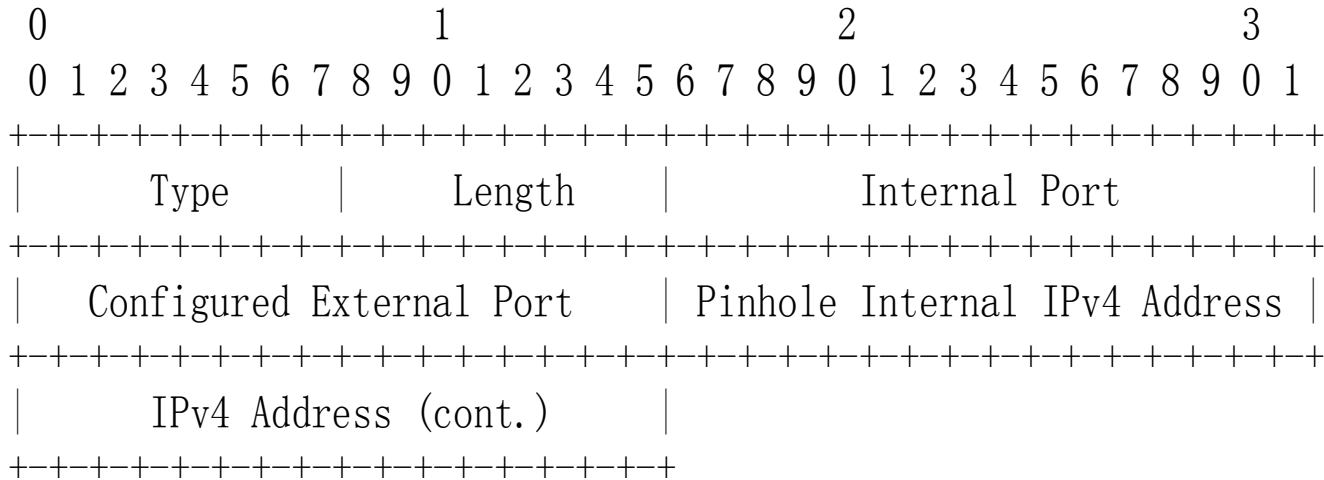
- **Scenario (in a broadband network)**
 - **User configuration is stored on a RADIUS server (user profile)**
 - **User's broadband connection terminates at a BNG**
 - **CNG (e.g. NAT44) can be co-located on a BNG**
- **Problem to solve**
 - **How to have one or few pinholes on the CGN allowing IP communication initiated from the external realm of the CGN?**
 - **The pinhole on the CGN stays during the entire service connection**
- **Solution proposed**
 - **Pre-configure the CGN port mapping on the RADIUS server as part of the user profile. This information is propagated to the BNG/CGN by RADIUS message exchange that occurs at the service request time.**

NAT44 Port Forwarding Configuration via RADIUS



Nat-IPv4-Forwarding-Port-Map

(proposed new RADIUS Attribute)



Type

TBD

Length

10 octets.

Internal Port

Internal port for the pinhole.

Configured External Port

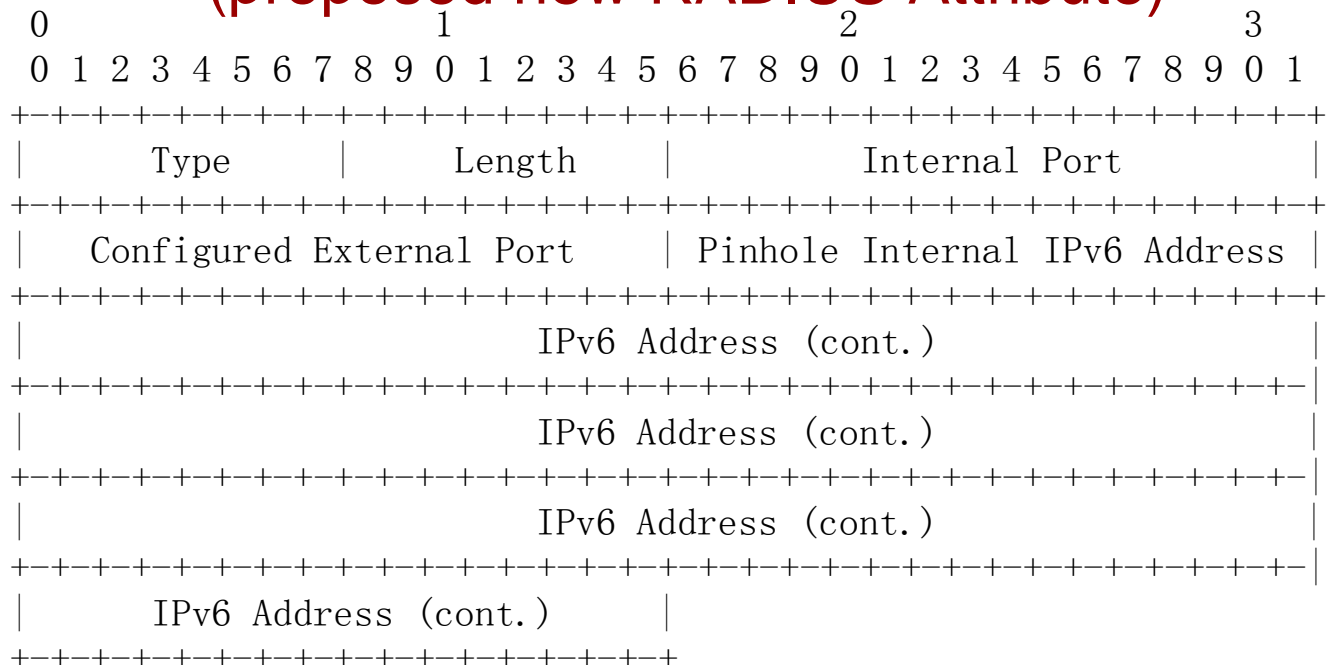
External port for the pinhole.

Pinhole Internal IPv4 Address

The internal IPv4 address at the pinhole.

Nat-IPv6-Forwarding-Port-Map

(proposed new RADIUS Attribute)



Type

TBD

Length

22 octets.

Internal Port

Internal port for the pinhole.

Configured External Port

External port for the pinhole.

Pinhole Internal IPv6 Address

The internal IPv6 address at the pinhole.

Next Step ...

- **Any interest or/and comments?**