

# GRE NAT Traversal Problem

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# Generic Routing Encapsulation (GRE)

- Defined in RFC 2784
- GRE tunnel

adds an additional GRE header between inner and outer IP headers.

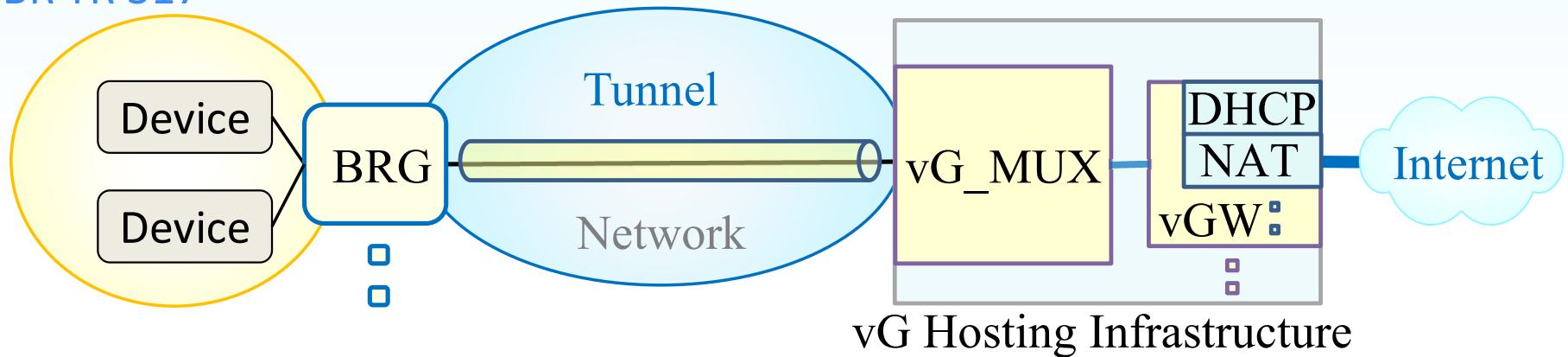


- Generic Routing Encapsulation Terminal Access Point (GRETAP):  
encapsulates Layer 3 protocol with a valid Ethernet type,



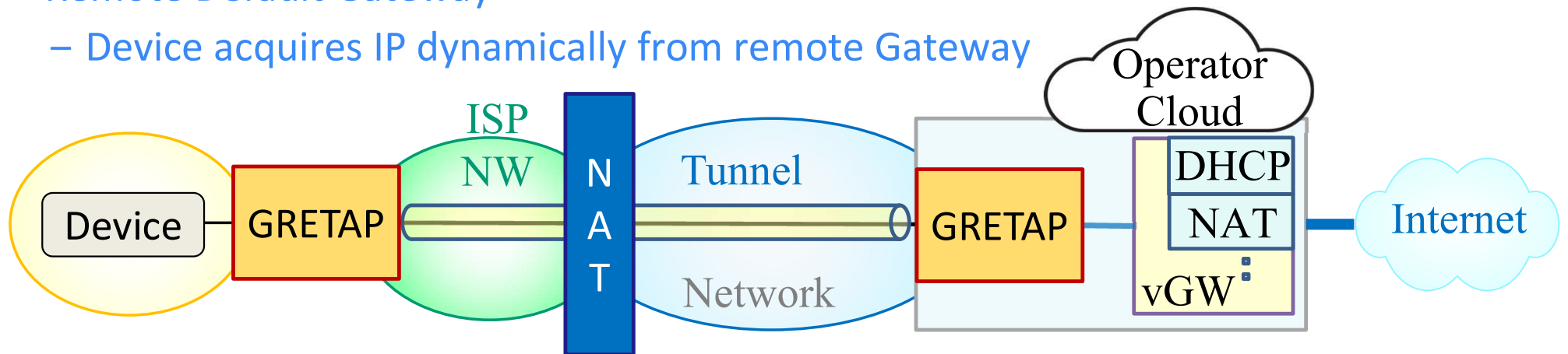
# Remote Default Gateway with Tunnel

- BBR TR 317



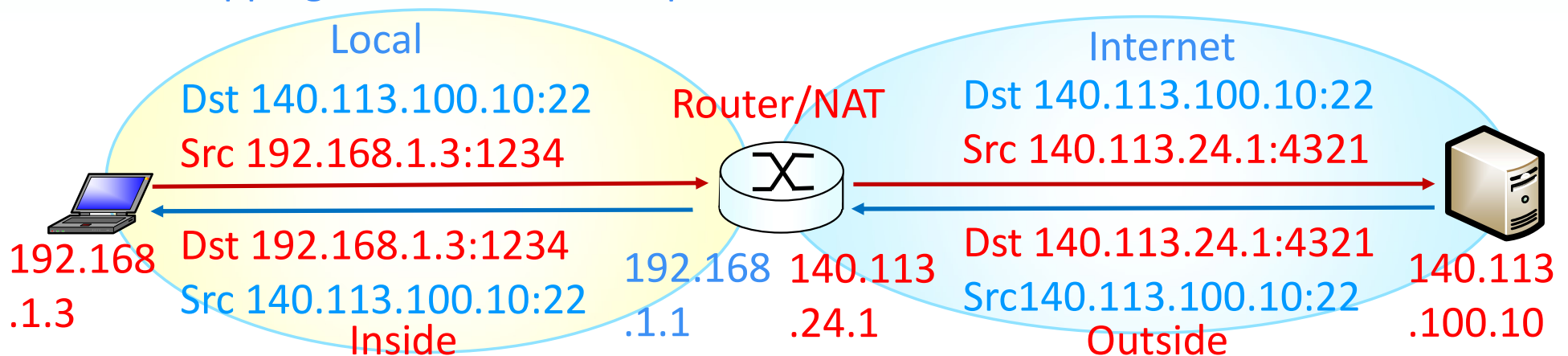
- Remote Default Gateway

- Device acquires IP dynamically from remote Gateway



## NAT/NAPT – NAT Port Address Translation

- Assigns an **external** transport identifiers (ports) for each connection and
- Maps **internal transport addresses** (IP and port) to **external transport addresses**
- Records mapping and re-write transport addresses in the IP headers



Internal	External
192.168.1.3:1234	140.113.24.1:4321
192.168.1.3:5678	140.113.24.1:8765
192.168.1.5:1234	140.113.24.1:9999