

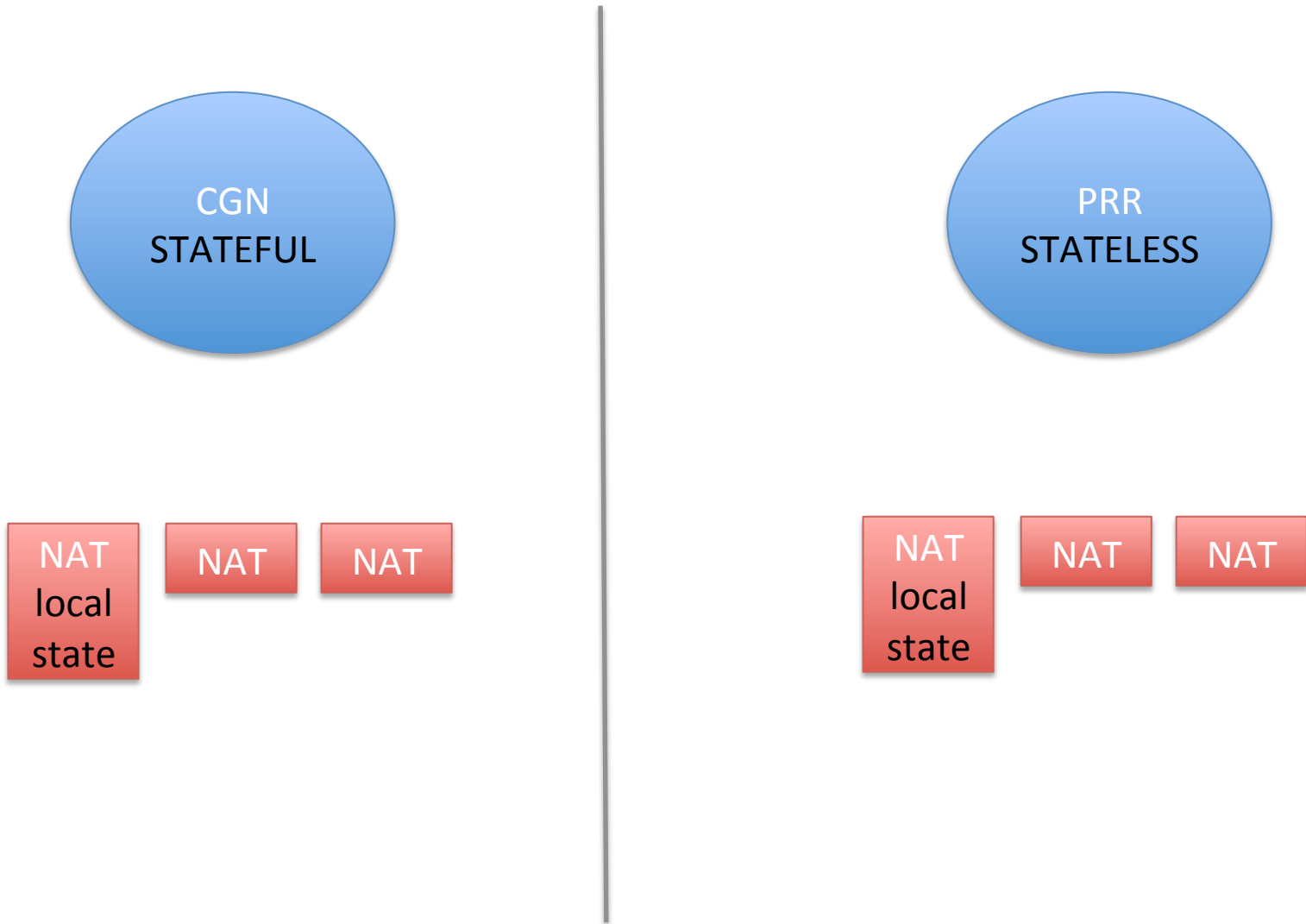
CGN vs PRR

STATEFUL vs STATELESS

What is state?

- Type 1) NAT binding
 - Customer ID + Internal IP address + port → external IP address + port
- Type 2) Which customer “has” which port

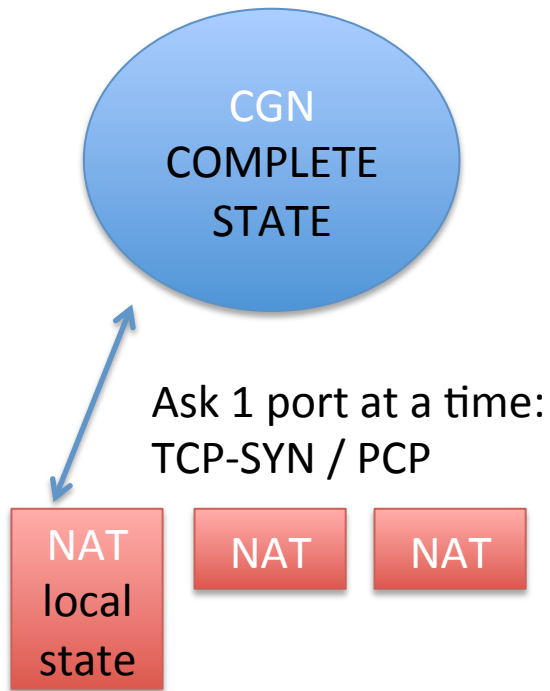
Where is Type 1 State?



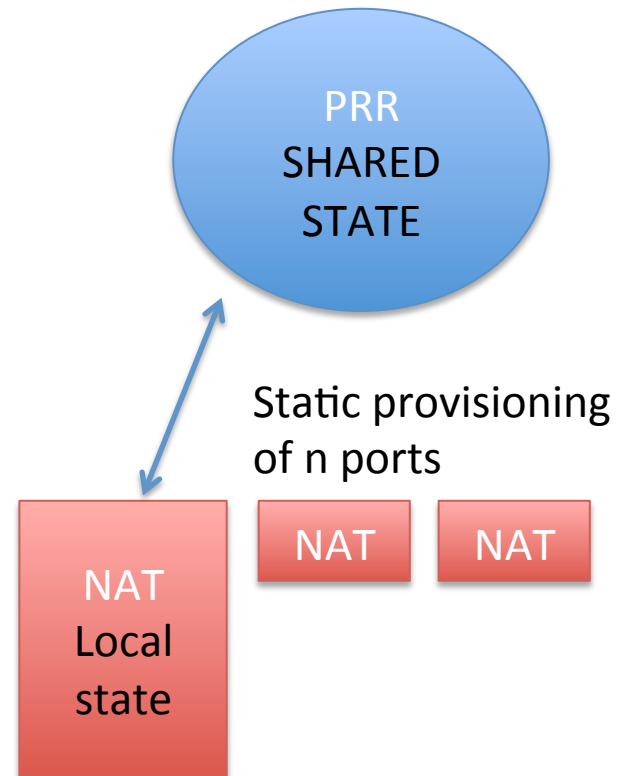
Where is Type 2 State?

Static Port Allocation

CGN allocates static port sets.
No log.



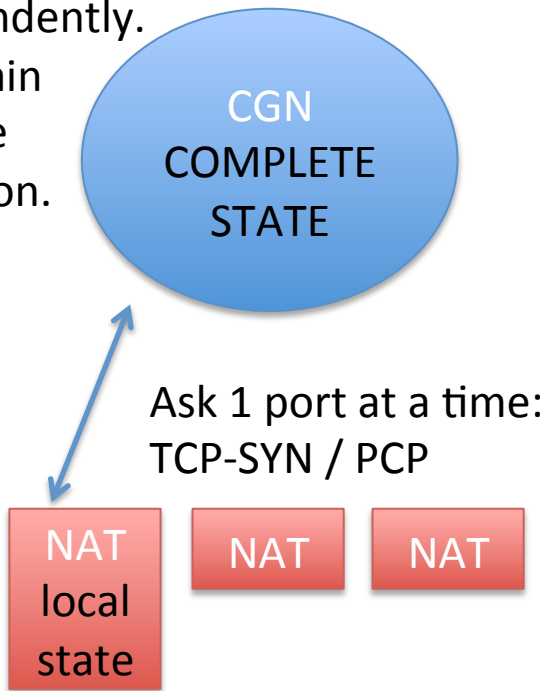
PRR allocates static port sets.
No log.



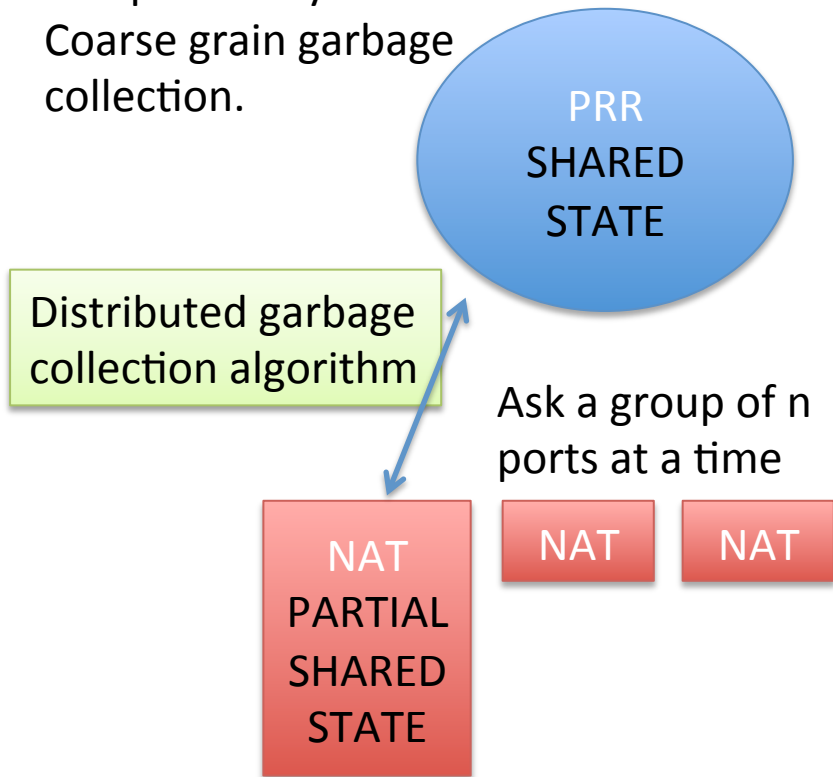
Where is Type 2 State?

Dynamic Port Allocation

CGN expires each port independently.
Fine grain garbage collection.



PRR expires port groups independently.
Coarse grain garbage collection.



Keep track of port usage
Ask for more if need be,
Release unused ports and/or blocks