

(IETF73)

# ISP Shared Address

draft-shirasaki-isp-shared-addr

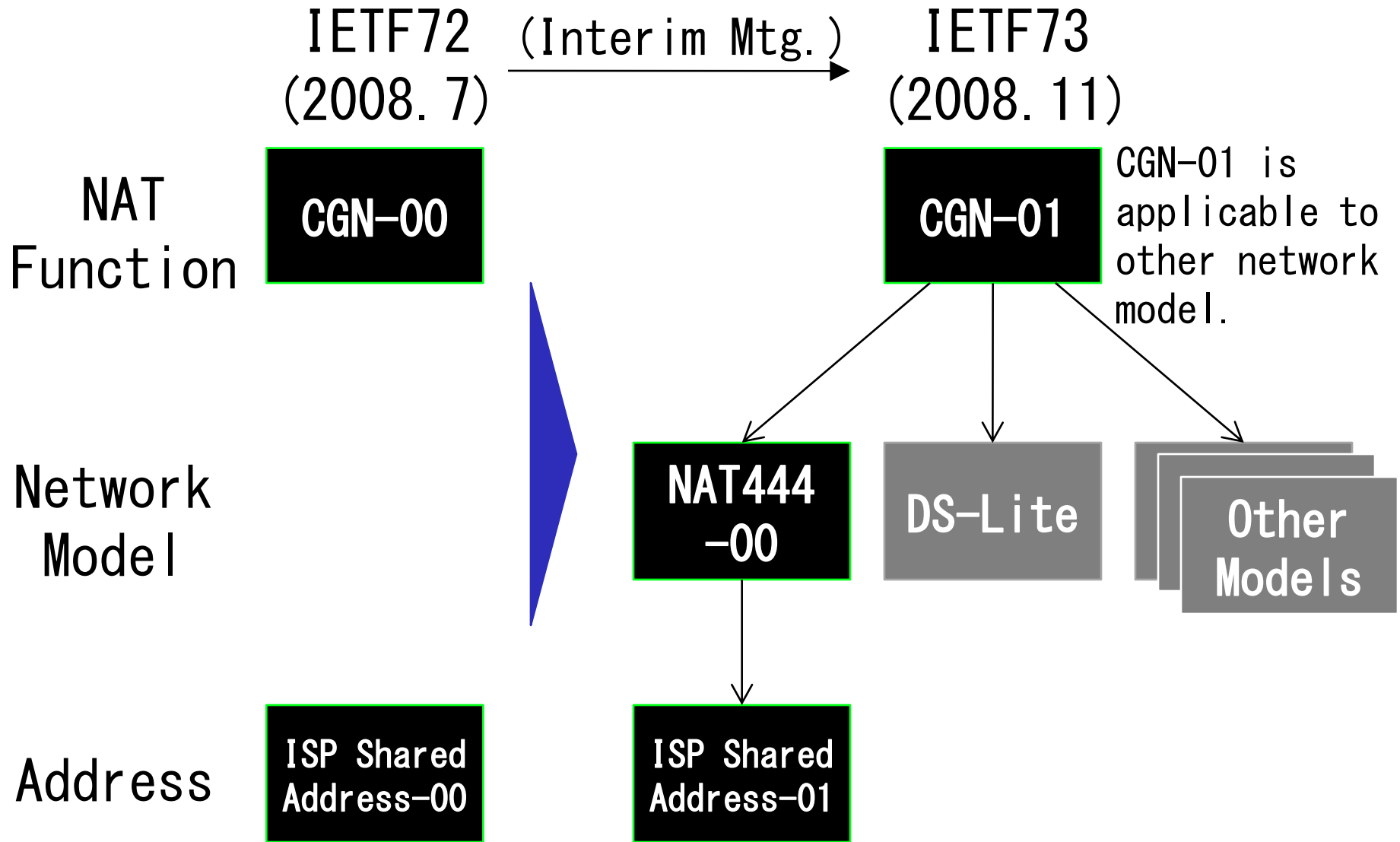
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# Rearrangement of Internet Drafts

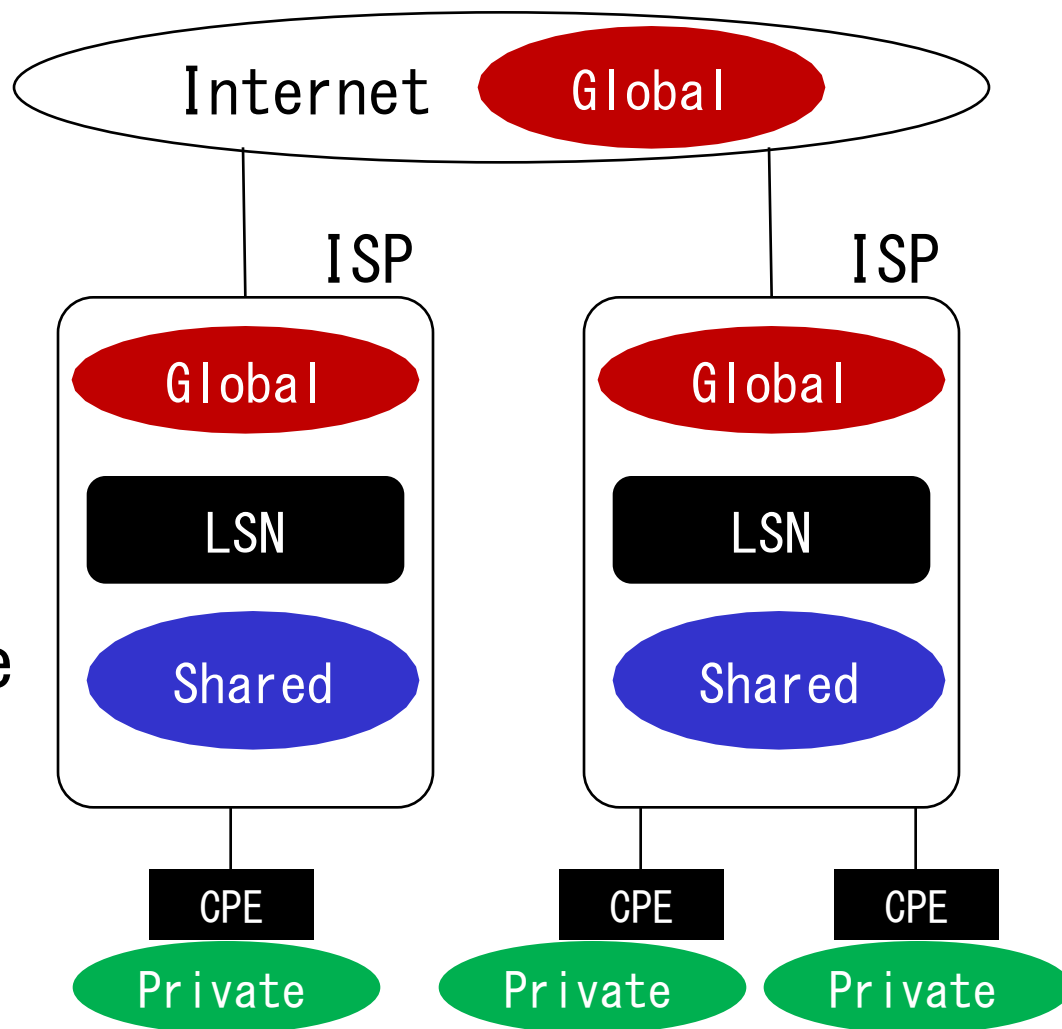


# What is ISP Shared Address ?

ISP Shared Address:

◆ Used in NAT444 Model

◆ Between LSN (Large Scale NAT) & CPE



# Routing Issue of Private Address

Packet doesn't know  
which 10.0.0.12 to go.

Global Address

(Large Scale  
NAT)

LSN

10/8

?

10.0.0.12

NAT

NAT

Even if the  
packet arrives,  
some FWs drop  
packet with RFC  
1918 source  
addresses here

10/8

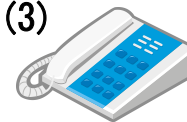
(1)



(2)



(3)

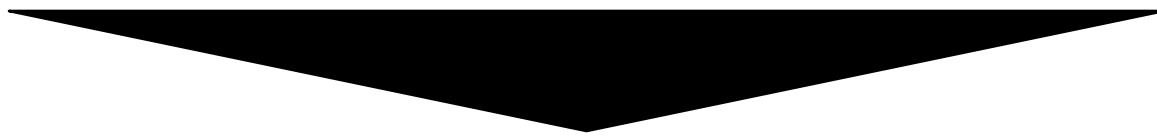


10.0.0.12

- ◆ **Proposed at APNIC26 (in Taipei / Feb, 2008)**
  - We found Some ISPs agreed in AP Region.
- ◆ **Talked with IANA**
- ◆ **All of above suggested**
  - Get (some level of) consensus in IETF first
  - It is unprecedented
- ◆ **As IPv4 space getting tighter**
  - Earlier consensus, Easier to block space

# If this proposal is not passed,

ISP will get Global IPv4 Address Block



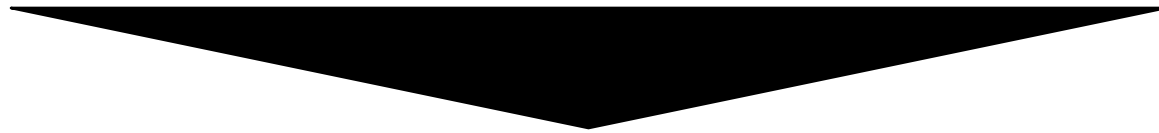
## Depletion comes sooner !

## ◆ How large address size do we need ?

- One /8 might be small for large ISPs
- Four /8s might be too large to convince registries
- We may need to show the necessity in this case
- Two /8s suitable ?

Size	ISP Coverage	
	Number of ISPs	%
/10	103	44%
/9	58	52%
/8	35	65%
/8*2	19	82%
/8*3	6	92%
/8*4	2	100%

**NAT444 Model needs Shared Address !!**



**to Working Group Draft ?**