



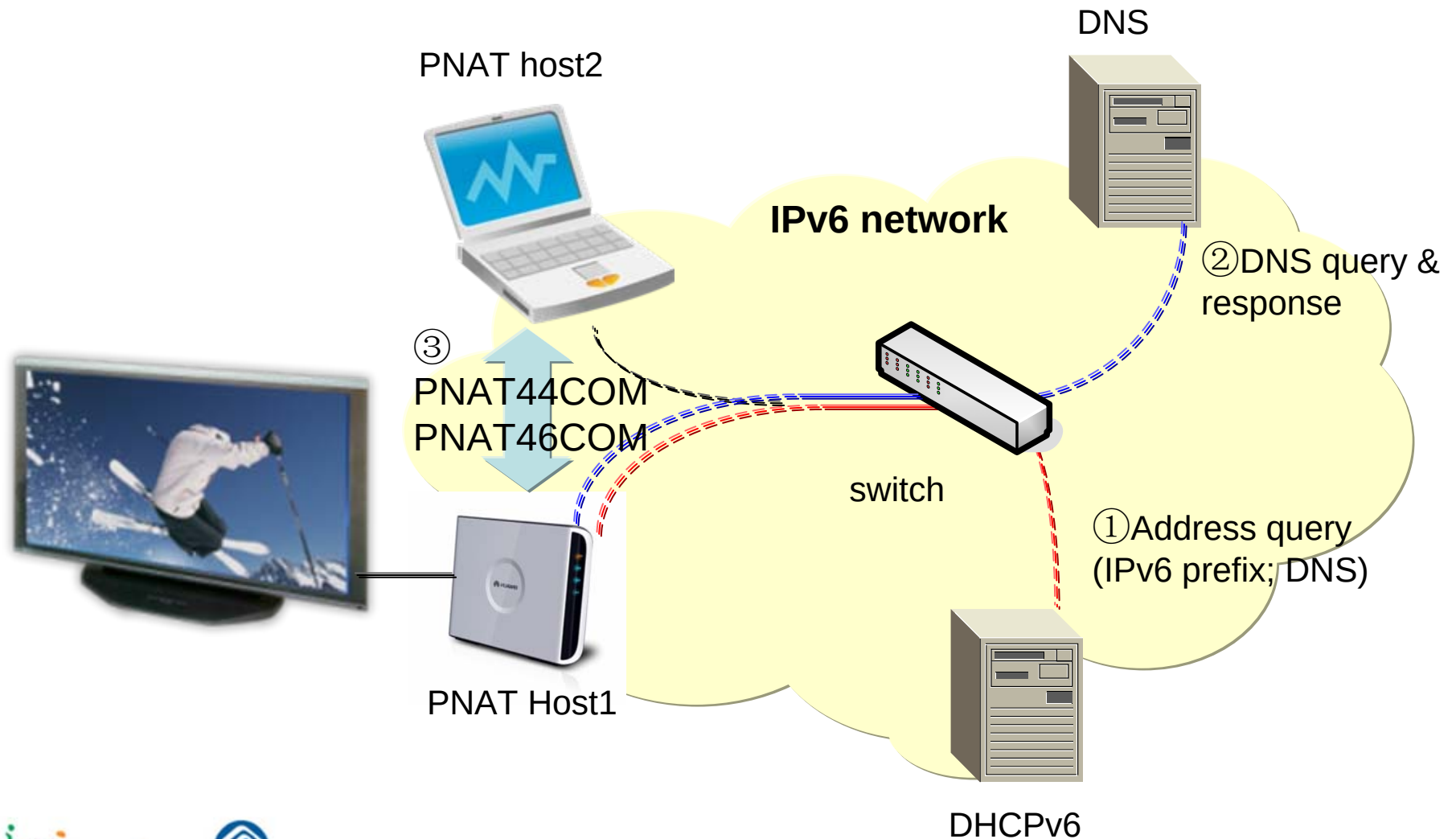
中国移动通信
CHINA MOBILE

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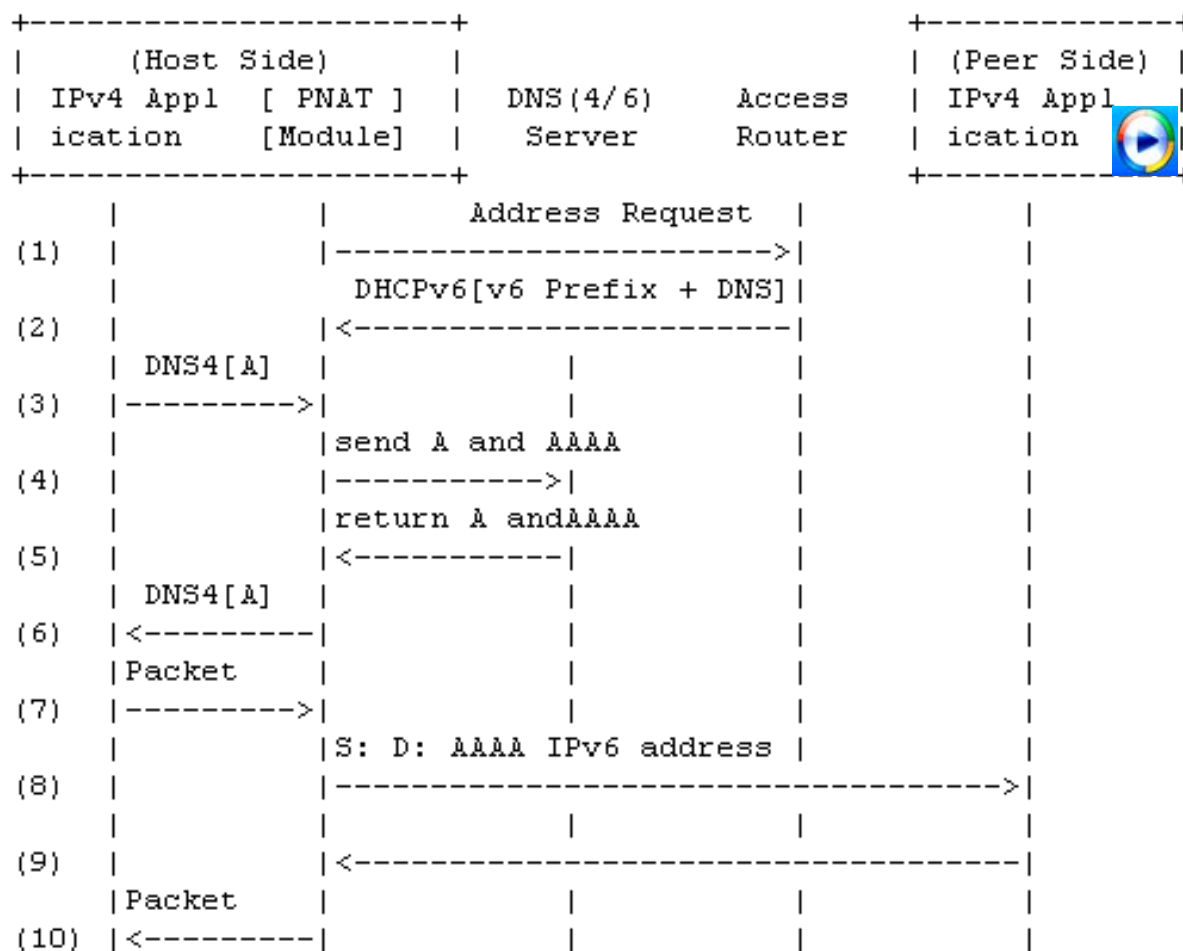
PNAT Demonstration

China Mobile

Demonstration Topology



PNAT44COM Process



PNAT44COM Network -- Both two hosts stay in the same network

PNAT46COM Process

"dual stack"

"host46"

IPv4	TCP/	extension	address	translator	IPv6
appli-	IPv4	name	mapper		
cation		resolver			



```

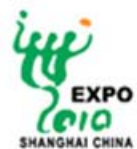
| | | | | | |
|<<Resolve an IPv4 address for "host46".>> | | |
| | | | | | |
|----->| Query of 'A' records for "host46". | Name
| | | | | | | | Server
| | | |----->|
| | | Query of 'A' records and 'AAAA' for "host46"
| | | | | | |
| | |<----->|
| | | Reply with 'A' and 'AAAA' records. |
| | | | | | |
| | |<<Both 'AAAA' and 'A' record is resolved.>>
| | | | | | |
| | |----->| Request mapping of received IPv4 address
| | | | corresponding to the received IPv6 address.
| | | | | | |
|<----->| Reply with the 'A' record. |
| | | | | | |

```

PNAT46COM(Cont..)

"dual stack"				"host46"	
IPv4 appli- cation	TCP/ IPv4	extension name resolver	address mapper	translator	IPv6
<<Send an IPv4 packet to "host46".>>					
=====	=====	=====	=====	>	An IPv4 packet.
			<-----		Request IPv6 addresses corresponding to the IPv4 addresses.
			----->		Reply with the IPv6 addresses.
					<<Translate IPv4 into IPv6.>>
			An IPv6 packet.	=====	=====>
					<<Reply an IPv6 packet to "dual stack".>>
			An IPv6 packet.	<=====	=====
					<<Translate IPv6 into IPv4.>>
<=====	=====	=====	=====		An IPv4 packet.





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Thank You