

INE 3010 Lab Manual

Technical Information for NSP C

Version 1.0

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I. Address allocation

Enterprise Charlie Address MAP

Branch Office	IP Address Range	Domain Name and DNS Server IP	Router Interface IP to ISP / Netmask	Upstream ISP Router IP / Netmask
Hong Kong	10.16.2.0/24	hk.charlie.ine.cuhk.edu.hk 10.16.2.1	10.16.200.249/30	10.16.200.250/30
Shanghai	10.16.16.0/24	sh.charlie.ine.cuhk.edu.hk 10.16.16.1	10.16.205.249/30	10.16.205.250/30
Beijing	10.16.32.0/24	bj.charlie.ine.cuhk.edu.hk 10.16.32.1	10.16.210.249/30	10.16.210.250/30
Chengdu	10.16.64.0/24	cd.charlie.ine.cuhk.edu.hk 10.16.64.1	10.16.215.249/30	10.16.215.250/30

NSP C Address MAP

Region	Internal Network	Domain Name and DNS Server IP																											
Hong Kong	10.16.128.0/24	hk.nspc.ine.cuhk.edu.hk 10.16.128.1																											
<p>Core Router Interface IP</p> <table border="1"> <thead> <tr> <th>Network Connected to</th> <th>Router Interface IP</th> <th>Opposite Side IP</th> </tr> </thead> <tbody> <tr> <td>NSP Internal Network gw</td> <td>10.16.130.130/30</td> <td>10.16.130.129/30</td> </tr> <tr> <td>POP in IX</td> <td>10.16.130.249/30</td> <td>10.16.130.250/30</td> </tr> <tr> <td>NSP in Shanghai</td> <td>10.16.160.249/30 (s1)</td> <td>10.16.160.250/30</td> </tr> <tr> <td>NSP in Chengdu</td> <td>10.16.162.250/30 (s0)</td> <td>10.16.162.249/30</td> </tr> <tr> <td>NSP in Beijing</td> <td>10.16.168.250/30</td> <td>10.16.168.249/30</td> </tr> <tr> <td>Enterprise Network C gw</td> <td>10.16.200.250/30</td> <td>10.16.200.249/30</td> </tr> </tbody> </table> <p>POP Interface IP</p> <table border="1"> <thead> <tr> <th>Network Connected to</th> <th>Interface IP</th> </tr> </thead> <tbody> <tr> <td>Core Router</td> <td>10.16.130.250/30</td> </tr> <tr> <td>IX VLAN</td> <td>10.6.160.16/24</td> </tr> </tbody> </table>			Network Connected to	Router Interface IP	Opposite Side IP	NSP Internal Network gw	10.16.130.130/30	10.16.130.129/30	POP in IX	10.16.130.249/30	10.16.130.250/30	NSP in Shanghai	10.16.160.249/30 (s1)	10.16.160.250/30	NSP in Chengdu	10.16.162.250/30 (s0)	10.16.162.249/30	NSP in Beijing	10.16.168.250/30	10.16.168.249/30	Enterprise Network C gw	10.16.200.250/30	10.16.200.249/30	Network Connected to	Interface IP	Core Router	10.16.130.250/30	IX VLAN	10.6.160.16/24
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NSP in Chengdu	10.16.170.249/30	10.16.170.250/30																											
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II. Host Naming

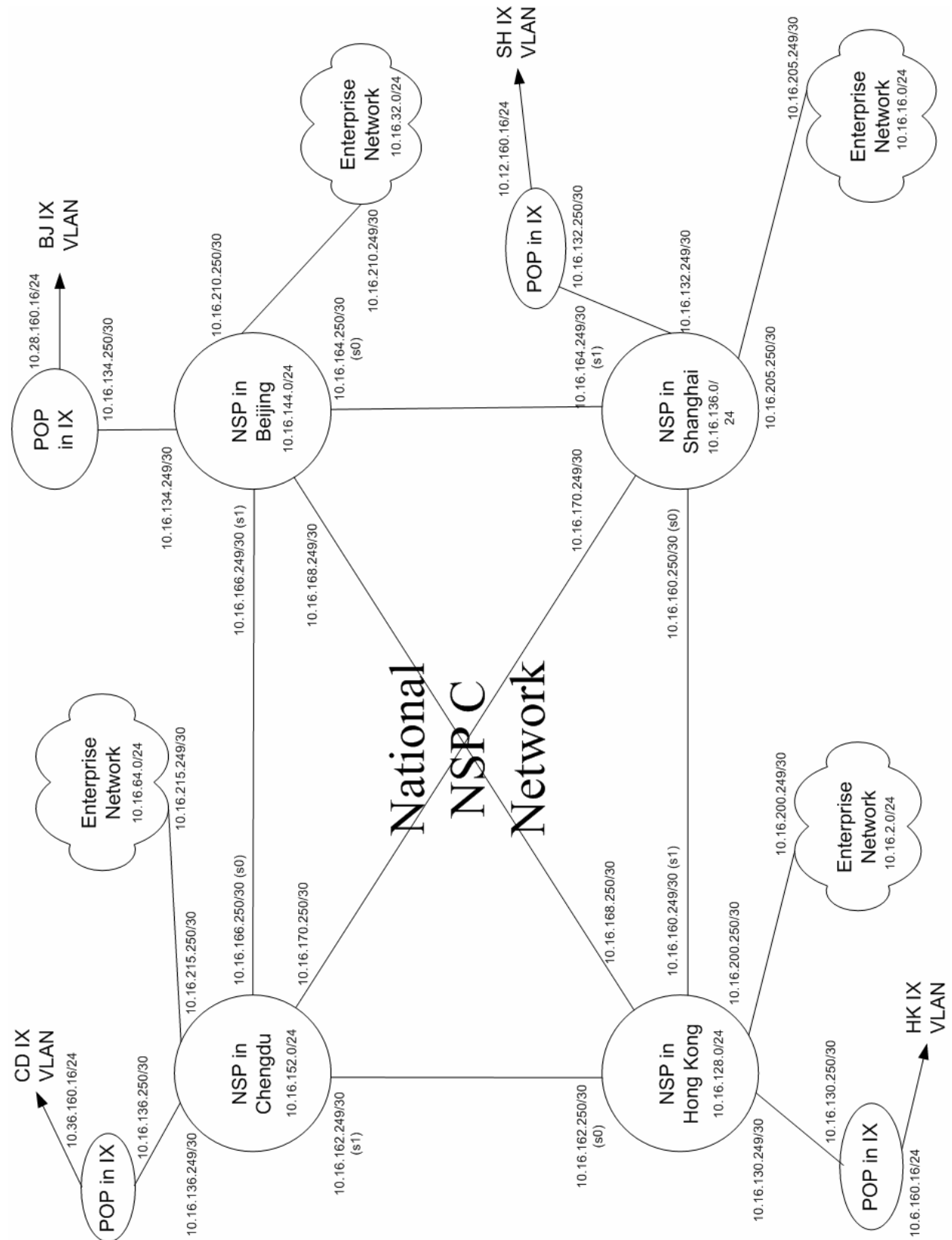
In order to facilitate your successors and headquarter to follow up your jobs, you are required to set the hostname of your servers as follow:

NSP C

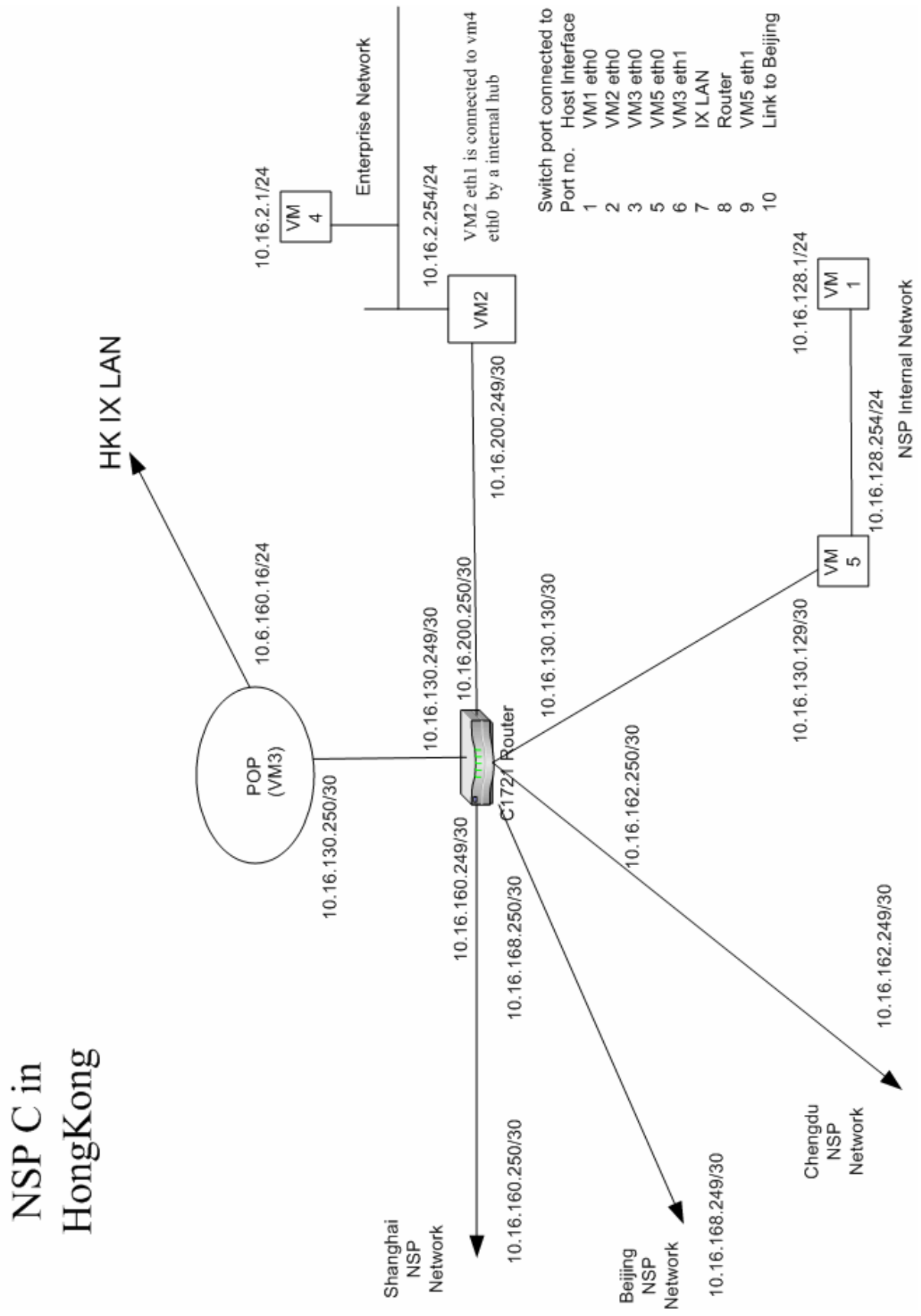
Branch Office	Server Hostname
Hong Kong	vms13-11 (NSP internal network server) vms13-12 (Enterprise network gateway) vms13-13 (POP) vms13-14 (Enterprise network server) vms13-15 (NSP internal network gateway) c2950-n9 (switch) c1721-n9 (router)
Shanghai	vms14-1 (NSP internal network server) vms14-2 (Enterprise network gateway) vms14-3 (POP) vms14-4 (Enterprise network server) vms14-5 (NSP internal network gateway) c2950-n10 (switch) c1721-n10 (router)
Beijing	vms14-6 (NSP internal network server) vms14-7 (Enterprise network gateway) vms14-8 (POP) vms14-9 (Enterprise network server) vms14-10 (NSP internal network gateway) c2950-n11 (switch) c1721-n11 (router)
Chengdu	vms14-11 (NSP internal network server) vms14-12 (Enterprise network gateway) vms14-13 (POP) vms14-14 (Enterprise network server) vms14-15 (NSP internal network gateway) c2950-n12 (switch) c1721-n12 (router)

III. Network Diagrams

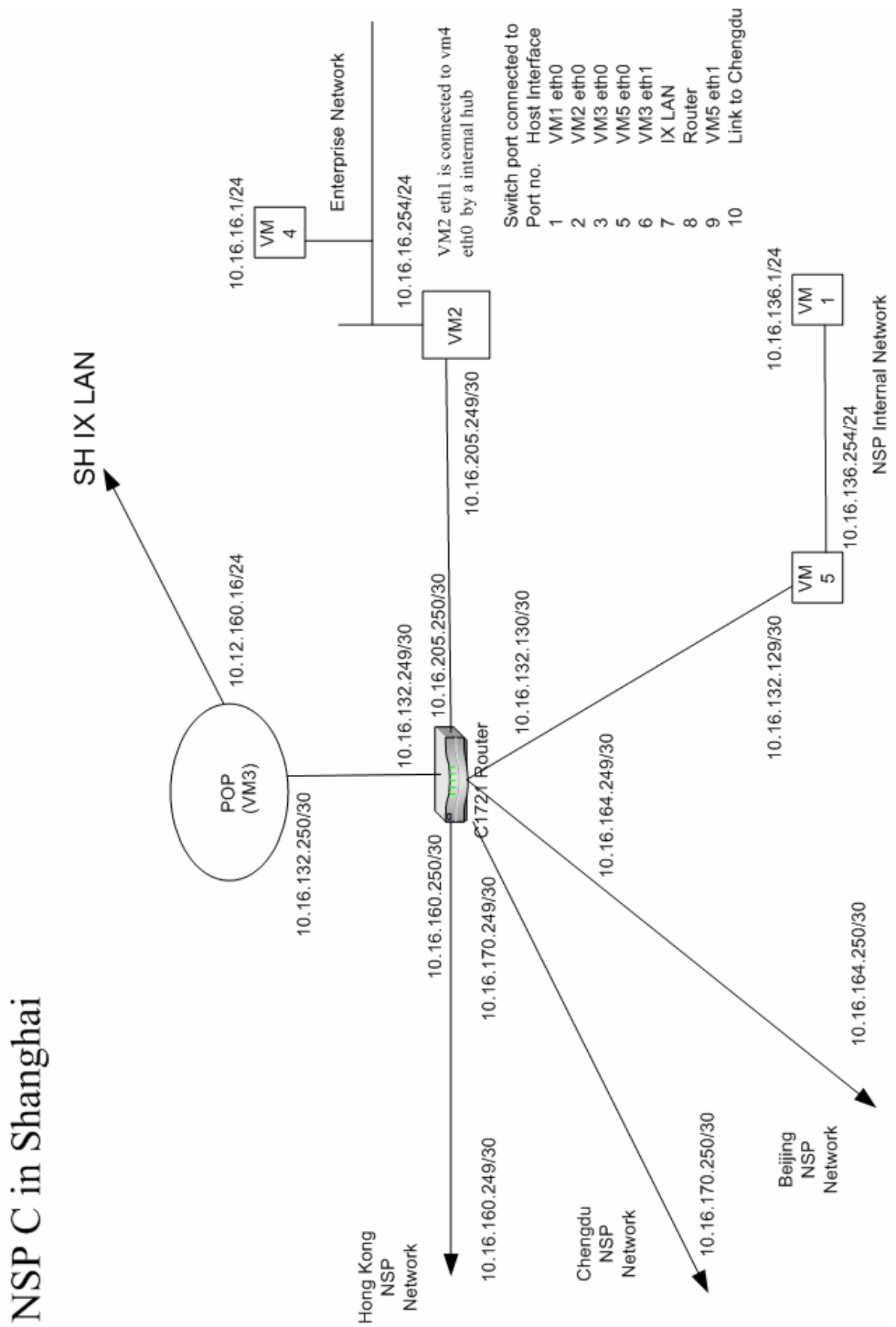
Network Diagram of NSP C



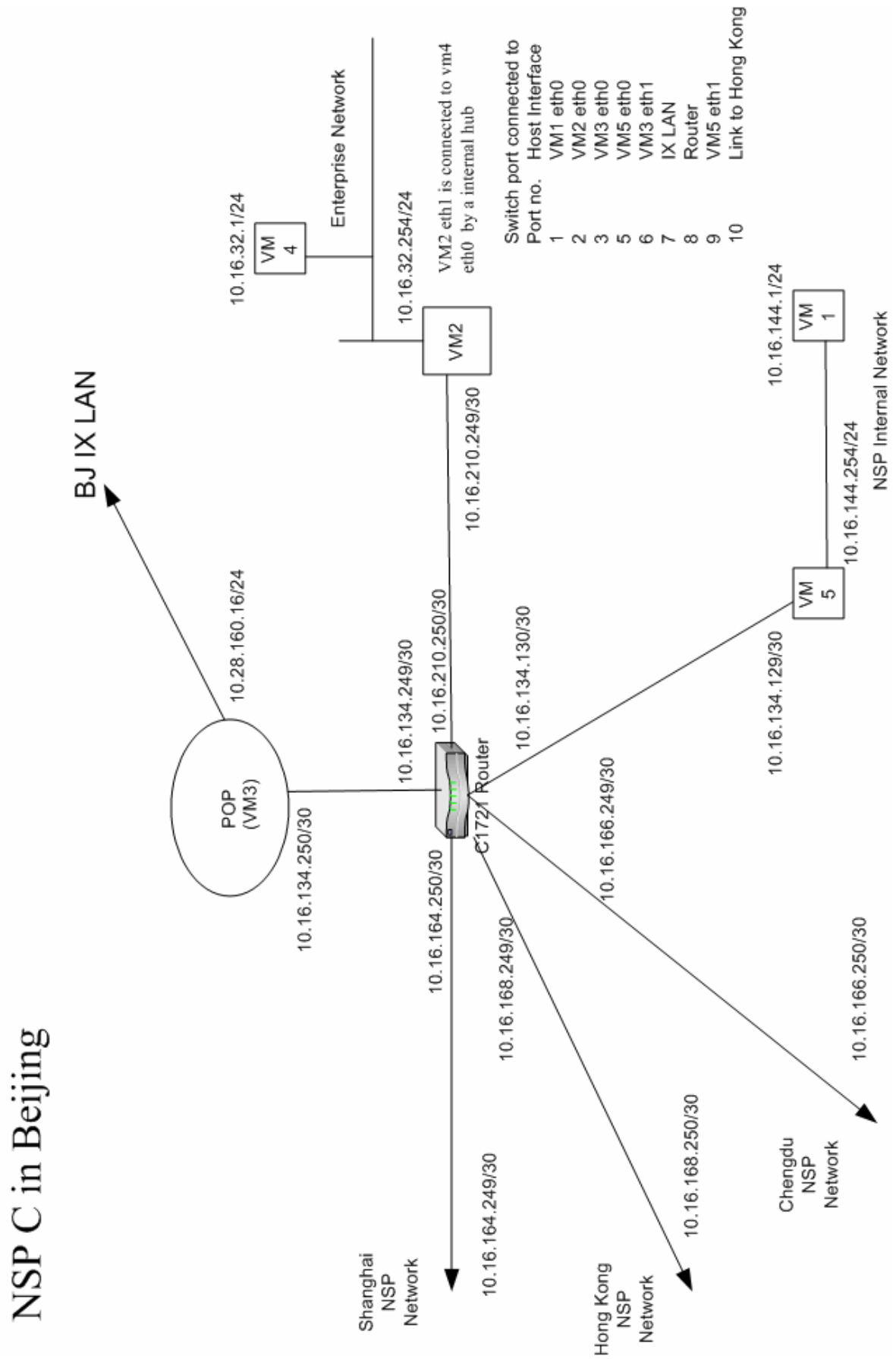
Network Diagram of the NSP C in Hong Kong Region



Network Diagram of the NSP C in Shanghai Region



Network Diagram of the NSP C in Beijing Region



Network Diagram of the NSP C in Chengdu Region

