SANGFOR AD
General Test Guide

SANGFOR Technologies Co., Ltd.

22.Sep 2017

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Deployment and Features:

Deployment Mode	Main Features
Single arm	Server load balance, SSL off load , Intelligent DNS, GSLB(Global Server Load Balance)
Gateway	Server load balance, SSL off load, Intelligent DNS, GSLB(Global Server Load Balance), Policy-based routing, DNS proxy

General Configuration Step:

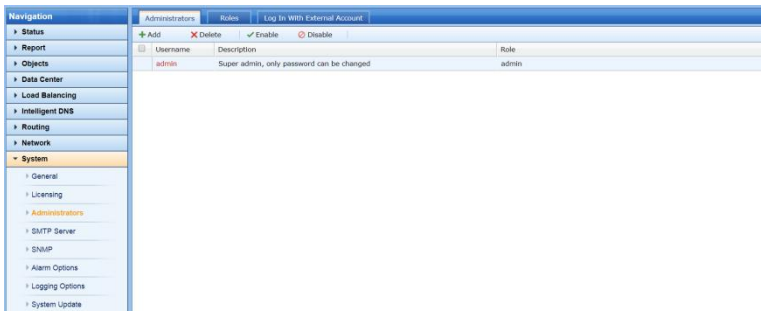
Module	Item
System	1. Change admin default password 2. Add manage interface IP 3. Remote maintenance 4. Input license (vAD license active in HCI)
Network	Single arm mode: 1. WAN interface 2. Source NAT 3. Enable WAN Port Forwards Outgoing Traffic Gateway mode: 1. WAN interface 2. LAN interface 3. Source NAT 4. Destination NAT (Optional) 5. Enable WAN Port Forwards Outgoing Traffic 6. DNS proxy (Optional) 7. Static route 8. Policy-based routing

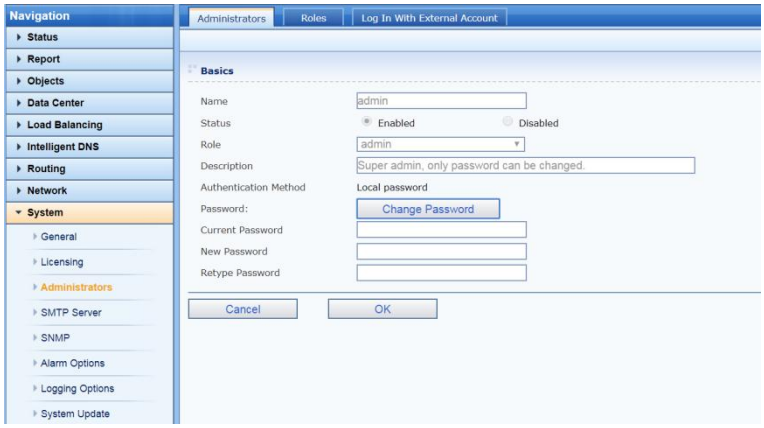
Server load balance	1. Service (Default) 2. WAN link 3. Persistence (Default) 4. Node monitor (Default) 5. Node pools 6. SSL (Optional) 7. Policy (Optional) 8. Virtual service
Intelligent DNS	1. DNS server 2. Local virtual IP pool 3. Local DNS Mapping 4. LANDS (Optional) 5. Static proximity--virtual IP pool based (Optional) 6. Public IP UDP 53 port DNAT to AD single arm IP from gateway (Single arm mode) 7. Make domain NS records to AD DNS server Public IP from domain provider
GSLB	1. Data center 2. DNS server 3. Local virtual IP pool and global virtual IP pool 4. Local DNS mapping and global DNS mapping 5. Local LDNS and remote site LDNS (Optional) 6. Static proximity--DNS mapping based and virtual IP pool based (Optional) 6. Public IP UDP 53 port DNAT to AD single arm IP from gateway (Single arm mode) 7. Make domain NS records to AD DNS server Public IP from domain provider

Screenshot and Example:

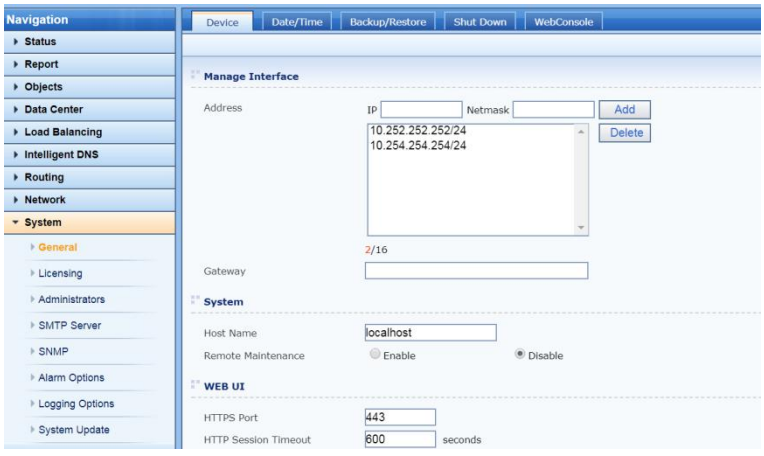
System

1. Change admin default password



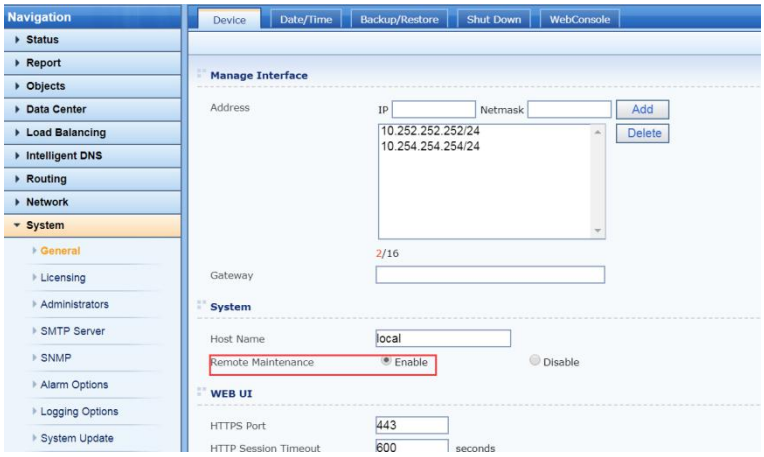


2. Add manage interface IP



3. Remote maintenance

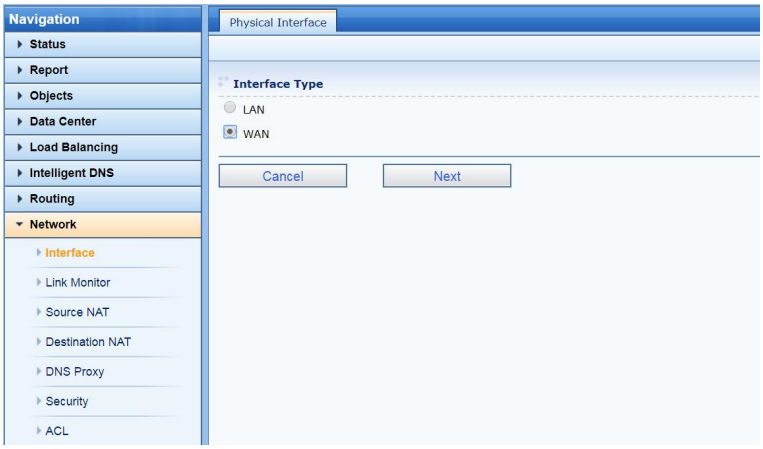
Used for login WebUI from WAN interface



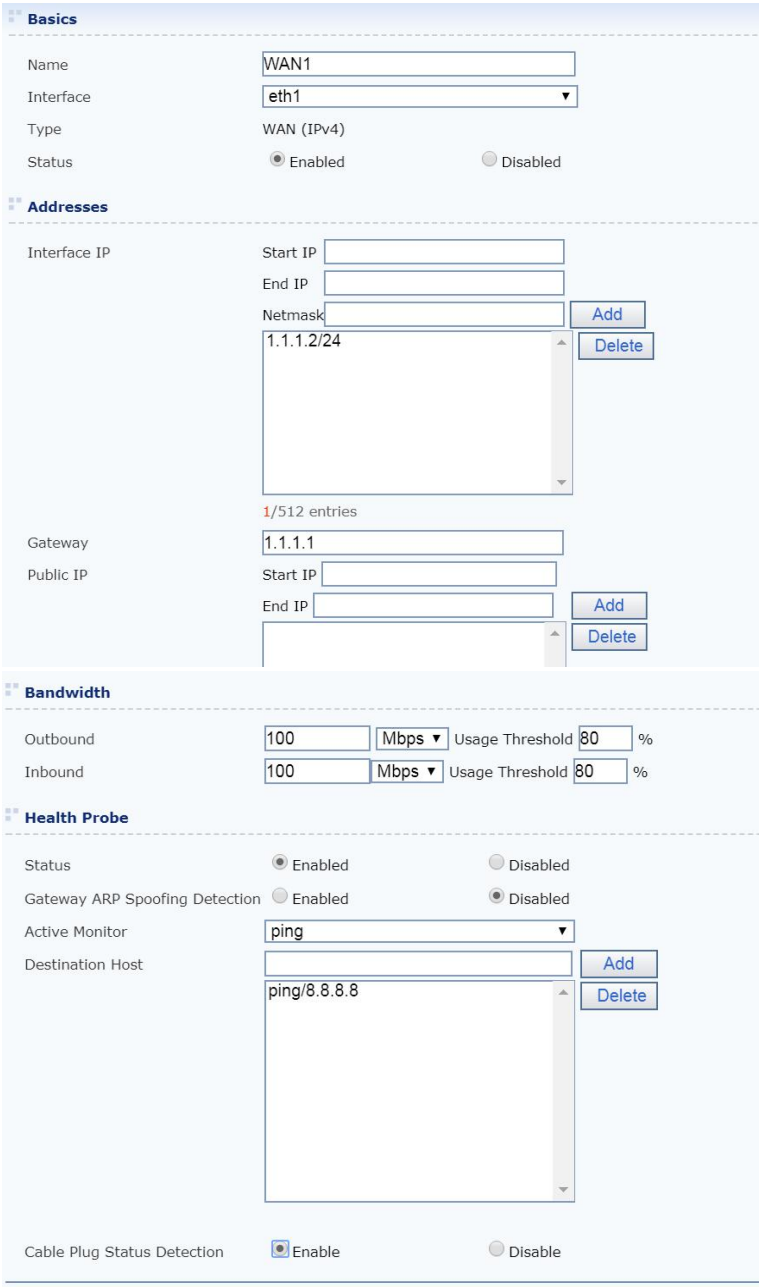
4. Input license

Network

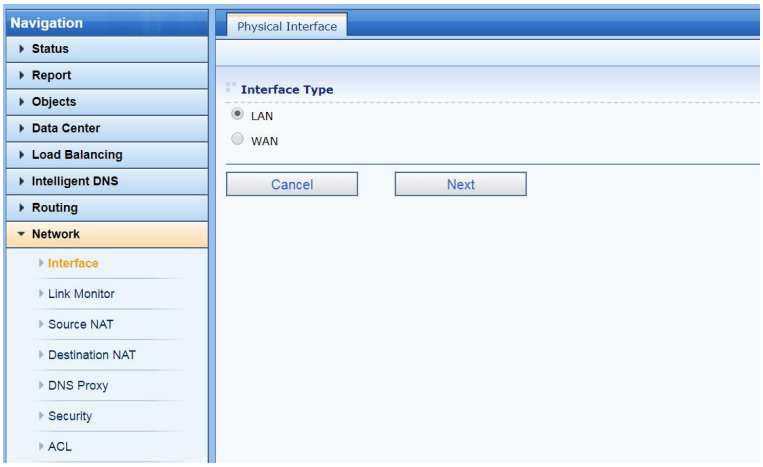
1. WAN interface

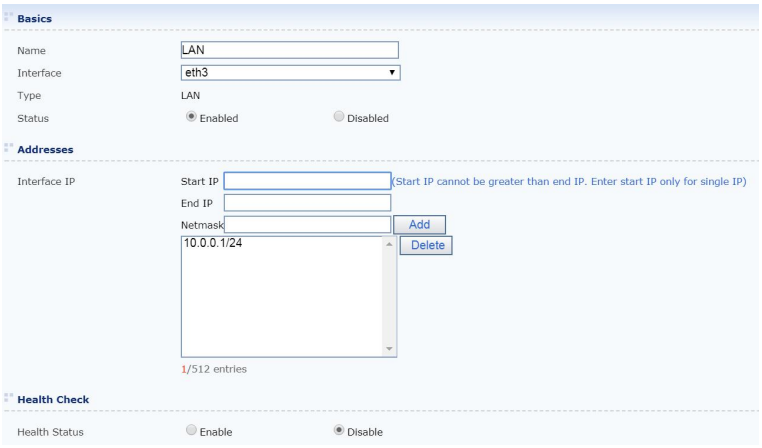


Public IP used for single arm mode



2. LAN interface

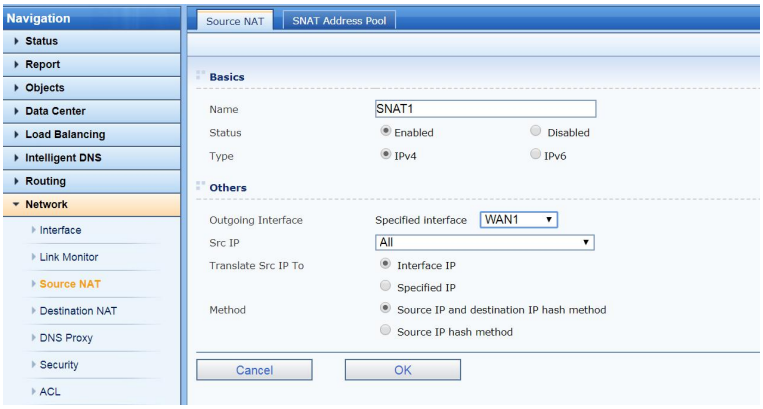




3. Source NAT

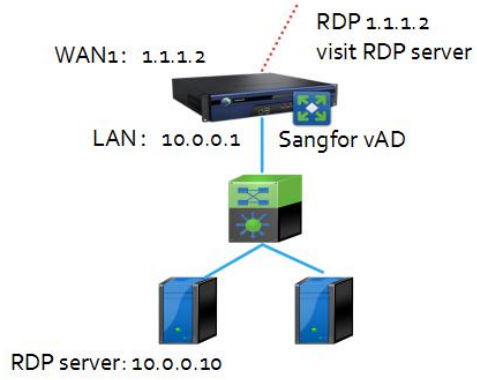
Gateway mode : Private IP change to public IP

Single arm mode : Avoid asymmetry route

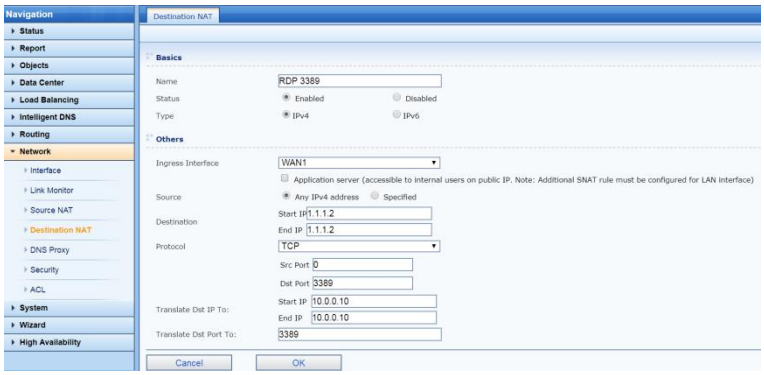


4. Destination NAT

Used for internet user access intranet server via WAN interface IP and port.

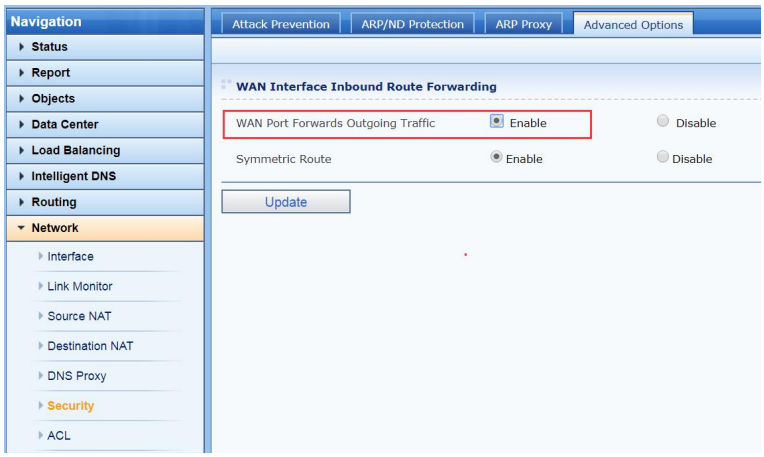


Gateway Mode Deployment

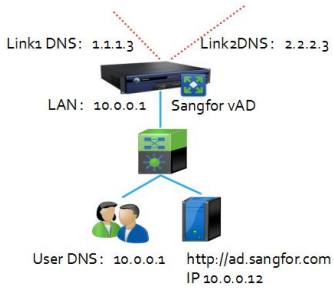


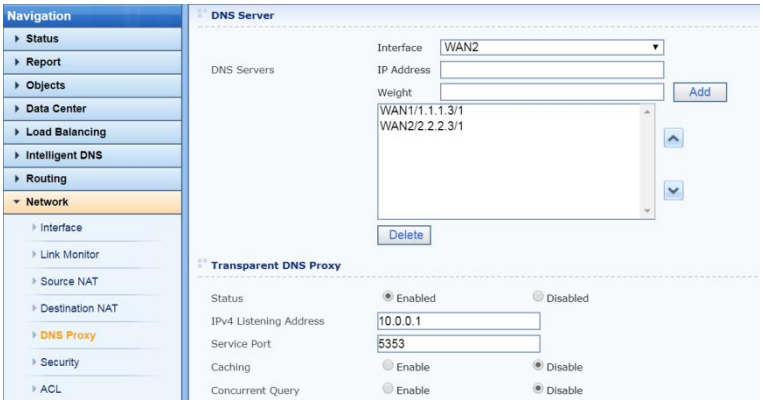
5. Enable WAN Port Forwards Outgoing Traffic

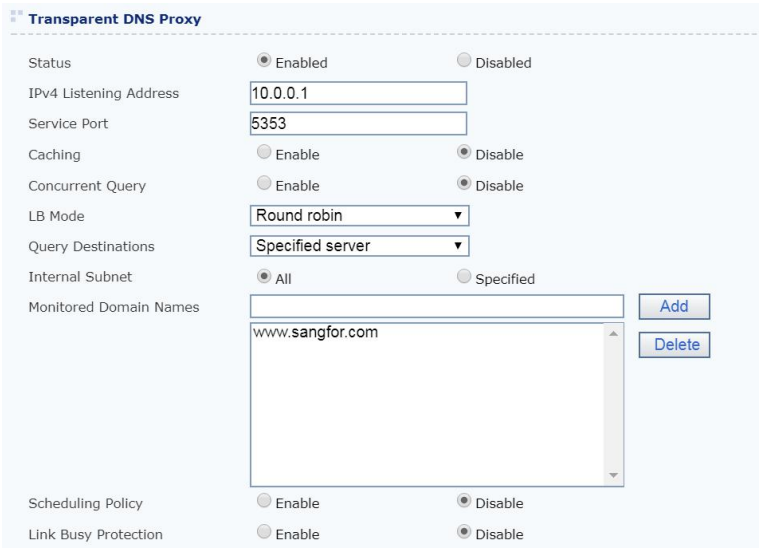
After enable this feature ,you can ping WAN interface IP and WAN interface will support traffic forward.



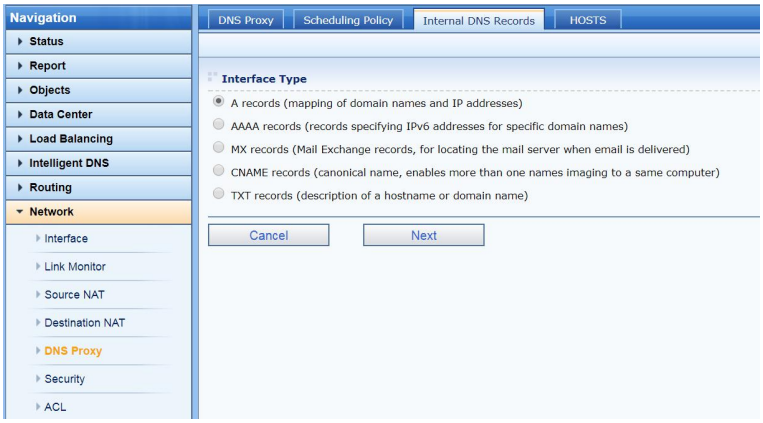
6. DNS proxy

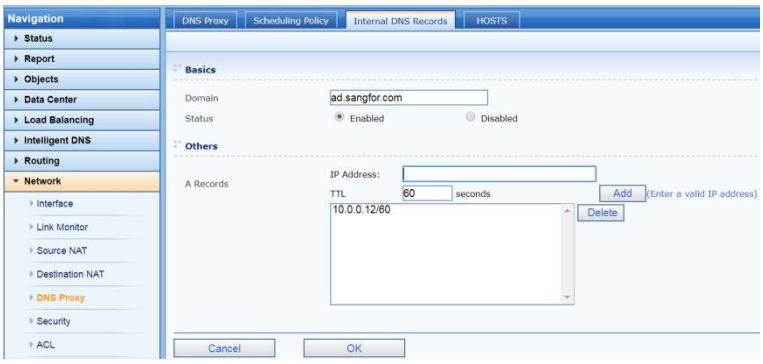






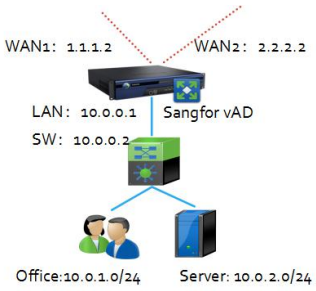
Intranet user visit 10.0.0.12 HTTP server via http://ad.sangfor.com

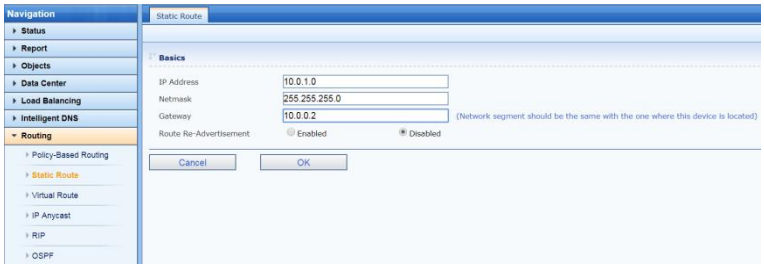


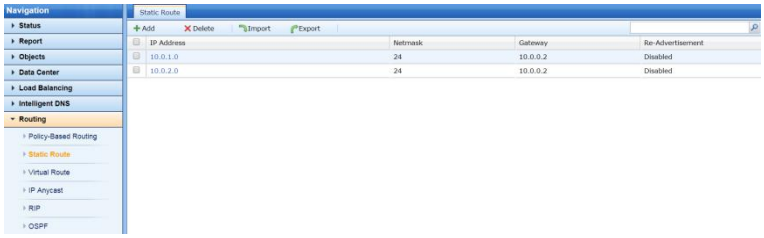


7. Static route

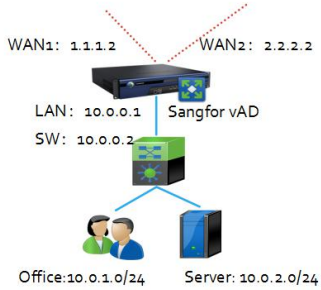
Used for multiple subnet intranet scenario.







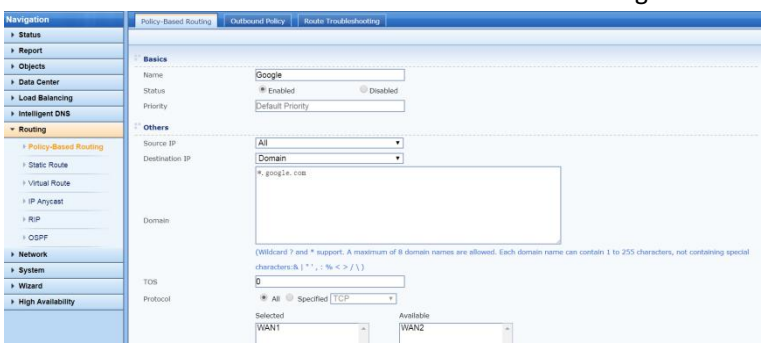
8. Policy-based routing

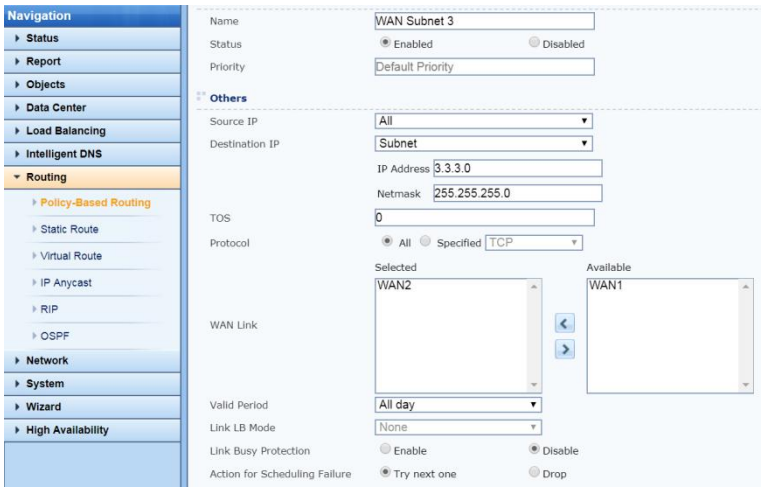


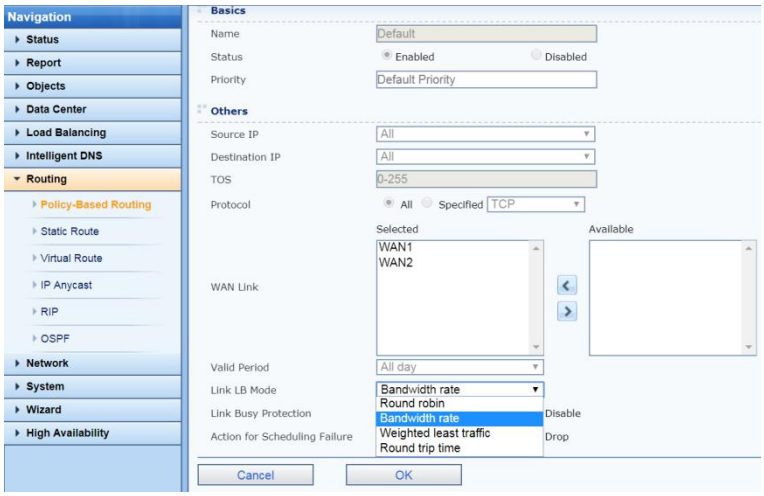
Customer hope all google traffic go out from WAN1

To destination subnet 3.3.3.0/24 go out from WAN2

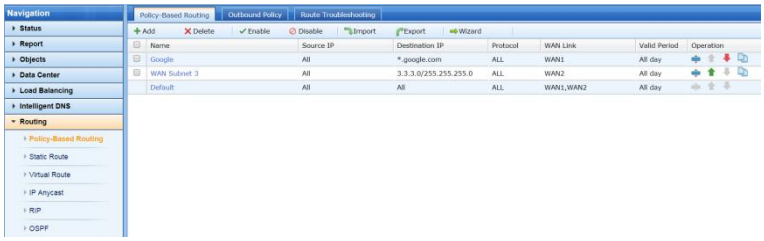
Other traffic choose low bandwidth usage rate link go out







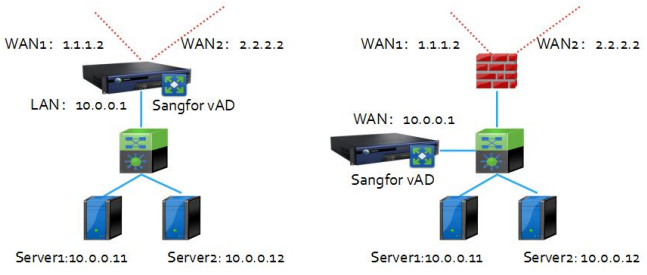
Traffic match order from top to bottom



Server Load Balance

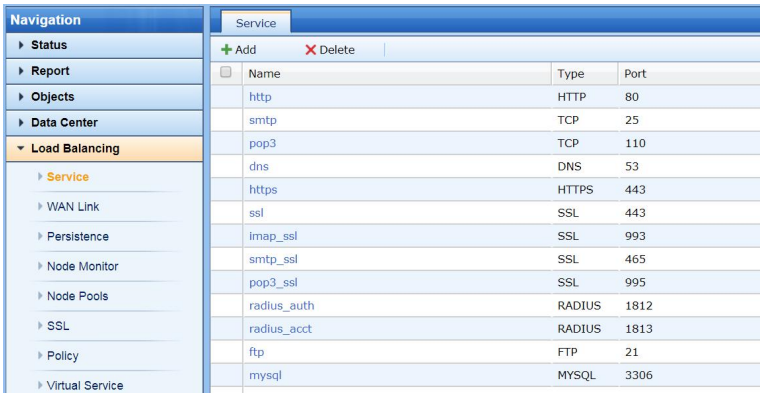
Customer want to delivery HTTP service via WAN1(1.1.1.2) and WAN2(2.2.2.2)

Two HTTP server load balance

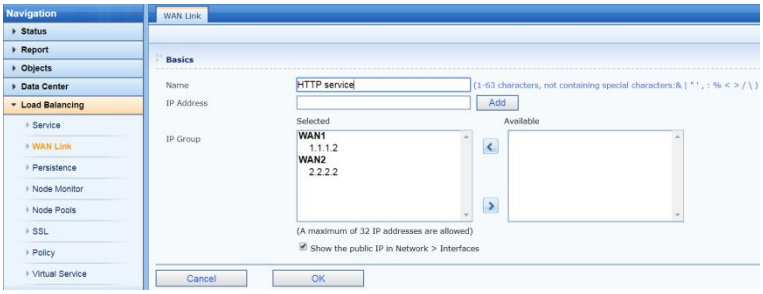


Gateway Mode Deployment **Single Mode Deployment**

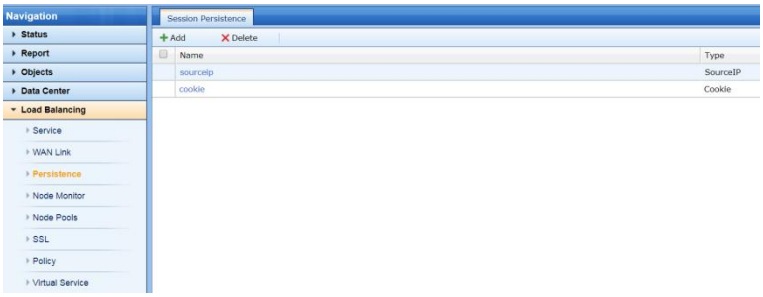
1. Service



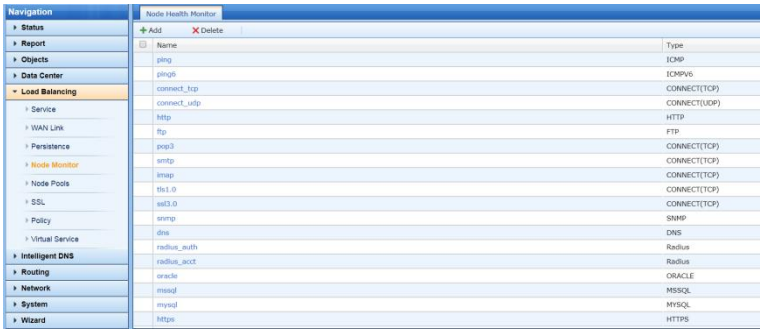
2. WAN link



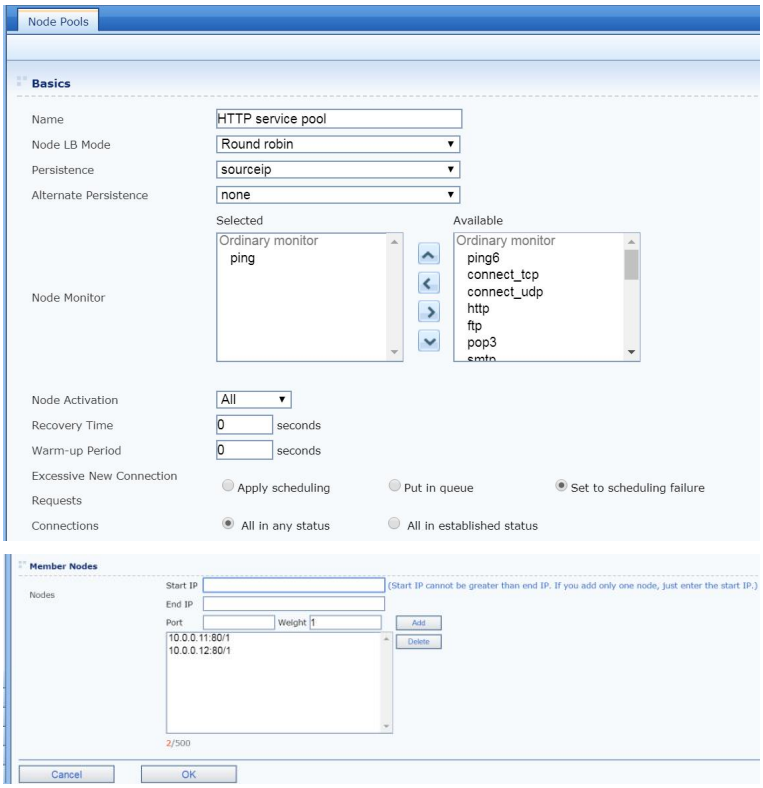
3. Persistence



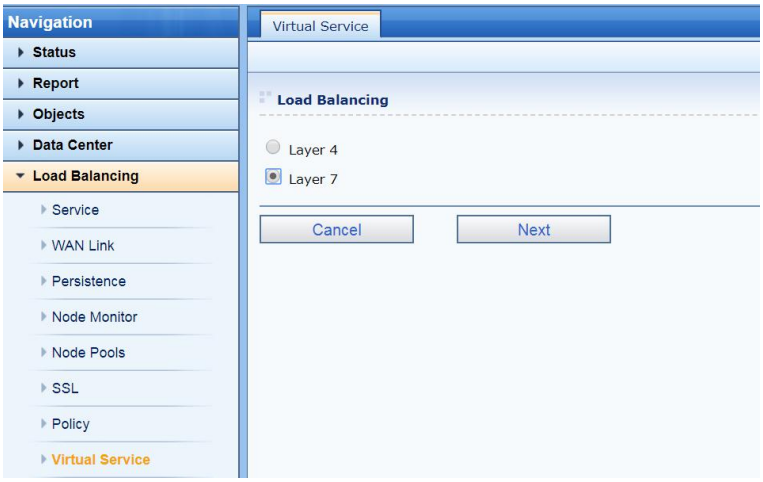
4. Node monitor

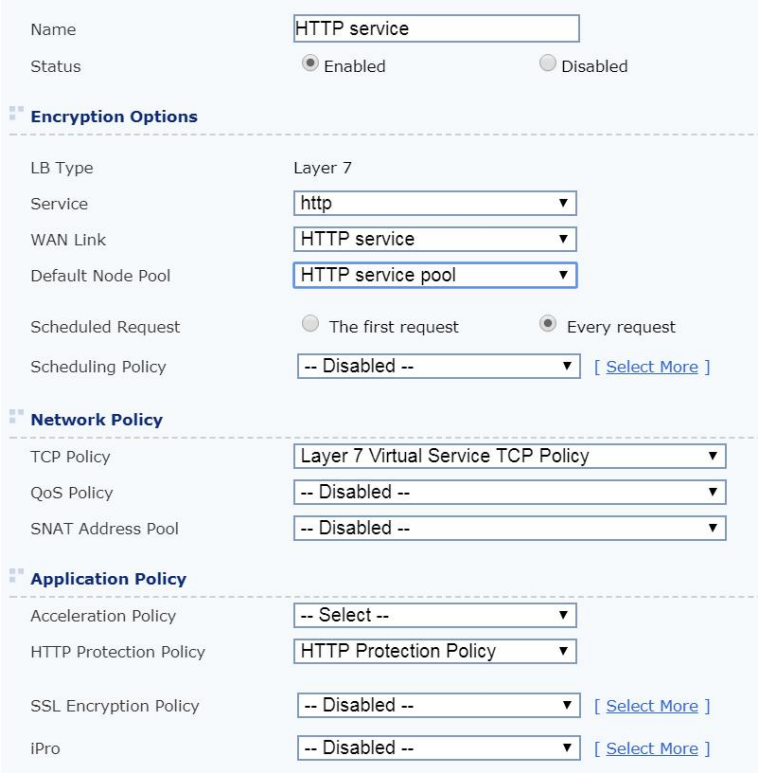


5. Node Pools



6. Virtual Service





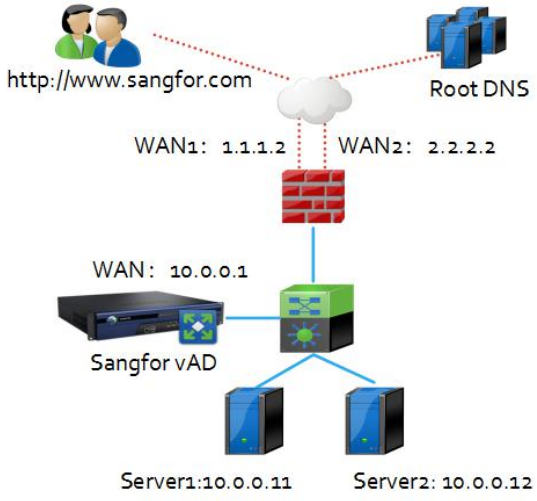
Service/WAN link/Node pool is necessary, other policy depend on customer's requirements.

SNAT Address Pool is necessary to avoid asymmetry route, when AD deploy as single arm mode.

Intelligent DNS

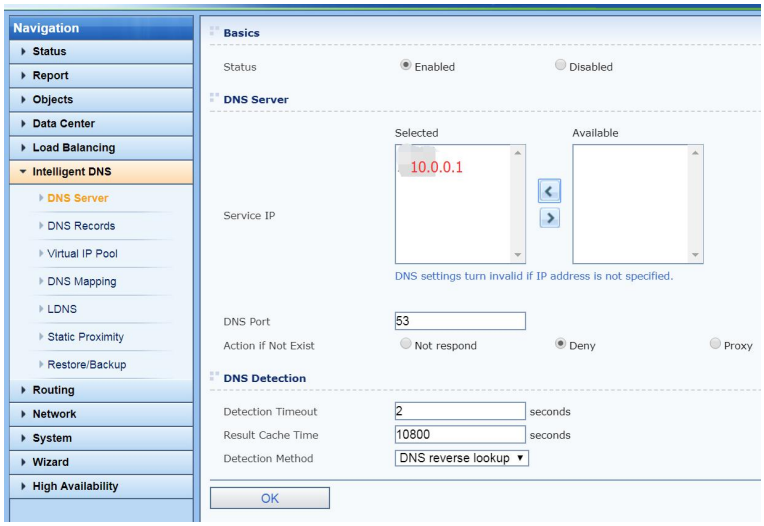
Internet user visit Sangfor portal via http://www.sangfor.com, the datacenter has two link for load balance, we hope one link down, user can visit the portal from another link.

Malaysia user access portal from WAN1 firstly.

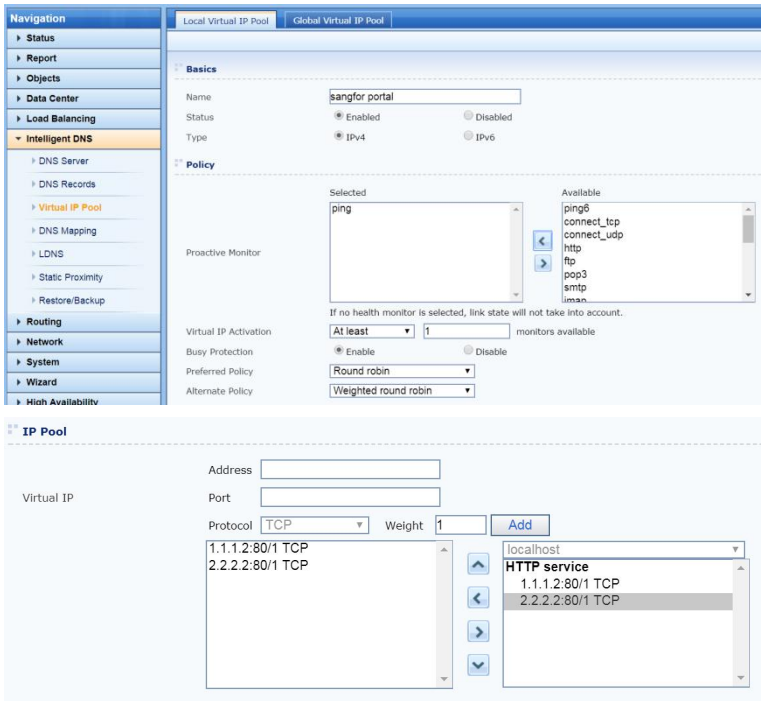


Single Mode Deployment

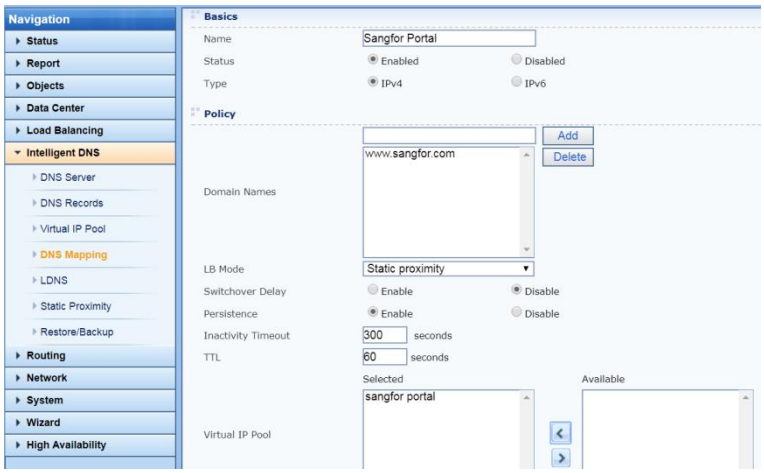
1. DNS server



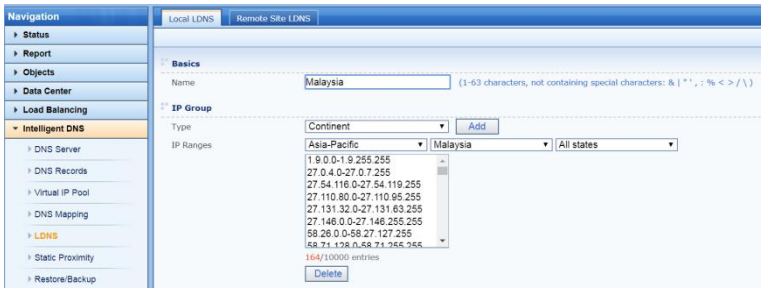
2. Virtual IP Pool



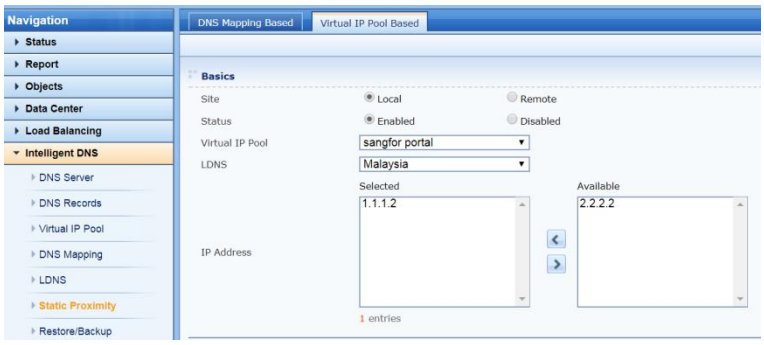
3. DNS mapping



4. LDNS



5. Static Proximity-virtual IP pool based

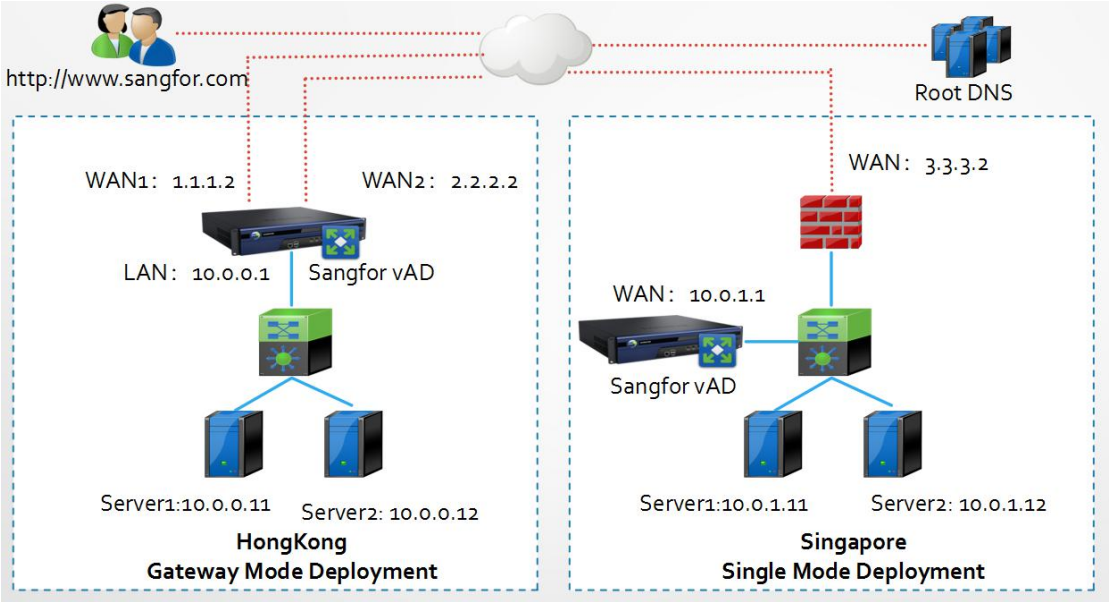


If customer has no policy requirements, just resolve domain to IP, DNS records also can meet customer's needs.

6. Add Destination NAT in FW, 1.1.1.2 and 2.2.2.2 UDP port 53 mapping to 10.0.0.1

7. Add NS records www.sangfor.com to 1.1.1.2 and 2.2.2.2 in domain provider

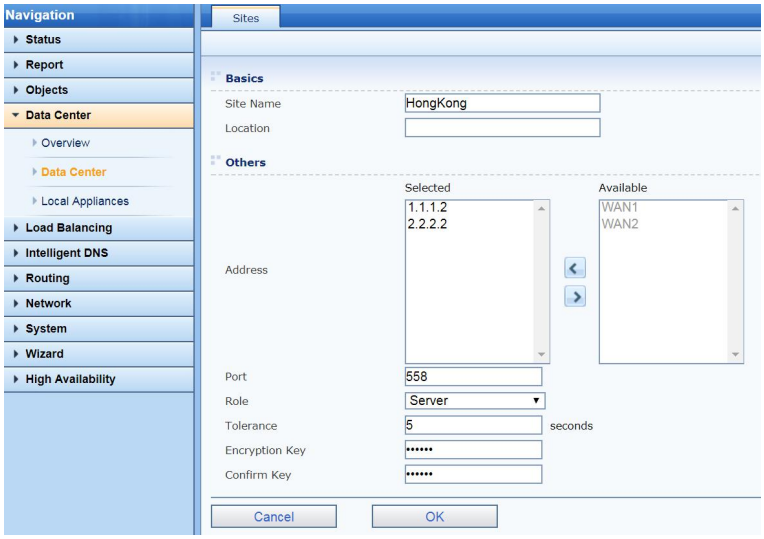
Global Server Load Balance

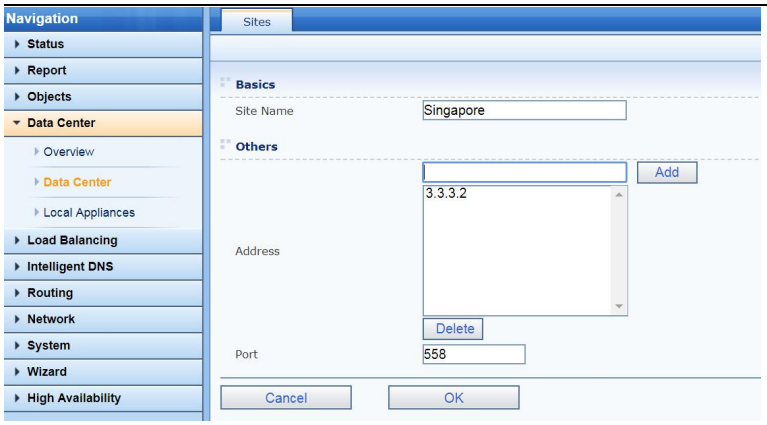


Customer's HQ in HongKong, HQ has two WAN link ,this customer also has a data center in Singapore.

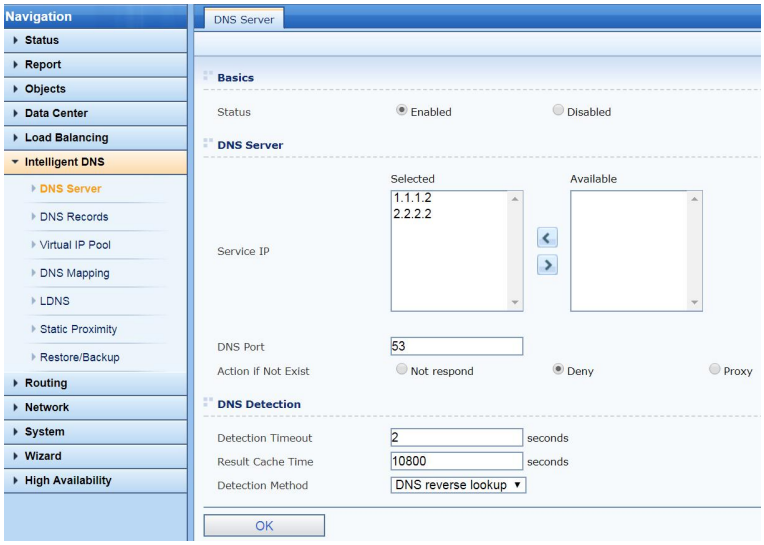
Customer hope Chinese mainland and HongKong user access portal from HongKong site, Malaysia and Singapore user access portal from Singapore site, Other region user access to the fastest site.

1. Data center

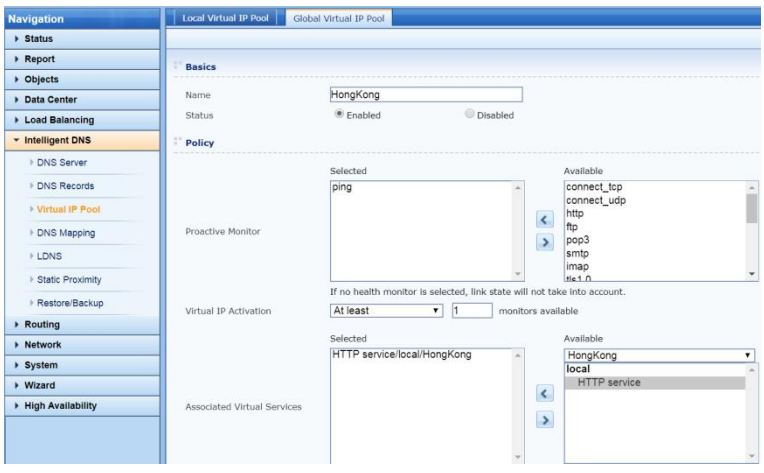


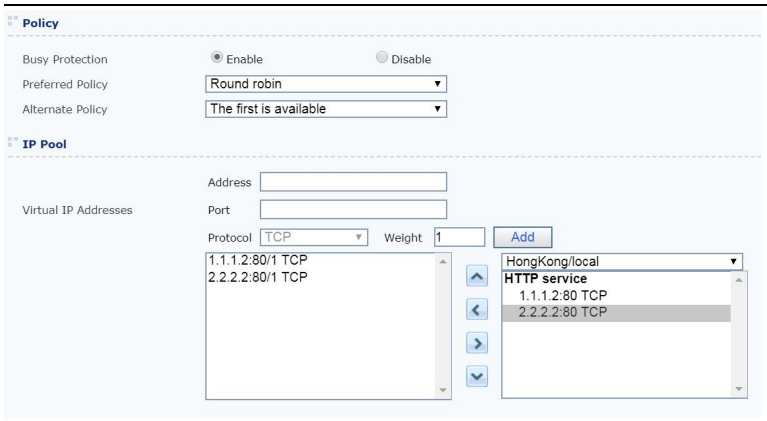


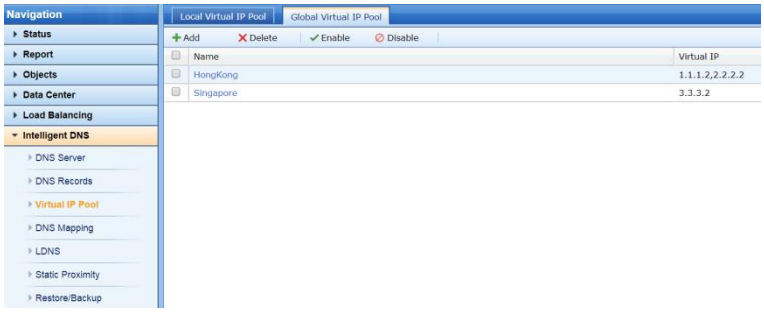
2. DNS server



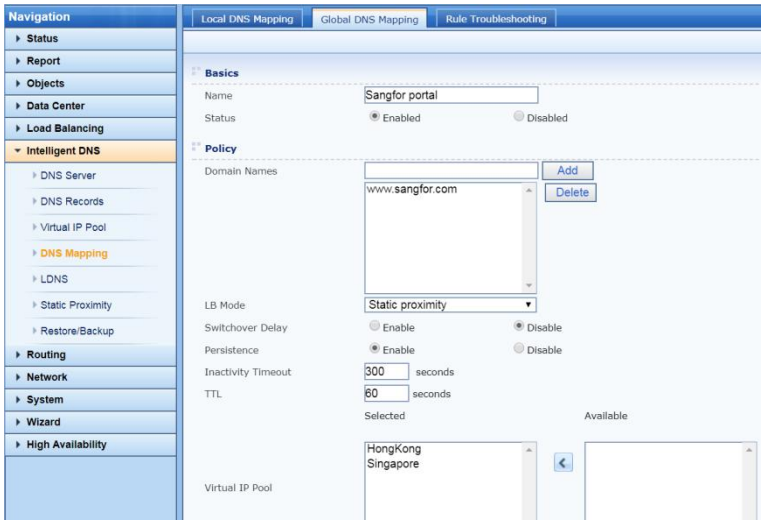
3. Global virtual IP pool



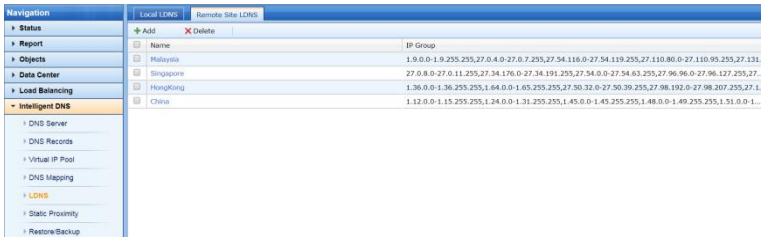




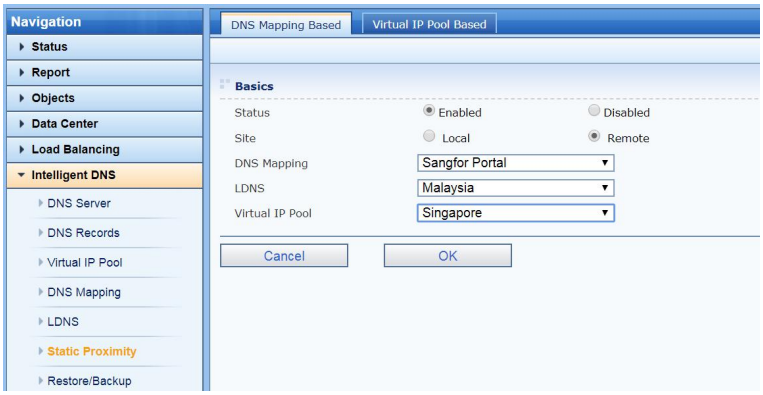
4. Global DNS mapping



5. Remote site LDNS



6. Static proximity--DNS mapping based



7. Add NS records www.sangfor.com to 1.1.1.2/2.2.2.2/3.3.3.2 in domain provider

* Singapore site FW should mapping 3.3.3.2 port 53 and port 558 to 10.0.1.1