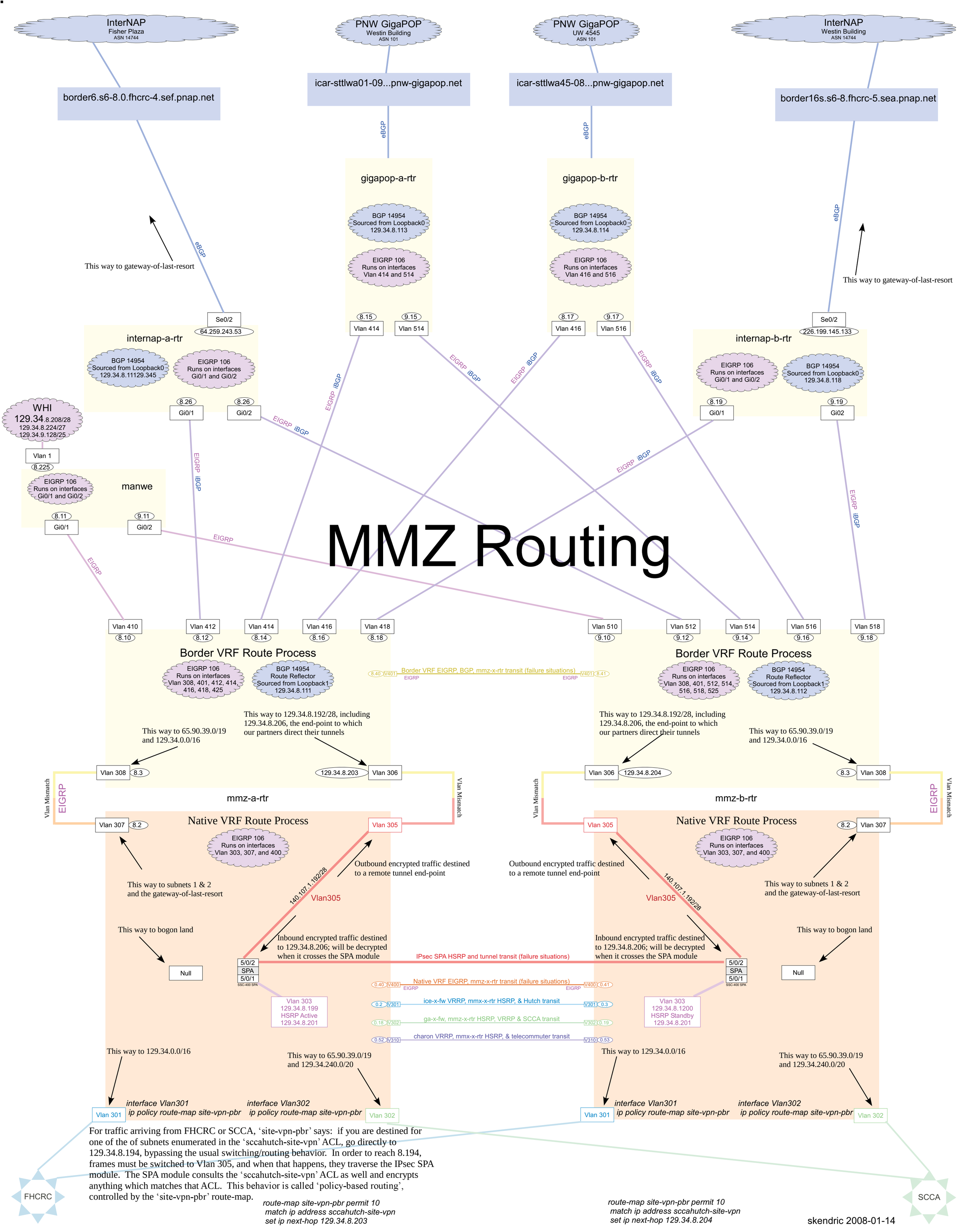
MMZ Routing
InterNAP
Fisher Plaza
ASN 14744
PNW GigaPOP
Westin Building
ASN 101
PNW GigaPOP
UW 4545
ASN 101
InterNAP
Westin Building
ASN 14744
border6.s6-8.0.fhcrc-4.sef.pnap.net
icar-sttlwa01-09...pnw-gigapop.net
icar-sttlwa45-08...pnw-gigapop.net
border16s.s6-8.fhcrc-5.sea.pnap.net
eBGP
This way to gateway-of-last-resort
gigapop-a-rtr
BGP 14954
Sourced from Loopback0
129.34.8.113
EIGRP 106
Runs on interfaces
Vlan 414 and 514
gigapop-b-rtr
BGP 14954
Sourced from Loopback0
129.34.8.114
EIGRP 106
Runs on interfaces
Vlan 416 and 516
Se0/2
64.259.243.53
internap-a-rtr
BGP 14954
Sourced from Loopback0
129.34.8.11129.345
EIGRP 106
Runs on interfaces
Gi0/1 and Gi0/2
Se0/2
226.199.145.133
internap-b-rtr
EIGRP 106
Runs on interfaces
Gi0/1 and Gi0/2
BGP 14954
Sourced from Loopback0
129.34.8.118
8.15
9.15
8.17
9.17
Vlan 414
Vlan 514
Vlan 416
Vlan 516
8.26
8.26
8.19
9.19
Gi0/1
Gi0/2
Gi0/1
Gi02
EIGRP iBGP
WHI
129.34.8.208/28
129.34.8.224/27
129.34.9.128/25
Vlan 1
8.225
EIGRP 106
Runs on interfaces
Gi0/1 and Gi0/2
manwe
8.11
9.11
Gi0/1
Gi0/2
EIGRP
Vlan 410
Vlan 412
Vlan 414
Vlan 416
Vlan 418
Vlan 510
Vlan 512
Vlan 514
Vlan 516
Vlan 518
8.10
8.12
8.14
8.16
8.18
9.10
9.12
9.14
9.16
9.18
Border VRF Route Process
EIGRP 106
Runs on interfaces
Vlan 308, 401, 412, 414, 416, 418, 425
BGP 14954
Route Reflector
Sourced from Loopback1
129.34.8.111
Border VRF EIGRP, BGP, mmz-x-rtr transit (failure situations)
8.40 V401 EIGRP
EIGRP V401 8.41
Border VRF Route Process
EIGRP 106
Runs on interfaces
Vlan 308, 401, 512, 514, 516, 518, 525
BGP 14954
Route Reflector
Sourced from Loopback1
129.34.8.112
This way to 129.34.8.192/28, including 129.34.8.206, the end-point to which our partners direct their tunnels
This way to 65.90.39.0/19 and 129.34.0.0/16
Vlan 308
8.3
129.34.8.203
Vlan 306
Vlan 306
129.34.8.204
8.3
Vlan 308
Vlan Mismatch
EIGRP
mmz-a-rtr
mmz-b-rtr
Vlan 307
8.2
Vlan 305
Native VRF Route Process
EIGRP 106
Runs on interfaces
Vlan 303, 307, and 400
Vlan 305
Native VRF Route Process
EIGRP 106
Runs on interfaces
Vlan 303, 307, and 400
8.2
Vlan 307
This way to subnets 1 & 2 and the gateway-of-last-resort
140.107.1.192/28
Vlan305
Outbound encrypted traffic destined to a remote tunnel end-point
This way to bogon land
Null
Inbound encrypted traffic destined to 129.34.8.206; will be decrypted when it crosses the SPA module
IPsec SPA HSRP and tunnel transit (failure situations)
5/0/2
SPA
5/0/1
SSC-400 SPA
Vlan 303
129.34.8.199
HSRP Active
129.34.8.201
Native VRF EIGRP, mmz-x-rtr transit (failure situations)
0.40 V400 EIGRP
EIGRP V400 0.41
ice-x-fw VRRP, mmx-x-rtr HSRP, & Hutch transit
0.2 V301
V301 0.3
ga-x-fw, mmz-x-rtr HSRP, VRRP & SCCA transit
0.18 V302
V302 0.19
charon VRRP, mmx-x-rtr HSRP, & telecommuter transit
0.52 V310
V310 0.53
Vlan 303
129.34.8.1200
HSRP Standby
129.34.8.201
This way to 129.34.0.0/16
This way to 65.90.39.0/19 and 129.34.240.0/20
Vlan 301
Vlan 302
interface Vlan301
ip policy route-map site-vpn-pbr
interface Vlan302
ip policy route-map site-vpn-pbr
FHCRC
SCCA
For traffic arriving from FHCRC or SCCA, 'site-vpn-pbr' says: if you are destined for one of the of subnets enumerated in the 'sccahutch-site-vpn' ACL, go directly to 129.34.8.194, bypassing the usual switching/routing behavior. In order to reach 8.194, frames must be switched to Vlan 305, and when that happens, they traverse the IPsec SPA module. The SPA module consults the 'sccahutch-site-vpn' ACL as well and encrypts anything which matches that ACL. This behavior is called 'policy-based routing', controlled by the 'site-vpn-pbr' route-map.
route-map site-vpn-pbr permit 10
match ip address sccahutch-site-vpn
set ip next-hop 129.34.8.203
route-map site-vpn-pbr permit 10
match ip address sccahutch-site-vpn
set ip next-hop 129.34.8.204
skendric 2008-01-14