Routing design – static routes

Routed – static routes over IPv4/IPv6 subnets

Tower 2 - IPv4/IPv6

IPv4 – 100.64.1.0/24
IPv6 – 2001:db8:0:4000::/50

Static routes for:
100.64.1.0/24
100.64.2.0/24
2001:db8:0:4000::/50
2001:db8:0:8000::/50

Static routes for:
100.64.2.0/24
2001:db8:0:8000::/50

IPv4 - 100.126.0.0/29
IPv6 - 2001:db8:126:1::/120

IPv4 - 100.126.0.8/29
IPv6 - 2001:db8:126:2::/120

100.64.1.101
2001:db8:0:4000::/56

Static routes for:
100.64.0.0/22
2001:db8::/48

IPv4 - 100.126.0.0/30
IPv6 - 2001:db8:126:5::/120

100.64.2.102
2001:db8:0:8000::/56

Upstream

203.0.113.0/30
2001:db8:100::/120

Static route for 0.0.0.0/0 and ::/0 from Tower 3 to Tower 2
Static route for 0.0.0.0/0 and ::/0 from Tower 2 to Tower 1

100.64.0.0/22
2001:db8:200::/48

**Edge/Core/Agg
(collapsed) router - IPv4
NAT Point**

100.64.0.0/22 is configured
to NAT into 203.0.113.2 at
the gateway router for all
subscribers.

A pool of NAT addresses
can also be used if a block
of /29, /28, /27, etc is routed
in from the provider.

Tower 3 - IPv4/IPv6

IPv4 – 100.64.2.0/24
IPv6 – 2001:db8:0:8000::/50

IPv4 subnets are broken into a /24 per
tower and handed off via DHCP.

IPv6 is broken into a /50 per tower with
a /56 per subscriber and handed off
via DHCPv6 PD.