Internal IP Address Plan

Autonomous systems

```
AS65534       AS-PRG
AS65533       AS-BRQ
AS65532       AS-B48
AS65531       AS-B48-2
```

Internal ASNs and connect prefixes

```
AS4294967294    [MAX INTERNAL ASN]

AS42**------    Location
    00              Prague
    01              Brno
AS42--***---    Rack
      000           PRG-R-4-7
      001           PRG-R-14-7
AS42-----***    Node / switch #
        [000-899 nodes]
        [900-999 switches]

AS4200000901 MAI-PRG-R-4-7-1                                    172.16.253.0/24
2a03:3b40:42:0::/64
AS4200000902 MAI-PRG-R-4-7-2                                    172.16.252.0/24
2a03:3b40:42:1::/64

AS4200001901 MAI-PRG-R-14-7-1                                   172.16.251.0/24
2a03:3b40:42:2::/64
AS4200001902 MAI-PRG-R-14-7-2                                   172.16.250.0/24
2a03:3b40:42:2::/64

AS4200001001 node1.stg
AS4200001002 node2.stg

??4201000900 MAI-BRQ-R-????-1                                   172.19.253.0/24
2a03:3b40:42:2::/64???
??4201000901 MAI-BRQ-R-????-2                                   172.19.252.0/24
2a03:3b40:42:2::/64???

??4201000001 node?.brq
```

```
=[MAI-PRG-
R-4-7-1]=========================================================================
===============
```

```
--INTERFACE---PEER-ASN---------TARGET-----------------------IPv4-----------
-----IPv6-----------------
Port 10G 01  4200000001   <-> node1.stg                      172.16.253.1/30
2a03:3b40:42:0:01::1/80
Port 10G 02  4200000002   <-> node2.stg                      172.16.253.5/30
2a03:3b40:42:0:02::1/80
Port 10G 03  4200000003   <-> node17.prg                     172.16.253.9/30
2a03:3b40:42:0:03::1/80
Port 10G 04  4200000004   <-> node18.prg                     172.16.253.13/30
2a03:3b40:42:0:04::1/80
Port 40G 49  4200000902   <-> MAI-PRG-R-4-7-2  Port 40G 49
172.16.253.193/30   2a03:3b40:42:0:49::1/80
Port 40G 51  4200001901   <-> MAI-PRG-R-14-7-1 Port 40G 51
172.16.253.201/30   2a03:3b40:42:0:51::1/80
Port 40G 53  4200001902   <-> MAI-PRG-R-14-7-2 Port 40G 53
172.16.253.209/30   2a03:3b40:42:0:53::1/80
```

```
=[MAI-PRG-
R-4-7-2]=========================================================================
===============

--INTERFACE---PEER-ASN---------TARGET-----------------------IPv4-----------
-----IPv6-----------------
Port 10G 01  4200000001   <-> node1.stg                      172.16.252.1/30
2a03:3b40:42:1:01::1/80
Port 10G 02  4200000002   <-> node2.stg                      172.16.252.5/30
2a03:3b40:42:1:02::1/80
Port 10G 03  4200000003   <-> node17.prg                     172.16.252.9/30
2a03:3b40:42:1:03::1/80
Port 10G 04  4200000004   <-> node18.prg                     172.16.252.13/30
2a03:3b40:42:1:04::1/80
Port 40G 49  4200000901   <-> MAI-PRG-R-4-7-1  Port 40G 49
172.16.253.194/30   2a03:3b40:42:0:49::2/80
Port 40G 51  4200001902   <-> MAI-PRG-R-14-7-2 Port 40G 51
172.16.252.201/30   2a03:3b40:42:1:51::1/80
Port 40G 53  4200001901   <-> MAI-PRG-R-14-7-1 Port 40G 53
172.16.252.209/30   2a03:3b40:42:1:53::1/80
```

```
=[MAI-PRG-
R-14-7-1]========================================================================
================

--INTERFACE---PEER-ASN---------TARGET-----------------------IPv4-----------
-----IPv6-----------------
Port 10G 01  4200001001   <-> node1.stg                      172.16.251.1/30
2a03:3b40:42:2:01::1/80
Port 10G 02  4200001002   <-> node2.stg                      172.16.251.5/30
2a03:3b40:42:2:02::1/80
Port 10G 03  4200001003   <-> node17.prg                     172.16.251.9/30
2a03:3b40:42:2:03::1/80
Port 10G 04  4200001004   <-> node18.prg                     172.16.251.13/30
```

```
2a03:3b40:42:2:04::1/80
Port 10G 48  65534        <-> edgertr1.prg
172.16.251.189/30   2a03:3b40:42:2:48::1/80
Port 40G 49  4200001902   <-> MAI-PRG-R-14-7-2 Port 40G 49
172.16.251.197/30   2a03:3b40:42:2:49::1/80
Port 40G 51  4200000901   <-> MAI-PRG-R-4-7-1  Port 40G 51
172.16.253.202/30   2a03:3b40:42:0:51::2/80
Port 40G 53  4200000902   <-> MAI-PRG-R-4-7-2  Port 40G 53
172.16.252.210/30   2a03:3b40:42:1:53::2/80
```

```
=[MAI-PRG-
R-14-7-2]=======================================================================
================

--INTERFACE---PEER-ASN---------TARGET-----------------------IPv4-----------
-----IPv6-----------------
Port 10G 01  4200001001   <-> node1.stg                     172.16.250.1/30
2a03:3b40:42:3:01::1/80
Port 10G 02  4200001002   <-> node2.stg                     172.16.250.5/30
2a03:3b40:42:3:02::1/80
Port 10G 03  4200001003   <-> node17.prg                    172.16.250.9/30
2a03:3b40:42:3:03::1/80
Port 10G 04  4200001004   <-> node18.prg                    172.16.250.13/30
2a03:3b40:42:3:04::1/80
Port 10G 48  65534        <-> edgertr1.prg
172.16.250.189/30   2a03:3b40:42:3:48::1/80
Port 40G 49  4200001901   <-> MAI-PRG-R-14-7-2 Port 40G 49
172.16.251.198/30   2a03:3b40:42:2:49::2/80
Port 40G 51  4200000902   <-> MAI-PRG-R-4-7-2  Port 40G 51
172.16.252.202/30   2a03:3b40:42:1:51::2/80
Port 40G 53  4200000901   <-> MAI-PRG-R-4-7-1  Port 40G 53
172.16.253.210/30   2a03:3b40:42:0:53::2/80
```

IP Summary

```
GLOBAL ALLOCATION:    172.16.0.0 - 172.31.255.255
```

```
172.16.0.0 - 172.16.255.255 VPSFREE-PRG
172.17.0.0 - 172.17.255.255 BASE48-BRQ
172.18.0.0 - 172.30.255.255 [RESERVED-LEGACY]
172.19.0.0 - 172.19.255.255 VPSFREE-BRQ
172.20.0.0 - 172.30.255.255 [UNALLOCATED]
172.31.0.0 - 172.31.255.255 MNT-SUBNET
```

VPSFREE-PRG

Allocation:

```
172.16.0.0/16     VPSFREE-PRG
```

Assignments:

```
NETWORK           ALLOCATION NAME       VLAN #
================================================================================
===
172.16.0.0/23     VPSFREE-PRG-PROD      200
172.16.2.0/23     VPSFREE-PRG-PGND      210
172.16.8.0/21     VPSFREE-PRG-PROD-INT  200
172.16.100.0/24   VPSFREE-PRG-LEGACY    100
172.16.101.0/24   VPSFREE-PRG-MGMT      101
172.16.103.0/24   VPSFREE-PRG-SWITCHES  103
172.16.107.0/24   VPSFREE-PRG-VPN       220
172.16.107.0/24   VPSFREE-PRG-VPN       220
```

BASE48-BRQ

Allocation:

```
172.17.0.0/16     BASE48-BRQ
```

Assignments:

```
NETWORK           ALLOCATION NAME       VLAN #
================================================================================
===
172.17.0.0/24     BASE48-MGMT           100
-dhcp-            BASE48-UPC            200
172.17.1.0/24     BASE48-LAN            201
172.17.2.0/24     BASE48-WLAN           202
172.17.3.0/24     BASE48-IOT            203
172.17.4.0/23     BASE48-RACKBASE       300
172.17.6.0/23     BASE48-RACKVPSF       301
```

VPSFREE-BRQ

Allocation:

```
172.19.0.0/16     VPSFREE-BRQ
```

Assignments:

```
NETWORK           ALLOCATION NAME       VLAN #
================================================================================
===
172.19.0.0/23     VPSFREE-PRG-PROD      ---
172.19.8.0/21     VPSFREE-BRQ-PROD-INT  ---
172.19.101.0/24   VPSFREE-PRG-MGMT      101
```

MNT-SUBNET

Allocation:

```
172.31.0.0/16     MNT-SUBNET
```

Assignments:

```
NETWORK           ALLOCATION NAME       COMMENT
================================================================================
===
172.31.0.0/24     PEERING               IPSec /30 tunnels
  172.31.0.0/30   PEER-PRG-BRQ-1-1      edge-rtr1.prg <-> edge-rtr1.brq
  172.31.0.4/30   PEER-PRG-BRQ-1-2      edge-rtr1.prg <-> edge-rtr2.brq
  172.31.0.8/30   PEER-PRG-BRQ-2-1      edge-rtr2.prg <-> edge-rtr1.brq
  172.31.0.12/30  PEER-PRG-BRQ-2-2      edge-rtr2.prg <-> edge-rtr2.brq
  172.31.0.16/30  PEER-PRG-B48-1-1      edge-rtr1.prg <-> edge-rtr1.b48
  172.31.0.20/30  PEER-PRG-B48-2-1      edge-rtr2.prg <-> edge-rtr1.b48
  172.31.0.24/30  PEER-PRG-B48-2-1-1    edge-rtr1.prg <-> edge-rtr1.b48-2
  172.31.0.28/30  PEER-PRG-B48-2-2-1    edge-rtr2.prg <-> edge-rtr1.b48-2
```