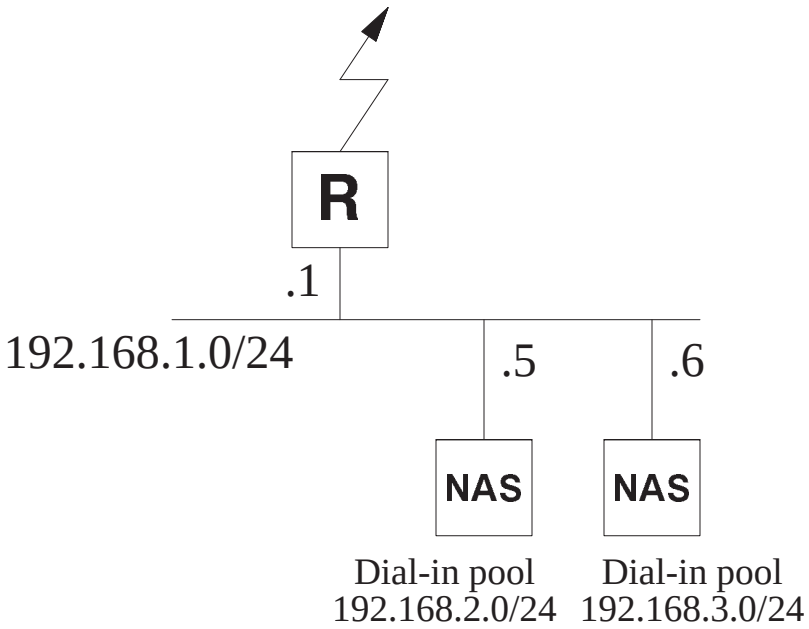
Initial rollout of core network

1. Before...



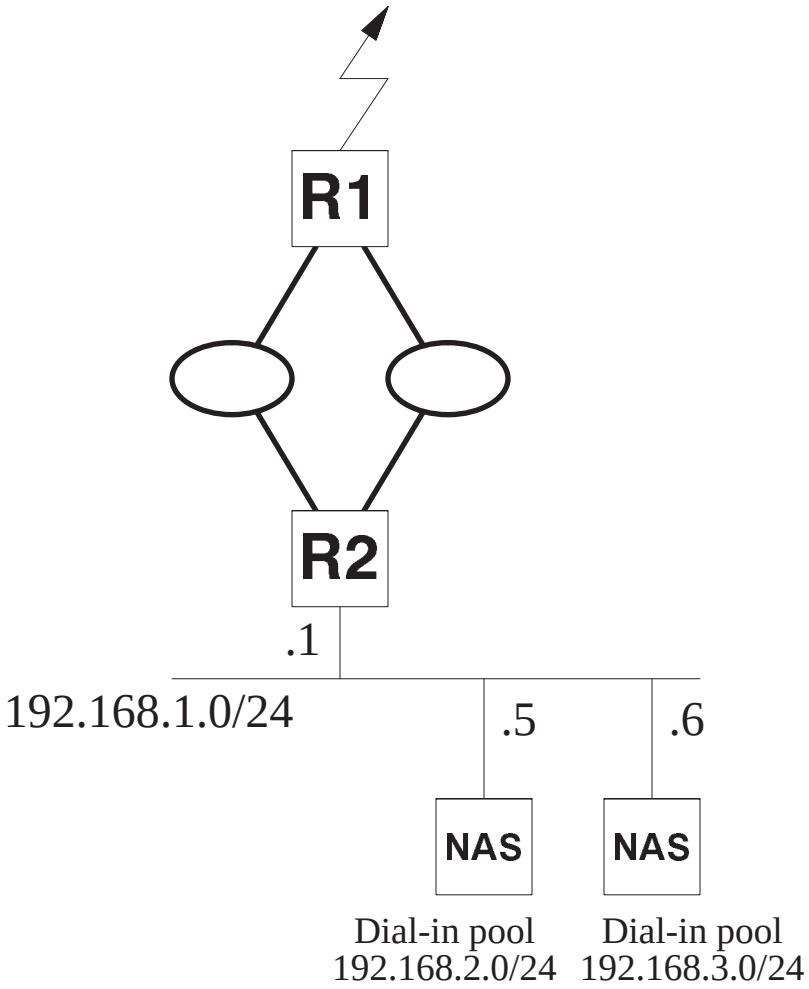

```
interface serial 0
  encapsulation ppp

interface ethernet 0
  ip address 192.168.1.1 255.255.255.0

interface ethernet 1
  shutdown

ip route 192.168.2.0 255.255.255.0 192.168.1.5
ip route 192.168.3.0 255.255.255.0 192.168.1.6
ip route 0.0.0.0 0.0.0.0 serial0
```

2. ...After


R1
R2
.1
192.168.1.0/24
.5
.6
NAS
NAS
Dial-in pool
192.168.2.0/24
Dial-in pool
192.168.3.0/24

Design

IP addressing

Allocate new subnets for the core networks: 192.168.2.0/28 and 192.168.2.16/28
Take .1 and .17 for the switches themselves (management address)
Take .2 and .18 for R1
Take .3 and .19 for R2

R1 config

```
interface serial 0
  encapsulation ppp

interface ethernet 0
  ip address 192.168.2.2 255.255.255.240

interface ethernet 1
  ip address 192.168.2.18 255.255.255.240

router ospf 1
  default-information originate metric 100
  ...

ip route 0.0.0.0 0.0.0.0 serial0
```

R2 config

```
interface ethernet 0
  ip address 192.168.2.3 255.255.255.240

interface ethernet 1
  ip address 192.168.2.19 255.255.255.240

interface ethernet 2
  ip address 192.168.1.1 255.255.255.0

router ospf 1
  redistribute static subnets
  redistribute connected subnets
  ...

ip route 192.168.2.0 255.255.255.0 192.168.1.5
ip route 192.168.3.0 255.255.255.0 192.168.1.6
```

Plan

Write a plan for converting "before" into "after". Goals:
(1) cause as little disruption to traffic as possible
(2) at each stage have a roll-back plan for undoing any changes

You can assume that the existing border R has a spare ethernet interface. List any other assumptions you make.

List the equipment and materials you will need.