Building the ICND1 Lab Network:

ROUTERS

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NETWORK ENGINEER

@bagurdes

Module Goals

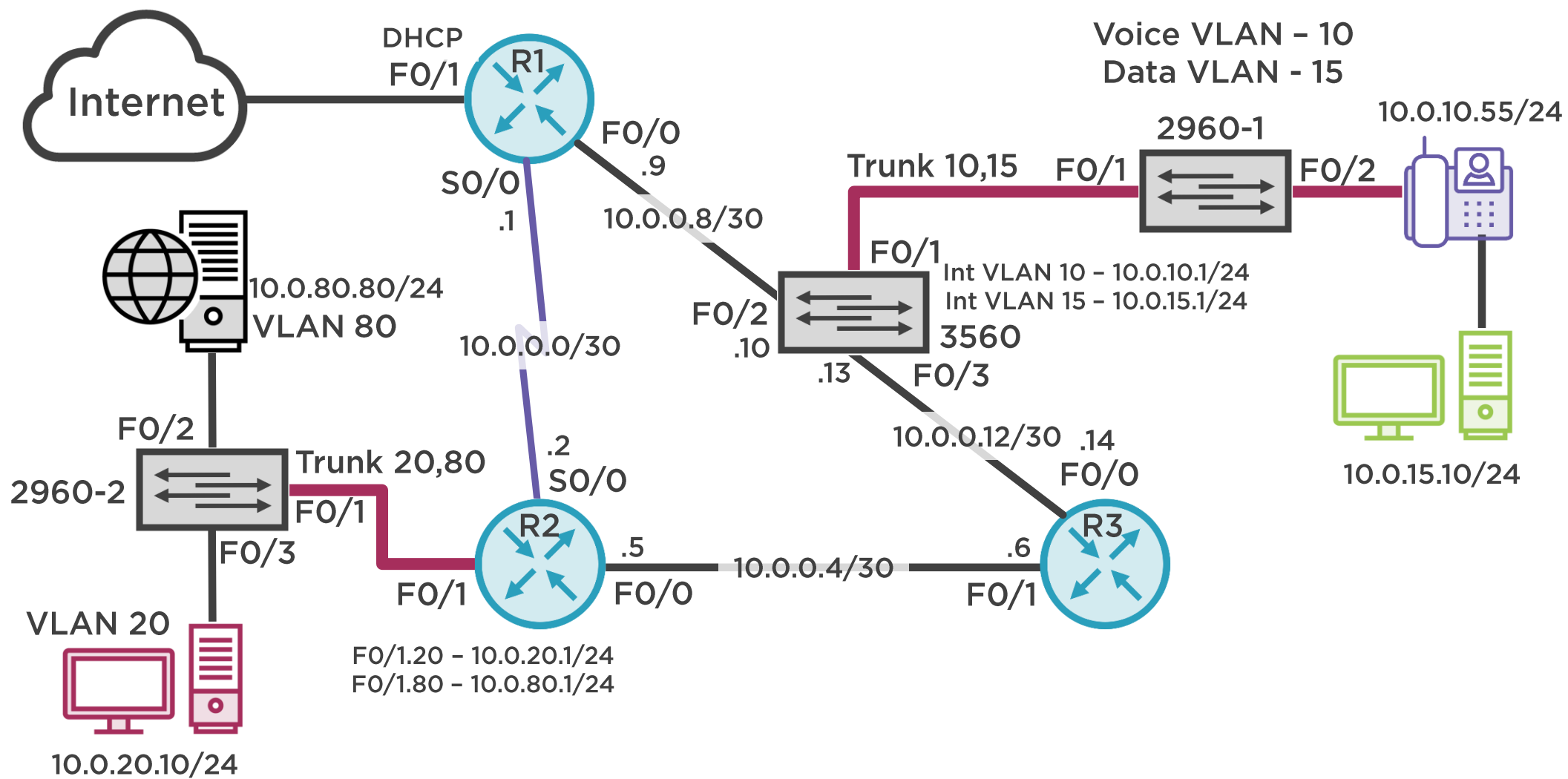Build ICND1 lab network

Use Notepad to build configurations
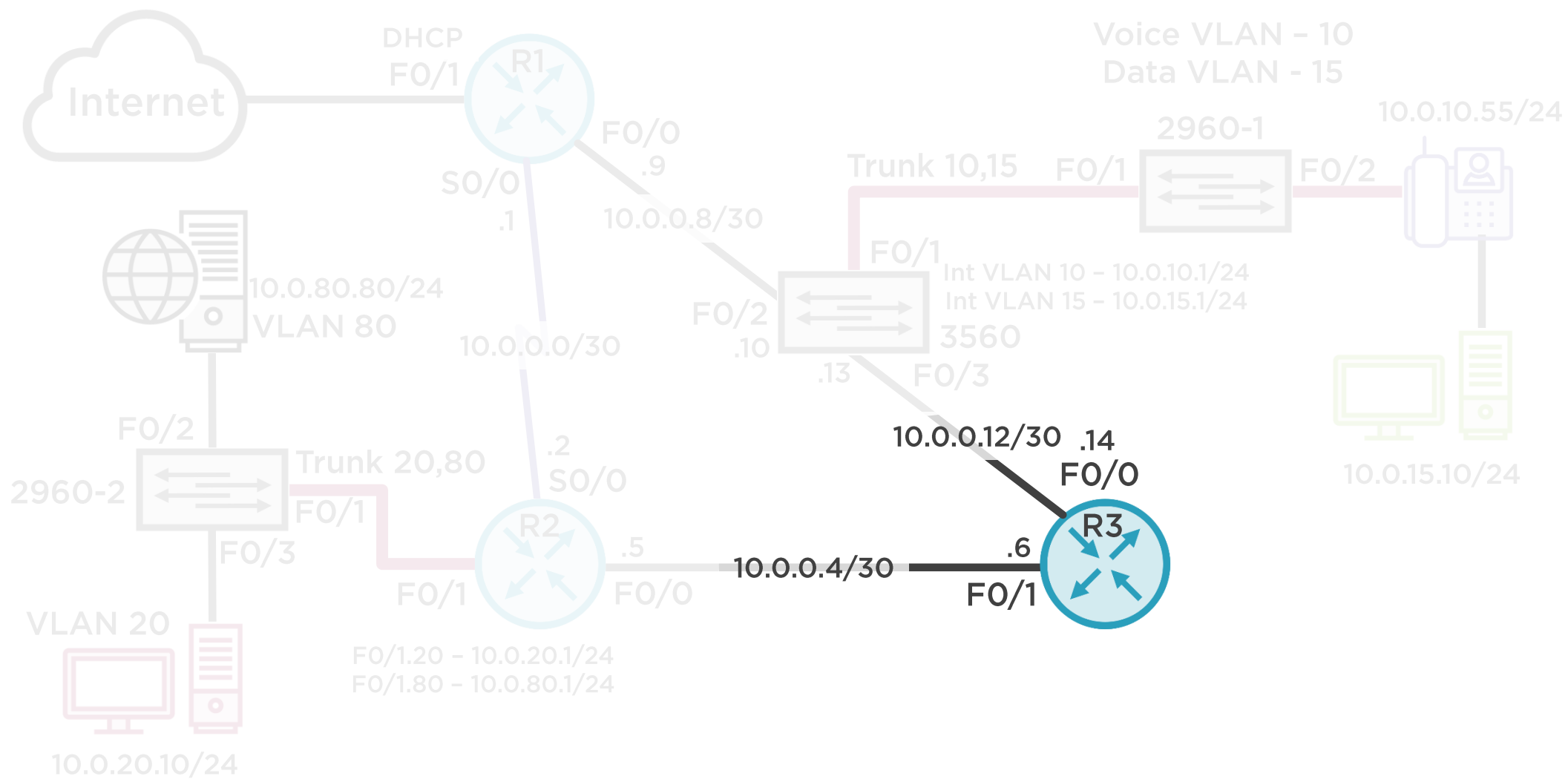
Demo

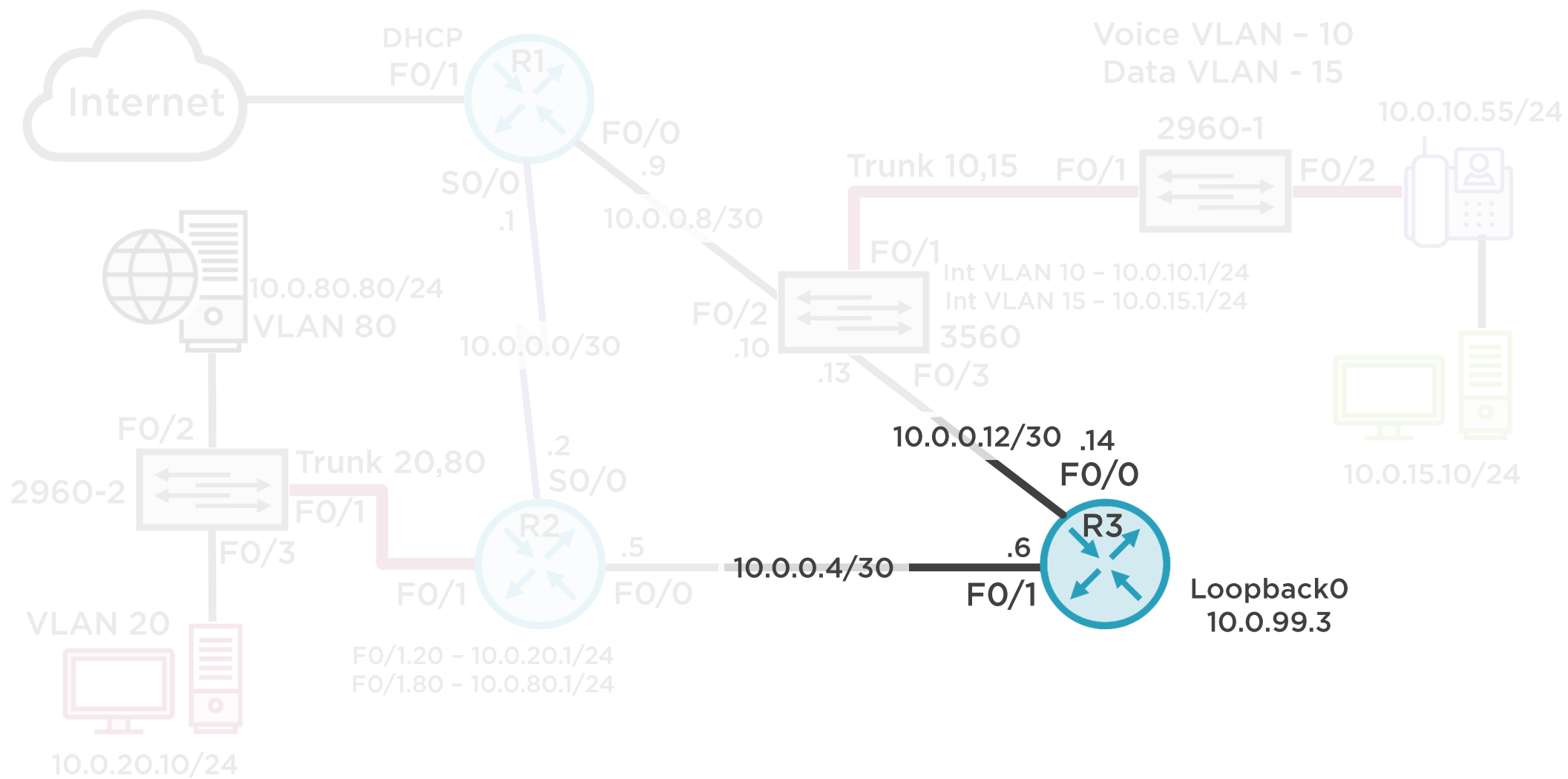**Build ICND1 Lab Network**

Lab Network

Internet

DHCP
F0/1
R1

Voice VLAN – 10
Data VLAN - 15

F0/0
.9

Trunk 10,15   F0/1   2960-1   F0/2

10.0.10.55/24

S0/0
.1

10.0.0.8/30

10.0.80.80/24
VLAN 80

F0/1

Int VLAN 10 – 10.0.10.1/24
Int VLAN 15 – 10.0.15.1/24

F0/2

10.0.0.0/30

F0/2
.10
3560

F0/2

.13   F0/3

10.0.0.12/30   .14

10.0.15.10/24

F0/2

2960-2

Trunk 20,80
F0/1

.2
S0/0

F0/0
R3

F0/3

R2   .5   F0/0

10.0.0.4/30

.6
R3

VLAN 20

F0/1

F0/1

F0/1.20 – 10.0.20.1/24
F0/1.80 – 10.0.80.1/24
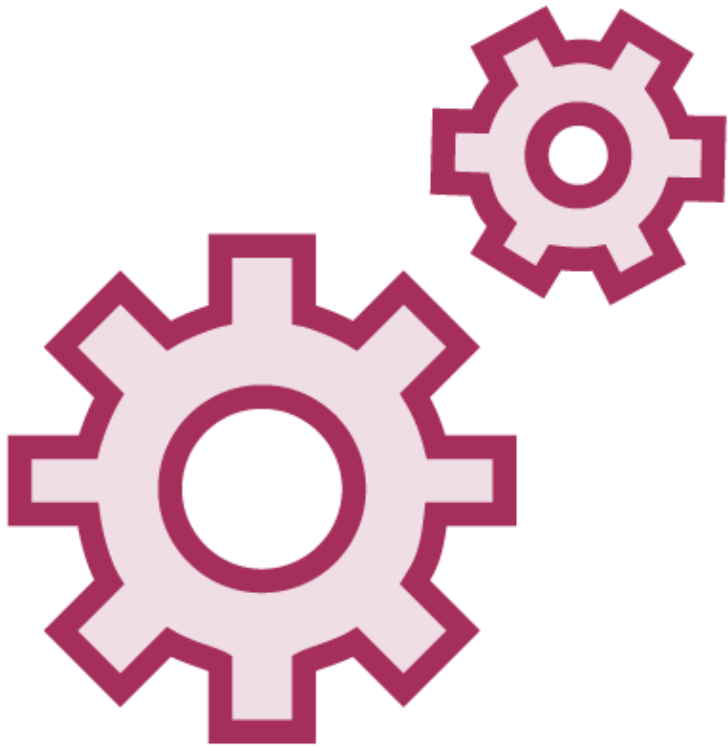
10.0.20.10/24

Configure R3

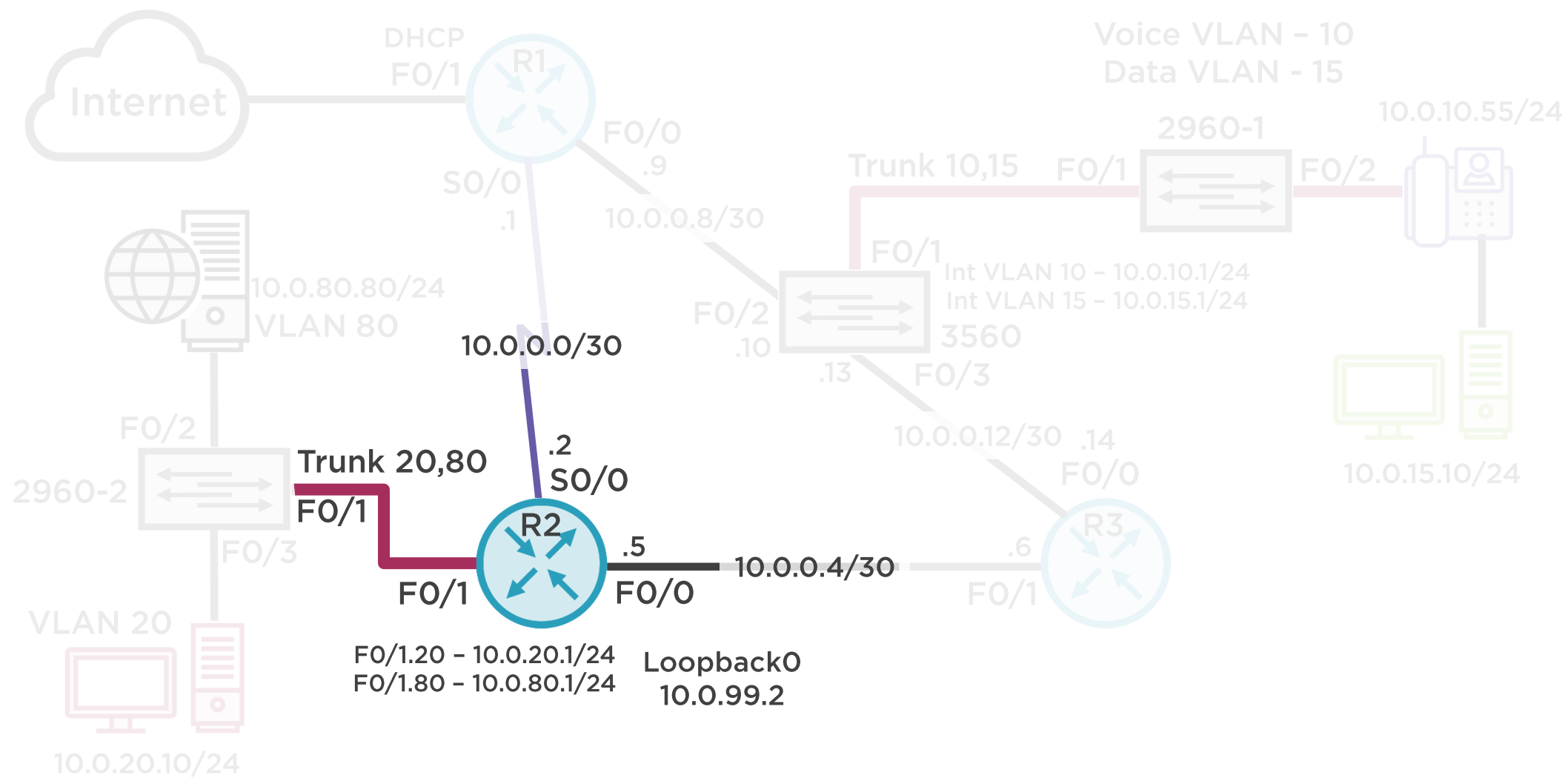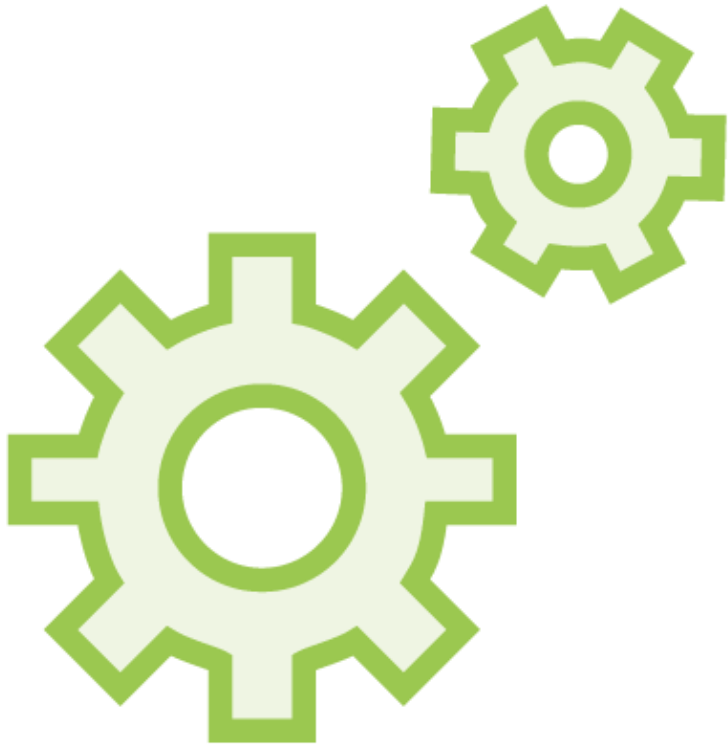# Lab Network

Lab Network

R3 Configuration Tasks

- Base configuration
  - Secure user/privileged mode
  - Enable SSH
- Configure interfaces
- Configure loopback IP
- Configure OSPF routing
- Copy config and paste in Notepad

Configure R2

Lab Network

Internet

DHCP
F0/1

R1

F0/0
.9

S0/0
.1

10.0.0.8/30

Voice VLAN – 10
Data VLAN - 15

2960-1

10.0.10.55/24

Trunk 10,15   F0/1   F0/2

F0/1
Int VLAN 10 – 10.0.10.1/24
Int VLAN 15 – 10.0.15.1/24

F0/2
.10

3560

10.0.80.80/24
VLAN 80

F0/2

.13   F0/3

10.0.0.0/30

10.0.0.12/30 .14

F0/0

10.0.15.10/24

Trunk 20,80
F0/1

.2
S0/0

2960-2

R2

.5   F0/0

10.0.0.4/30

.6

R3

F0/1

VLAN 20

F0/3

F0/1

F0/1.20 – 10.0.20.1/24
F0/1.80 – 10.0.80.1/24

Loopback0
10.0.99.2

10.0.20.10/24

R2 Configuration Tasks

- Use Notepad edit base config
- Paste base config on R2

Configure R1

Lab Network

Internet

DHCP
F0/1

Loopback0
10.0.99.1

R1

F0/0
.9

S0/0
.1

10.0.0.8/30

Voice VLAN – 10
Data VLAN - 15

2960-1

10.0.10.55/24

Trunk 10,15   F0/1   F0/2

F0/1

Int VLAN 10 – 10.0.10.1/24
Int VLAN 15 – 10.0.15.1/24

F0/2
.10

3560

10.0.0.0/30

10.0.80.80/24
VLAN 80

.2
S0/0

.13   F0/3

10.0.0.12/30   .14
F0/0

F0/2

2960-2   Trunk 20,80
F0/1

R2

.5
F0/0

10.0.0.4/30

.6
R3
F0/1

F0/3

VLAN 20

F0/1

F0/1.20 – 10.0.20.1/24
F0/1.80 – 10.0.80.1/24

10.0.15.10/24

10.0.20.10/24
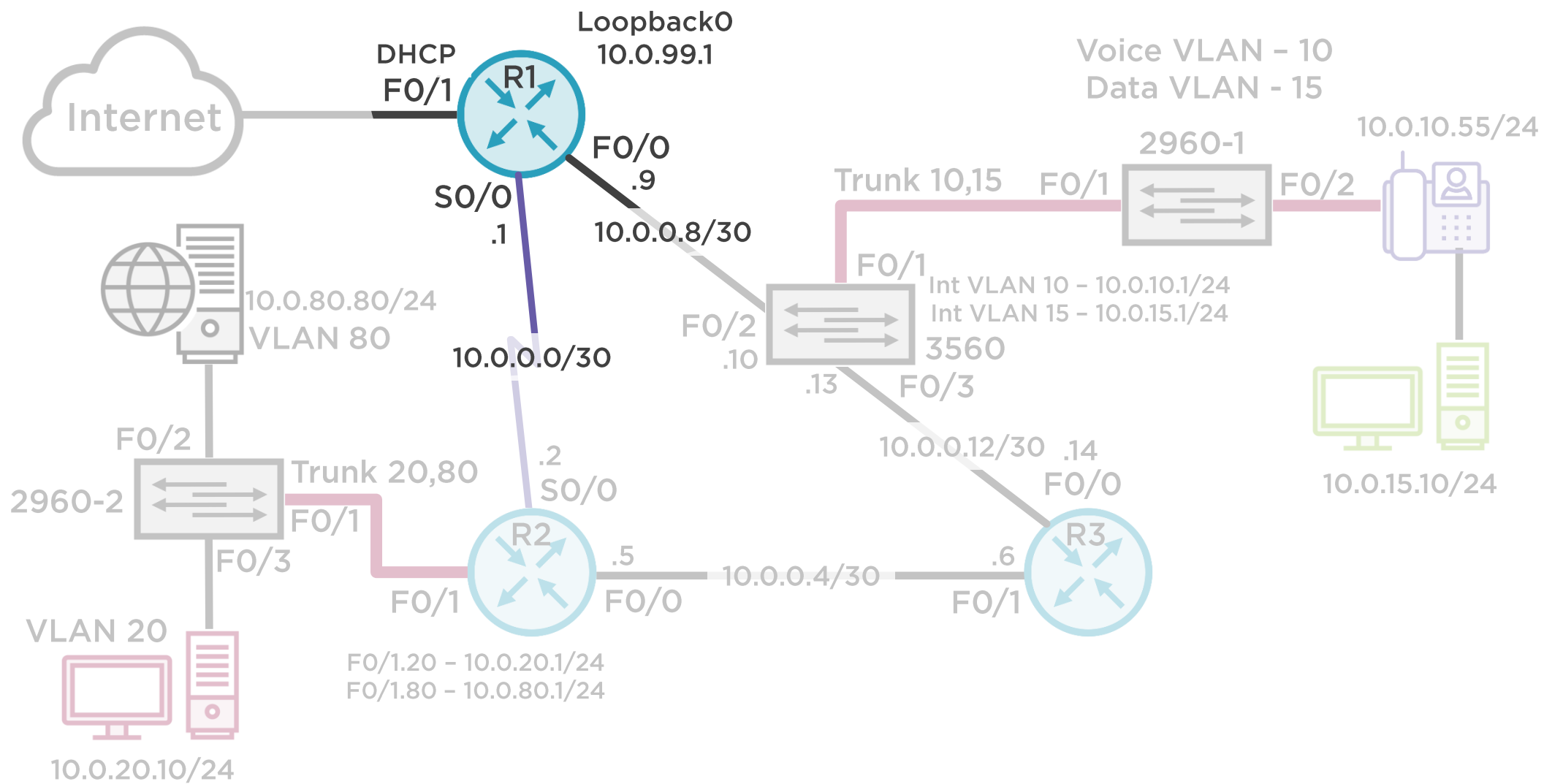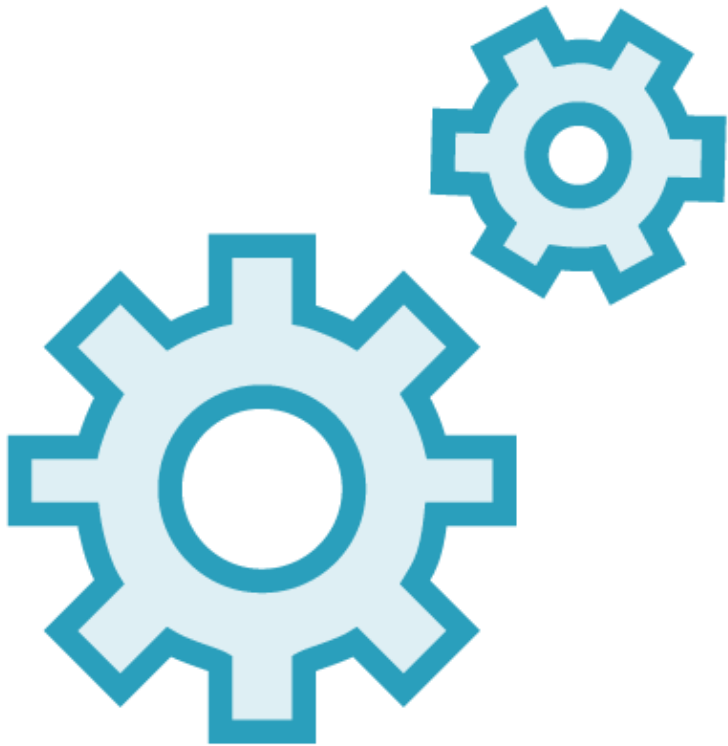
R1 Configuration Tasks

- Use Notepad edit base config
- Paste base config on R1
- Configure F0/1 for DHCP acquired address
- Configure static default route
- Configure PAT

Summary

Build ICND1 lab network

Use Notepad to build configurations