# Cisco Troubleshooting Cheat Sheet

## Set Up

#### R1 IP Conf

R1# conft

R1(config)# hostname R1 R1(config)# interface f 0/0

R1(config-if)# ip address 10.10.10.1 255.255.255.0

R1(config-if)# no shut

R1(config-if)# do wr

R1(config)# exit

#### R2 IP Conf

R2(config)# hostname R2 R2(config)# interface f 0/0 R2(config-if)# ip address 10.10.10.2 255.255.255.0 R2(config-if)# no shut R2(config)# interface f 1/0 R2(config-if)# ip address 10.10.20.2 255.255.255.0

#### R3 IP Conf

R2(config-if)# do wr

R3(config)# hostname R3 R3(config)# interface f 0/0 R3(config-if)# ip address 10.10.20.1 255.255.255.0 R3(config-if)# no shut R3(config-if)# do wr •

# Setting Up R3 As DNS Server

R3# conft R3# ip host R3.flackbox.lab 10.10.20.1



R1# conft R1(config)# ip domain lookup R1(config)# ip name-server 10.10.10.1

R2# conft R2(config)# ip domain lookup R2(config)# ip name-server 10.10.20.1



# **Default Gateway**

set R1 and R2 to use R3 as default gateway

R1# conft R1(config)# ip route 0.0.0.0 0.0.0.0 10.10.20.1 R1(config)# exit

R2(config)# ip route 0.0.0.0 0.0.0.0 10.10.20.1 R2(config)# exit



## Trouble Shooting

#### Telnet

used for interactive communication with another host

R1# telnet 10.10.20.1 53

### Ping

use to test the reachability of a host

R1# ping 10.10.20.1 R1# ping R3.flackbox.lab



#### **Traceroute**

for displaying possible routes and measuring transit delavs

R1# traceroute 10.10.20.1



#### Show IP Interface

best summery of the status protocol and IP addresses of your interfaces

R2# sh ip int brief

#### **DNS Server**



R3# sh run | include dns R3(config)# ip dns server

#### Sh Run

check the dns configuration

R3# sh run

#### Name Server

set R3 as dns server for R1

R1(config)# ip nameserver 10.10.20.1 R1(config)# no ip nameserver 10.10.10.1

