# TEST PROJECT
# IT NETWORK SYSTEMS ADMINISTRATION

WSC2015_TP39_D_TS_EN

Submitted by: Cisco Systems

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# MODULE D - TROUBLESHOOTING

## CONTENTS

This Test Project proposal consists of the following document/file:

WSC2015_TP39_D_TS_EN.docx
WSC2015_TP39_D_TS_XX.pkz

## INTRODUCTION

The competition has a fixed start and finish time. You must decide how to best divide your time.

Please **carefully** read the following instructions!

When the competition time ends, please save your file and add your Country-code in the end of the filename (change the XX), leave the Cisco Packet Tracer program and your workstation in a running state.

**DO NOT FORGET TO SAVE YOUR PACKET TRACER FILE REGULARLY!**

**(The Cisco Packet Tracer program may crash and you could loose marks!)**

## DESCRIPTION OF PROJECT AND TASKS

Ciscwell Glazing Company makes ceramic coatings for space capsules and ships. The processes in the factory are monitored via cameras, sensors, and people on the assembly lines. The Factory also has a store for the public to observe the process and buy samples of ceramics that have been in outer space.

Some aerospace customers will deliver their plans to the office where bids and processes are discussed. The webserver is also the email server (www.ciscwell.com).

After recent network upgrades there was a major power outage in the area so there are many devices that no longer work on the network. The IT-team did not have time to test the upgrades before the power outage. The IT manager is sick at home and you have been handed minor documentation of the network. Please look at the **Engineers notes**.

All PC must be able to reach all servers via ping or via the DNS entry. All email clients shown on the Engineers Notes must be configured and work. You have two hours to fix as many of the network errors that you can.

Good Luck,

The Packet Tracer Team

## Engineer notes

All routers using EIGRP 1

All PCs set to DHCP

All DHCP pools are on factory-RT

Servers all have static IPs

Video Server 172.16.10.5/24

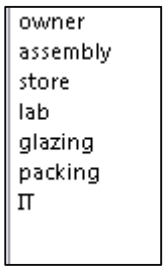
Sales Server 172.16.30.5/24

Assembly Data 172.16.40.5/24

DNS server 199.0.0.42/29

www.ciscwell.com 199.0.0.52/29

email accounts for www.ciscwell.com




all passwords cisco

| Port | Link | VLAN | IP Address | IPv6 Address | MAC Address |
|---|---|---|---|---|---|
| FastEthernet0/1 | Up | 10 | <not set> | <not set> | 00D0.5842.C001 |
| FastEthernet0/2 | Up | 1 | <not set> | <not set> | 00D0.5842.C002 |
| FastEthernet0/3 | Up | 30 | <not set> | <not set> | 00D0.5842.C003 |
| FastEthernet0/4 | Down | 1 | <not set> | <not set> | 00D0.5842.C004 |
| FastEthernet0/5 | Down | 1 | <not set> | <not set> | 00D0.5842.C005 |
| FastEthernet0/6 | Down | 1 | <not set> | <not set> | 00D0.5842.C006 |
| FastEthernet0/7 | Down | 1 | <not set> | <not set> | 00D0.5842.C007 |
| FastEthernet0/8 | Down | 1 | <not set> | <not set> | 00D0.5842.C008 |
| FastEthernet0/9 | Down | 1 | <not set> | <not set> | 00D0.5842.C009 |
| FastEthernet0/10 | Down | 1 | <not set> | <not set> | 00D0.5842.C00A |
| FastEthernet0/11 | Down | 1 | <not set> | <not set> | 00D0.5842.C00B |
| FastEthernet0/12 | Down | 1 | <not set> | <not set> | 00D0.5842.C00C |
| FastEthernet0/13 | Down | 1 | <not set> | <not set> | 00D0.5842.C00D |
| FastEthernet0/14 | Down | 1 | <not set> | <not set> | 00D0.5842.C00E |
| FastEthernet0/15 | Down | 1 | <not set> | <not set> | 00D0.5842.C00F |
| FastEthernet0/16 | Down | 1 | <not set> | <not set> | 00D0.5842.C010 |
| FastEthernet0/17 | Down | 1 | <not set> | <not set> | 00D0.5842.C011 |
| FastEthernet0/18 | Down | 1 | <not set> | <not set> | 00D0.5842.C012 |
| FastEthernet0/19 | Down | 1 | <not set> | <not set> | 00D0.5842.C013 |
| FastEthernet0/20 | Down | 1 | <not set> | <not set> | 00D0.5842.C014 |
| FastEthernet0/21 | Down | 1 | <not set> | <not set> | 00D0.5842.C015 |
| FastEthernet0/22 | Down | 1 | <not set> | <not set> | 00D0.5842.C016 |
| FastEthernet0/23 | Down | 1 | <not set> | <not set> | 00D0.5842.C017 |
| FastEthernet0/24 | Up | 40 | <not set> | <not set> | 00D0.5842.C018 |
| GigabitEthernet0/1 | Up | -- | <not set> | <not set> | 00D0.5842.C019 |
| GigabitEthernet0/2 | Up | -- | <not set> | <not set> | 00D0.5842.C01A |
| Vlan1 | Up | 1 | 172.16.1.1/24 | <not set> | 00E0.A34B.546B |
| Vlan10 | Up | 10 | 172.16.10.1/24 | <not set> | 00E0.A34B.546B |
| Vlan20 | Up | 20 | 172.16.20.1/24 | <not set> | 00E0.A34B.546B |
| Vlan30 | Up | 30 | 172.16.30.1/24 | <not set> | 00E0.A34B.546B |
| Vlan40 | Up | 40 | 172.16.40.1/24 | <not set> | 00E0.A34B.546B |

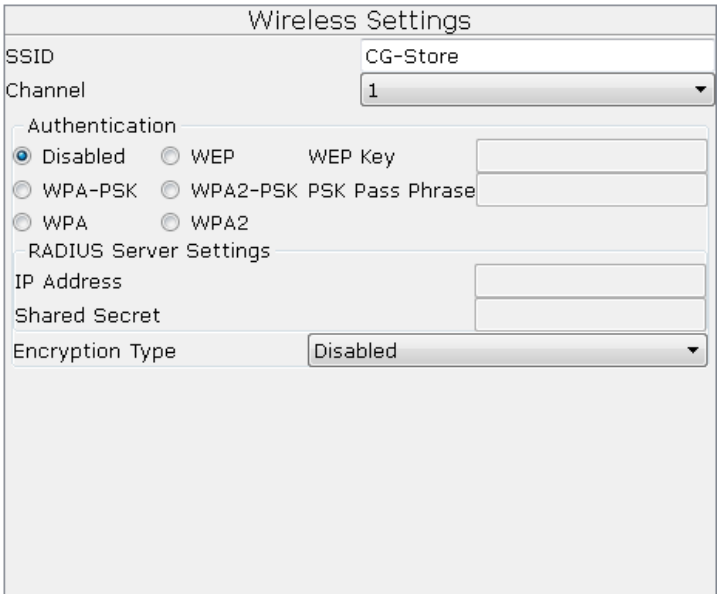
Hostname: Factory-SW1

```
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     172.16.0.0/16 is variably subnetted, 6 subnets, 2 masks
C       172.16.1.0/24 is directly connected, GigabitEthernet0/0
L       172.16.1.2/32 is directly connected, GigabitEthernet0/0
D       172.16.10.0/24 [90/25625856] via 172.16.1.1, 03:01:49, GigabitEthernet0/0
D       172.16.20.0/24 [90/25625856] via 172.16.1.1, 03:01:49, GigabitEthernet0/0
D       172.16.30.0/24 [90/25625856] via 172.16.1.1, 03:01:49, GigabitEthernet0/0
D       172.16.40.0/24 [90/25625856] via 172.16.1.1, 03:01:49, GigabitEthernet0/0
     199.0.0.0/24 is variably subnetted, 8 subnets, 2 masks
C       199.0.0.0/29 is directly connected, Serial0/0/0
L       199.0.0.2/32 is directly connected, Serial0/0/0
D       199.0.0.8/29 [90/2170368] via 200.200.200.1, 02:40:19, GigabitEthernet0/2
D       199.0.0.16/29 [90/5632] via 200.200.200.1, 02:40:19, GigabitEthernet0/2
D       199.0.0.24/29 [90/3072] via 200.200.200.1, 02:40:19, GigabitEthernet0/2
D       199.0.0.32/29 [90/3072] via 200.200.200.1, 02:40:19, GigabitEthernet0/2
D       199.0.0.40/29 [90/5632] via 200.200.200.1, 02:40:19, GigabitEthernet0/2
D       199.0.0.48/29 [90/5632] via 200.200.200.1, 02:24:49, GigabitEthernet0/2
     200.200.200.0/24 is variably subnetted, 2 subnets, 2 masks
C       200.200.200.0/30 is directly connected, GigabitEthernet0/2
L       200.200.200.2/32 is directly connected, GigabitEthernet0/2
Factory-RT#
```

```
VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active
10   Camera                            active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                                 Fa0/5, Fa0/6, Fa0/7, Fa0/8
20   WiFi                              active    Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                                 Fa0/13, Fa0/14, Fa0/15, Fa0/16
30   PCs                               active    Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                                 Fa0/21, Fa0/22, Fa0/23, Fa0/24
1002 fddi-default                      active
1003 token-ring-default                active
1004 fddinet-default                   active
1005 trnet-default                     active
Sw-west#
```



```
!
hostname SW-East
!
spanning-tree mode pvst
!
interface FastEthernet0/1
switchport access vlan 20
!
interface FastEthernet0/2
switchport access vlan 20
!
interface FastEthernet0/3
switchport access vlan 20
!
interface FastEthernet0/4
switchport access vlan 20
!
interface FastEthernet0/5
switchport access vlan 20
!
interface FastEthernet0/6
switchport access vlan 20
!
interface FastEthernet0/7
switchport access vlan 20
!
interface FastEthernet0/8
switchport access vlan 20
!
interface FastEthernet0/9
switchport access vlan 30
!
interface FastEthernet0/10
switchport access vlan 30
```

```
!
interface FastEthernet0/11
switchport access vlan 30
!
interface FastEthernet0/12
switchport access vlan 30
!
interface FastEthernet0/13
switchport access vlan 30
!
interface FastEthernet0/14
switchport access vlan 30
!
interface FastEthernet0/15
switchport access vlan 30
!
interface FastEthernet0/16
switchport access vlan 30
!
interface FastEthernet0/17
switchport access vlan 40
!
interface FastEthernet0/18
switchport access vlan 40
!
interface FastEthernet0/19
switchport access vlan 40
!
interface FastEthernet0/20
switchport access vlan 40
!
interface FastEthernet0/21
switchport access vlan 40
!
```

```
interface FastEthernet0/22
switchport access vlan 40
!
interface FastEthernet0/23
switchport access vlan 40
!
interface FastEthernet0/24
switchport access vlan 10
switchport mode access
!
interface GigabitEthernet0/1
switchport mode trunk
!
interface GigabitEthernet0/2
!
interface Vlan1
ip address 172.16.1.20 255.255.255.0
!
line con 0
!
line vty 0 4
login
line vty 5 15
login
!
```

# LOGICAL TOPOLOGY DIAGRAM