

## CONFIGURING A THIRD PARTY ROUTER



<u>System:</u> Quality Management System	<u>Reference No. Revision No:</u> Q-F-IT-P-05, Rev 1	<u>Originated by:</u> Systems Administrator
<u>Revision Date:</u> 23.07.2013	<u>Page No:</u> Page 1 of 7	<u>Authorised by:</u> IT Manager

### 1 Purpose

This document describes the procedure and a process for configuring the 3<sup>rd</sup> party router. The procedure is intended for SEC Network Administrator to use ONLY in times of setting up new router or adding an aggregator to the corporate network via the SPTC leased line.

### 2 Scope

The procedure serves as fine grained guide with step by step tasks to follow in case a new router is configured or adding new site.

### 3 References

Annex 1

### 4 Definitions

WIC - WAN Interface Card

APN – Access Point Name

### 5 Responsibilities

Network & Security Engineer/ Network Administrator – Only the Network Administrator OR an approved IT department employee is responsible for configure a main router on the SEC corporate network.

The Network & Security Engineer – Only the Network & Security Engineer or the IT Manager can approve the modification of settings on this router.

### 6 Procedure

**6.1** Connect the router to your PC with a serial cable and use the following settings:

Connect using: COM1, Bits per second: 9600, Data Bits: 8, Parity: None Stop bits: 1, Flow control: none

```
Router>enable
```

```
Router#config terminal
```

```
Router(config)#line console 0
```

```
Router(config-line)#password <s92mrt2r!>
```

```
Router(config-line)#login
```

```
Router(config-line)#exec-timeout 20 10
```

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```
Router(config-line)#logging synchronous
```

```
Router(config-line)^Z
```

```
Router#wr
```

```
Router#logout
```

Next, we logout of the router then login the router in order to make sure the password works. . The password is “**s92mrt2r!>**” as we configured on line console 0.

Router con0 is now available

Press RETURN to get started.

### 6.2 User Access Verification

Password:

*To configure passwords for privileged mode and vty lines.*

```
Router>enable
```

```
Router#config terminal
```

```
Router(config)#enable password <s92mrt2r>
```

```
Router(config)#enable secret <L1on@sec04!>
```

```
Router(config)#service password-encryption
```

```
Router(config)#line vty 0 4
```

```
Router(config-line)#password vty
```

```
Router(config-line)#login
```

```
Router(config-line)^Z
```

```
Router#wr
```

### 6.3 To configure theFasterEthernet 0/0 interface. Configure the ip address and network mask, finally we bring the interface up with command “no shutdown”.

```
Router(config)#interface GigabitEthernet0/2
```

```
Router(config-if)#ip address 192.168.10.1 255.255.255.252
```

```
Router(config-if)#no shutdown
```

```
Router(config-if)#exit
```

```
Router(config)#exit
```

### 6.4 The router is connected to a firewall device on X4 port and your gateway must be changed to 147.110.192.47

## CONFIGURING A THIRD PARTY ROUTER



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*Use putty or bring up a Microsoft command prompt window, type in "telnet192.168.10.1". The telnet program is executed, and started a telnet session on the router for us. Of course a password is needed, we know the password is "vty", because we set it previously when configuring vty line 0 4.*

### **6.5** To configure WIC (WAN Interface Card) In short, it's a serial card

**MTN mobile** serial 0/0/0 = 192.168.250.210 /30

**MTN APN** serial 0/1/0 =192.168.250.1 /30

**FNB** serial 0/2/0 = 10.169.169.106 /30

**SBS** serial 0/3/0 = 10.138.240.46/30

interface Serial0/0/0

ip address 192.168.250.210 255.255.255.252

interface Serial0/1/0

ip address 192.168.250.1 255.255.255.252

interface Serial0/2/0

ip address 10.169.169.106 255.255.255.252

### ***Routing***

ip route 10.254.16.0 255.255.255.0 Serial0/2/0

ip route 10.254.209.0 255.255.255.0 Serial0/1/0

ip route 10.254.210.0 255.255.255.0 Serial0/1/0

ip route 147.110.192.0 255.255.255.0 192.168.10.2

ip route 196.11.132.0 255.255.255.0 Serial0/0/0

ip route 196.11.133.0 255.255.255.0 Serial0/0/0

## **7 Records**

N/A

***See Annex 1– current configuration***

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### Annex1

```
Current configuration : 5887 bytes
!
! Last configuration change at 12:27:13 UTC Thu Aug 8 2013 by silwane
! NVRAM config last updated at 12:48:24 UTC Thu Aug 8 2013 by silwane
! NVRAM config last updated at 12:48:24 UTC Thu Aug 8 2013 by silwane
version 15.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname 3rdparty
!
boot-start-marker
boot-end-marker
!
!
logging buffered 51200 warnings
enable secret 4 jPtf4NXaC3O5/3Z3oq.KCKwrrFwP4YXRct5SDkfcppM
enable password red!master@sec01!
!
no aaa new-model
!
no ipv6 cef
ip source-route
ip cef
!
!
!
!
ip domain name yourdomain.com
multilink bundle-name authenticated
!
!
crypto pki token default removal timeout 0
!
crypto pki trustpoint TP-self-signed-92884530
  enrollment selfsigned
  subject-name cn=IOS-Self-Signed-Certificate-92884530
  revocation-check none
  rsakeypair TP-self-signed-92884530
!
!
crypto pki certificate chain TP-self-signed-92884530
certificate self-signed 01
  30820227 30820190 A0030201 02020101 300D0609 2A864886 F70D0101 05050030
  2F312D30 2B060355 04031324 494F532D 53656C66 2D536967 6E65642D 43657274
  69666963 6174652D 39323838 34353330 301E170D 31323131 31343231 31393035
  5A170D32 30303130 31303030 3030305A 302F312D 302B0603 55040313 24494F53
  2D53656C 662D5369 676E6564 2D436572 74696669 63617465 2D393238 38343533
  3030819F 300D0609 2A864886 F70D0101 01050003 818D0030 81890281 810097CB
  38E38E20 53C77D5D E2C69FAD B6E12634 759B4897 FB107966 3C85A61B 327CA30F
  06F5B606 17A2BABF 23DCDD3A 172A4A39 925E4D5D 120C13D7 593771BE 6DE2BDD0
  C8B53580 E62C4052 210A8648 A27E63B4 BEC97B95 0A95CB78 4B5C80F1 BD652D02
  66D7578B 49F86B40 0B0C7909 E961ACD6 4D45F80D D34D3664 DC991565 C0270203
  010001A3 53305130 0F060355 1D130101 FF040530 030101FF 301F0603 551D2304
  18301680 14E1EEAD 9284C211 89E4C361 57369A66 494873F4 76301D06 03551D0E
  04160414 E1EEAD92 84C21189 E4C36157 369A6649 4873F476 300D0609 2A864886
  F70D0101 05050003 81810032 65371E17 74E0ADCD DBA2EBB4 B47C8FDC 5890DB84
  560D5EF4 B4CF1A1B F85BC7A2 6E4E72B1 9395E5AB 77B62FC6 97C768DD 1B9FABBE
  FB287974 8FA74377 730D9ADA F33CB372 D59A45DC 574873F7 5897EDD6 8FB17B2F
  575554F4 A7D9B74D 7557E7C2 03D77E84 95FA9179 71747897 296C959E 93749816
  7B4E5765 009EFCE8 A09705
--More--
```

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```
license udi pid CISCO2911/K9 sn FGL164611H1
!
!
username silwane password 0 s92mrt2r!
!
!
!
!
!
!
interface Embedded-Service-Engine0/0
 no ip address
 shutdown
!
interface GigabitEthernet0/0
 description $ETH-LAN$$ETH-SW-LAUNCH$$INTF-INFO-GE 0/0$
 ip address 192.168.10.1 255.255.255.252
 duplex auto
 speed auto
 no mop enabled
!
interface GigabitEthernet0/1
 no ip address
 shutdown
 duplex auto
 speed auto
 no mop enabled
!
interface GigabitEthernet0/2
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface Serial0/0/0
 ip address 192.168.250.210 255.255.255.252
!
interface Serial0/1/0
 ip address 192.168.250.1 255.255.255.252
!
interface Serial0/2/0
 ip address 10.169.169.106 255.255.255.252
!
interface Serial0/3/0
 ip address 10.138.240.46 255.255.255.252
!
ip forward-protocol nd
!
ip http server
ip http access-class 23
ip http authentication local
ip http secure-server
ip http timeout-policy idle 60 life 86400 requests 10000
!
ip route 10.138.0.0 255.255.0.0 Serial0/3/0
ip route 10.254.16.0 255.255.255.0 Serial0/2/0
ip route 10.254.209.0 255.255.255.0 Serial0/1/0
ip route 10.254.210.0 255.255.255.0 Serial0/1/0
ip route 147.110.192.0 255.255.255.0 192.168.10.2
ip route 196.11.132.0 255.255.255.0 Serial0/0/0
ip route 196.11.133.0 255.255.255.0 Serial0/0/0
!
dialer-list 1 protocol ip permit
--More--
```