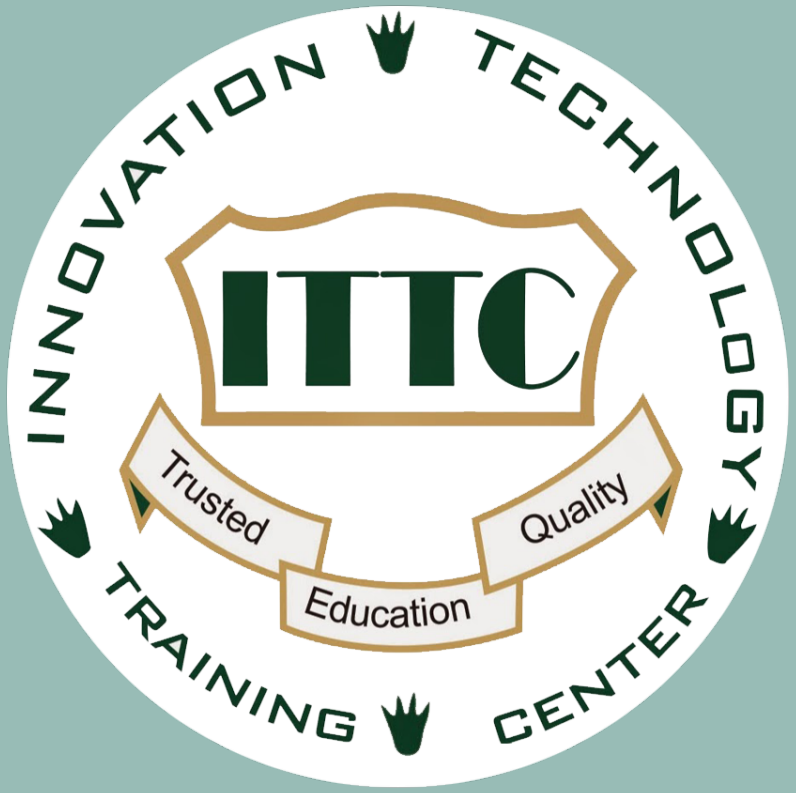
# KEEP LEARNING IS THE BEST CHOICE




TRAINING@ITTC.EDU.KH

WWW.ITTC.EDU.KH

# PRESENTER INFOMATION

Ke Lon

8 Year for network Engineering

MTCNA, MTCRE

E-mail: lon.ke@ittc.edu.kh

Mobile: 078 878 723

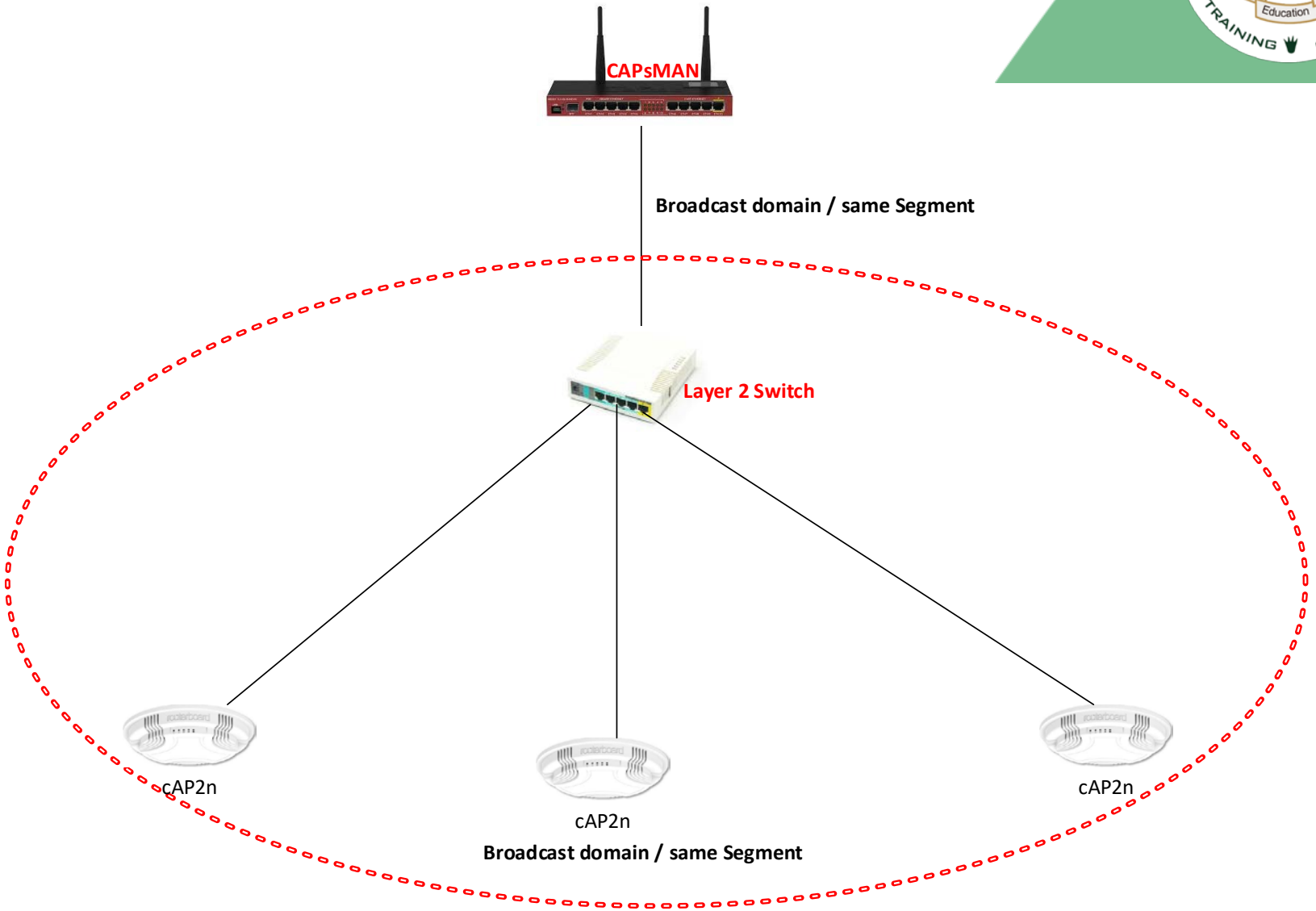
http://www.ittc.edu.kh

# Wireless Multi Service using CAPsMAN and IP Management

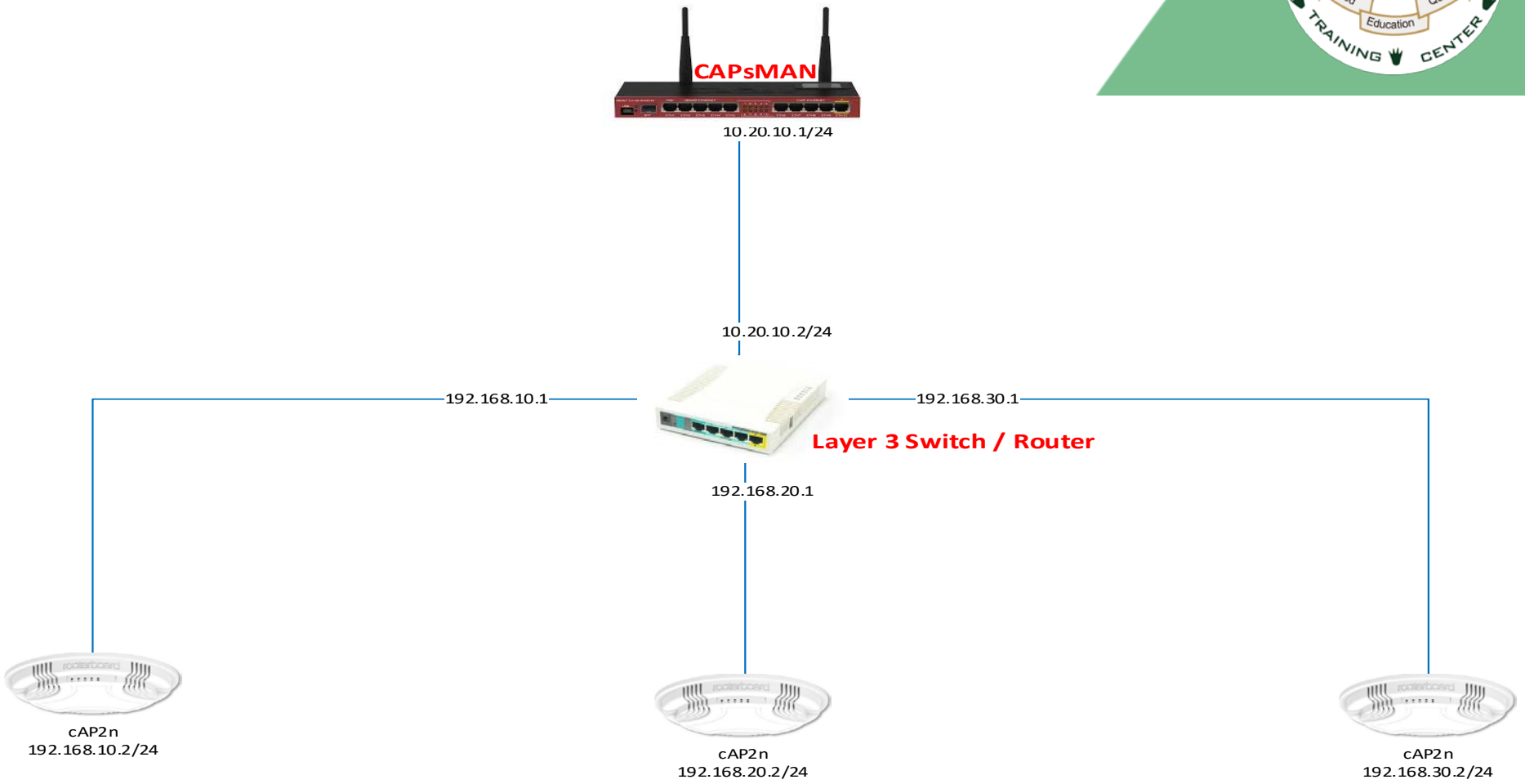
# OBJECTIVE

- CAP must have link between CAPsMAN
- ALL CAP must be assign management IP address to interface connected to CAPsMAN
- Create different profile services to provision base on specific MAC address (CAP radio mac address)

# CAPsMAN to CAP connection via Mac address



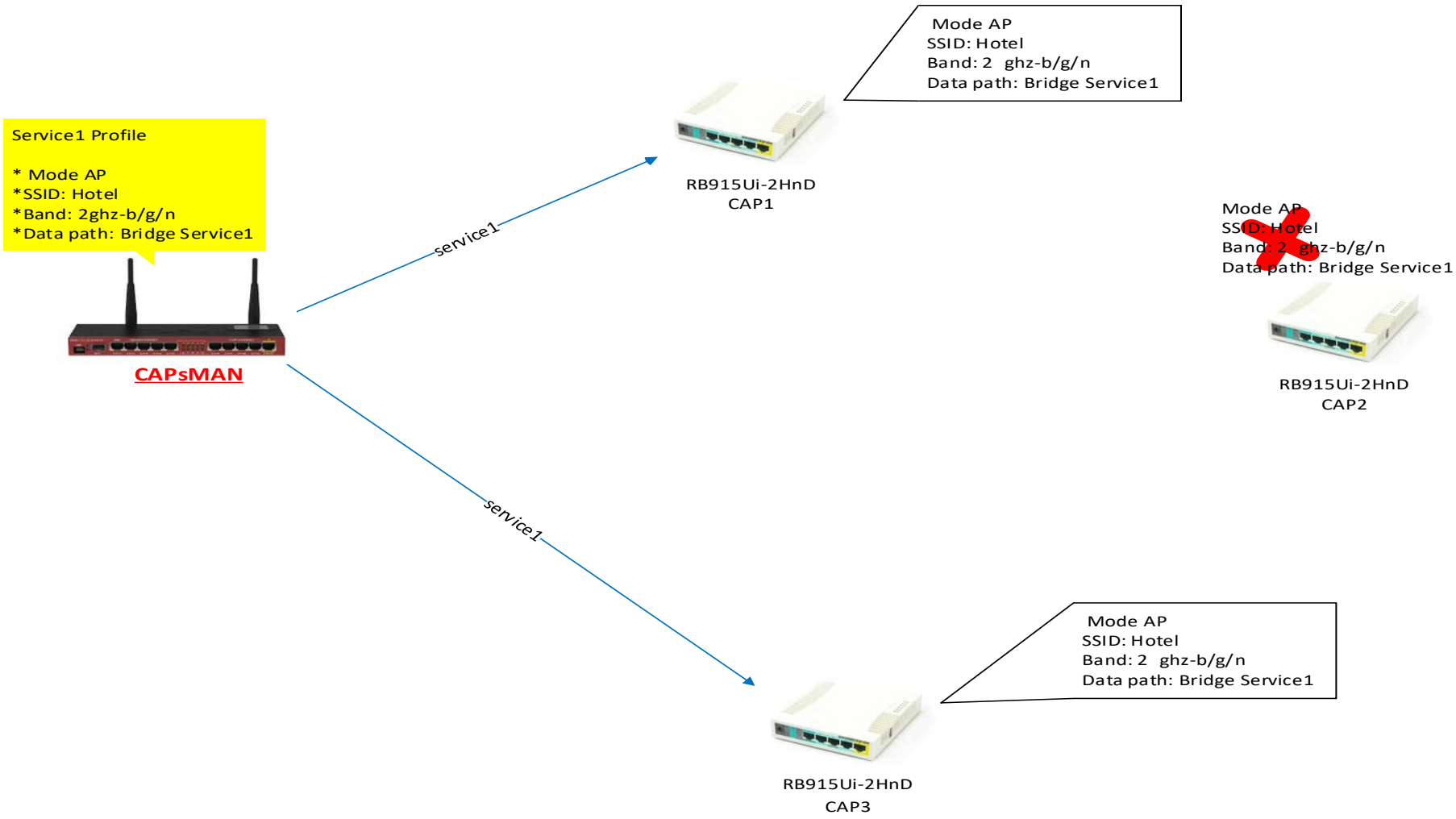
# CAPsMAN to CAP connection via IP address



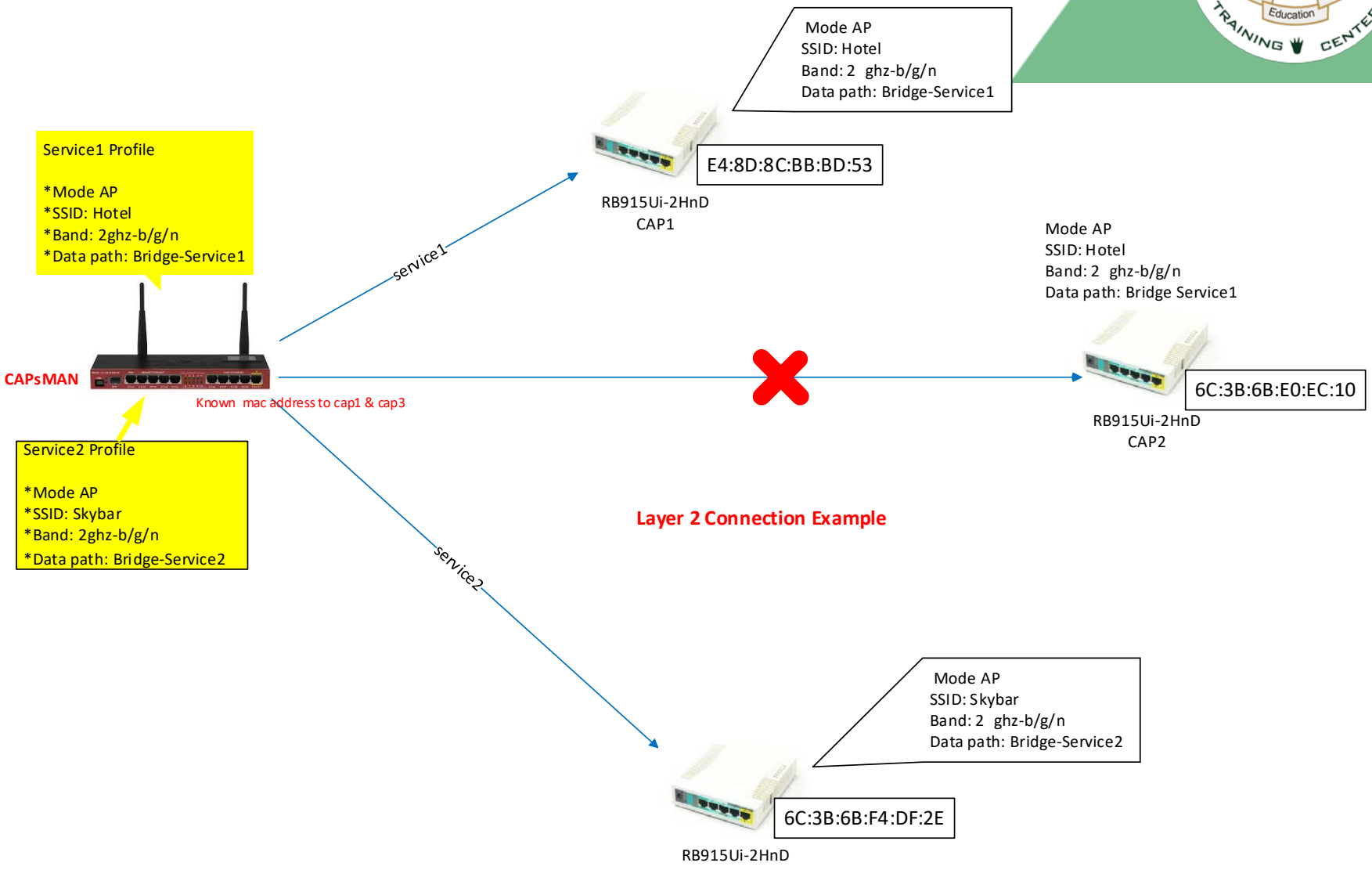

***Cap must be ping to CAPsMan Success

https://wiki.mikrotik.com/wiki/Manual:CAPsMAN

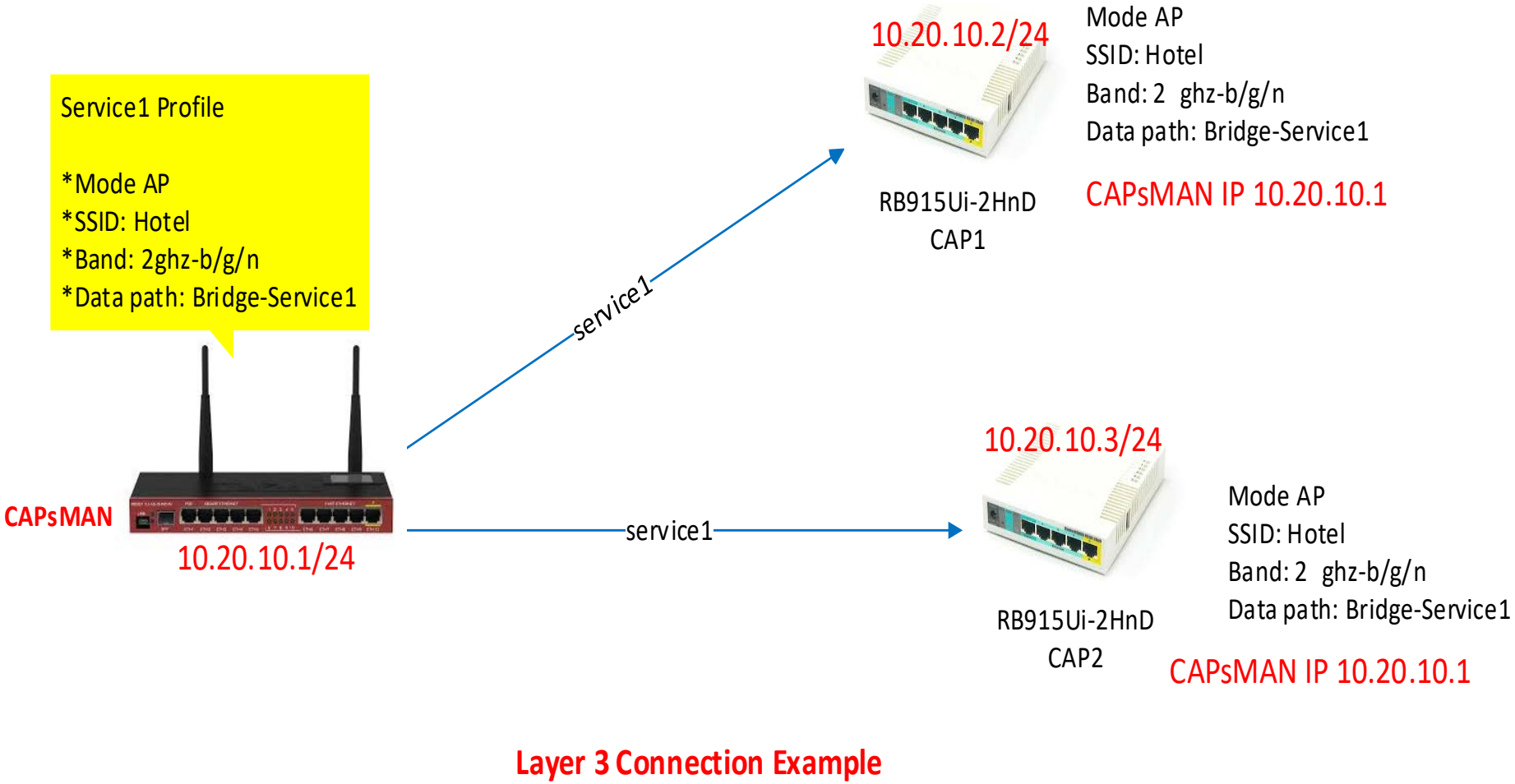
# Understanding CAPsMan and CAP



# Understanding CAPsMan and CAP (Cont.)

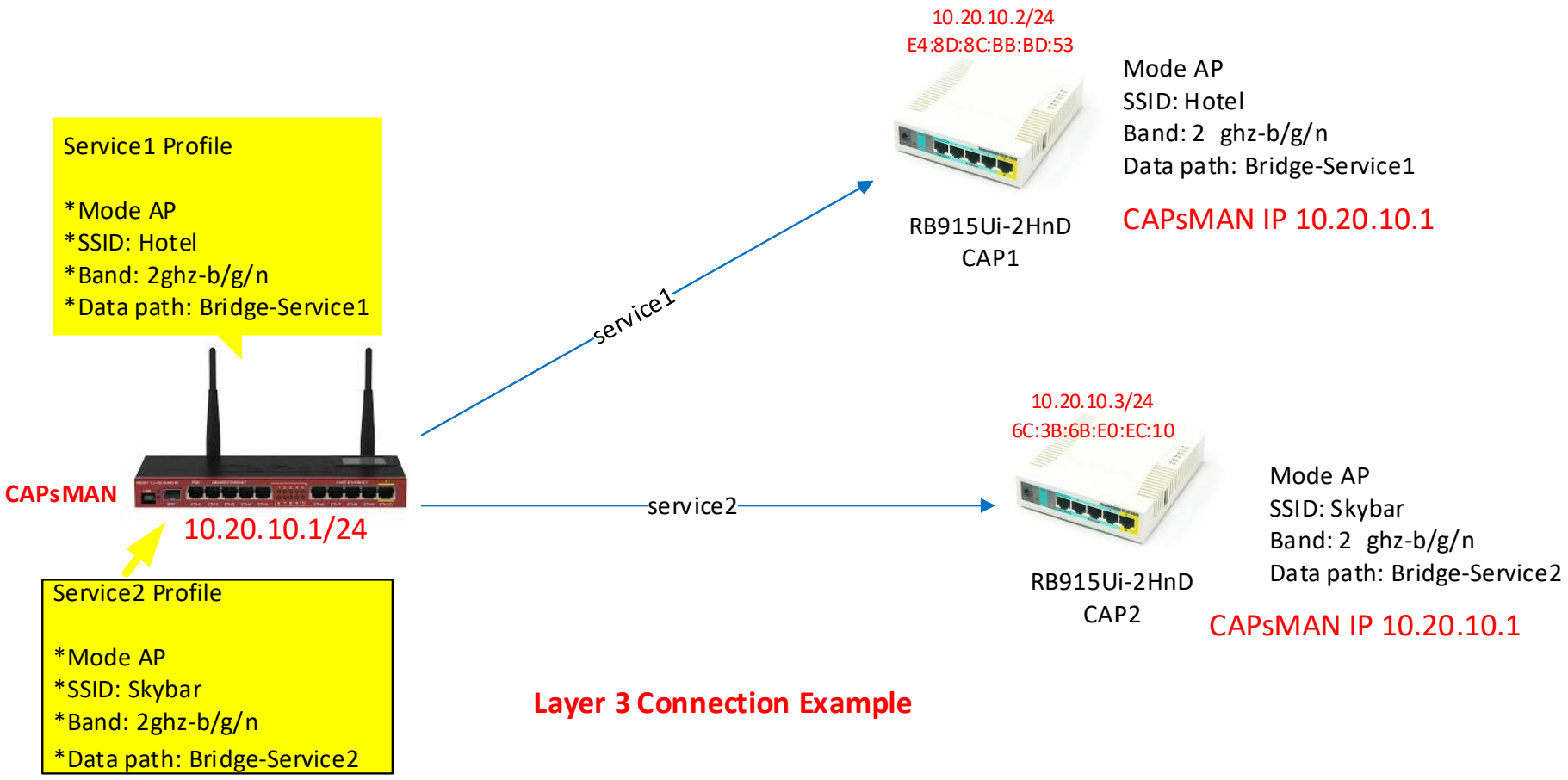


# Understanding CAPsMan and CAP (Cont.)



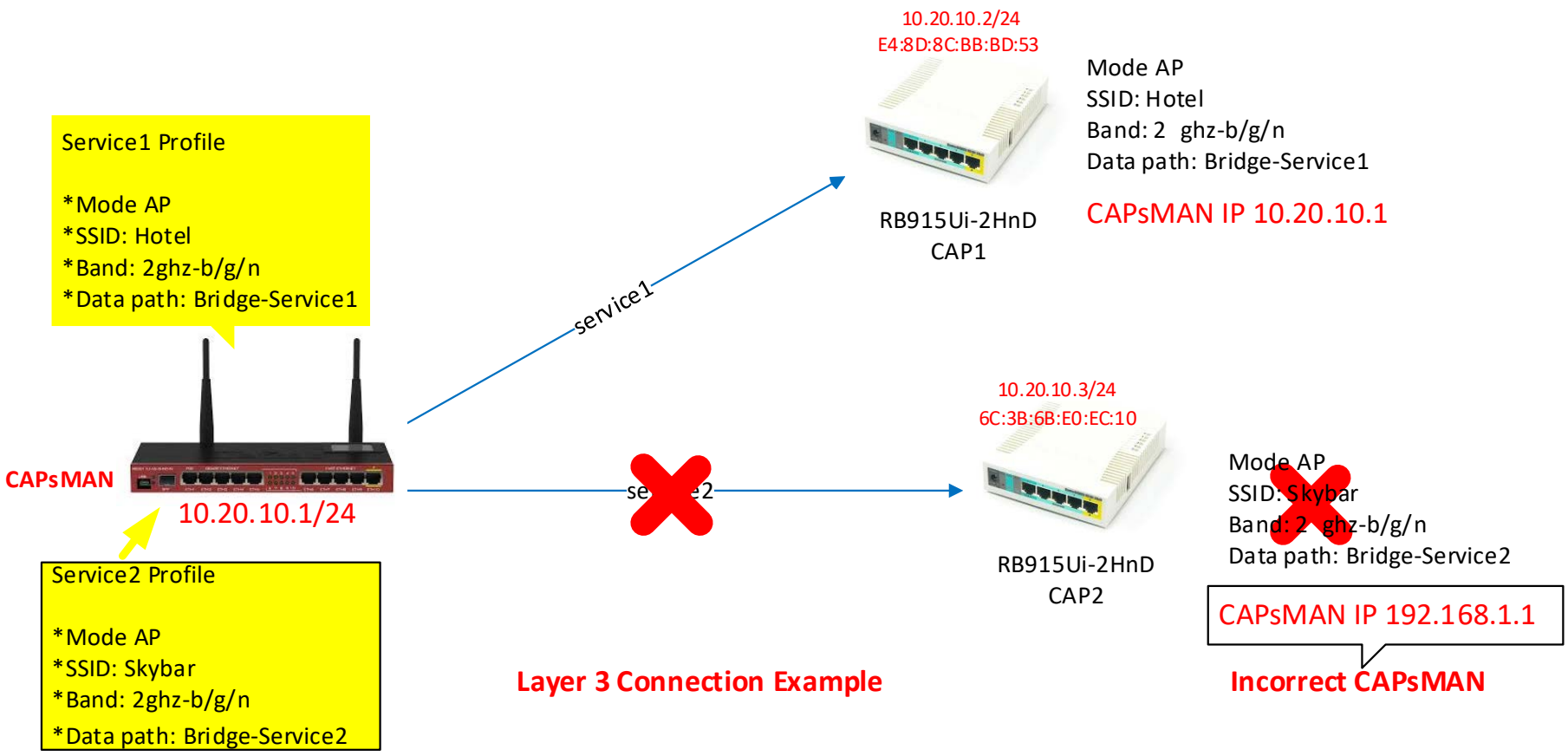

**Layer 3 Connection Example**

# Understanding CAPsMan and CAP (Cont.)

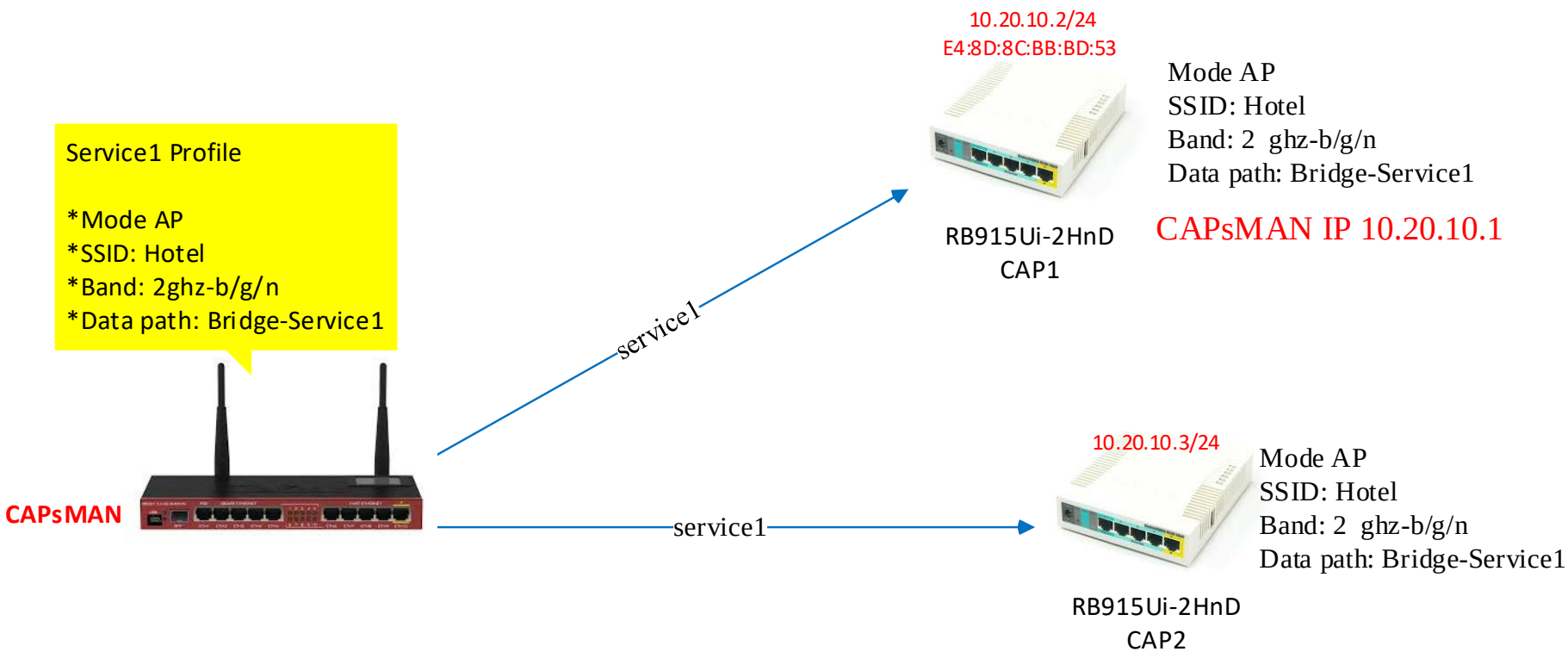



**Layer 3 Connection Example**

# Understanding CAPsMan and CAP (Cont.)

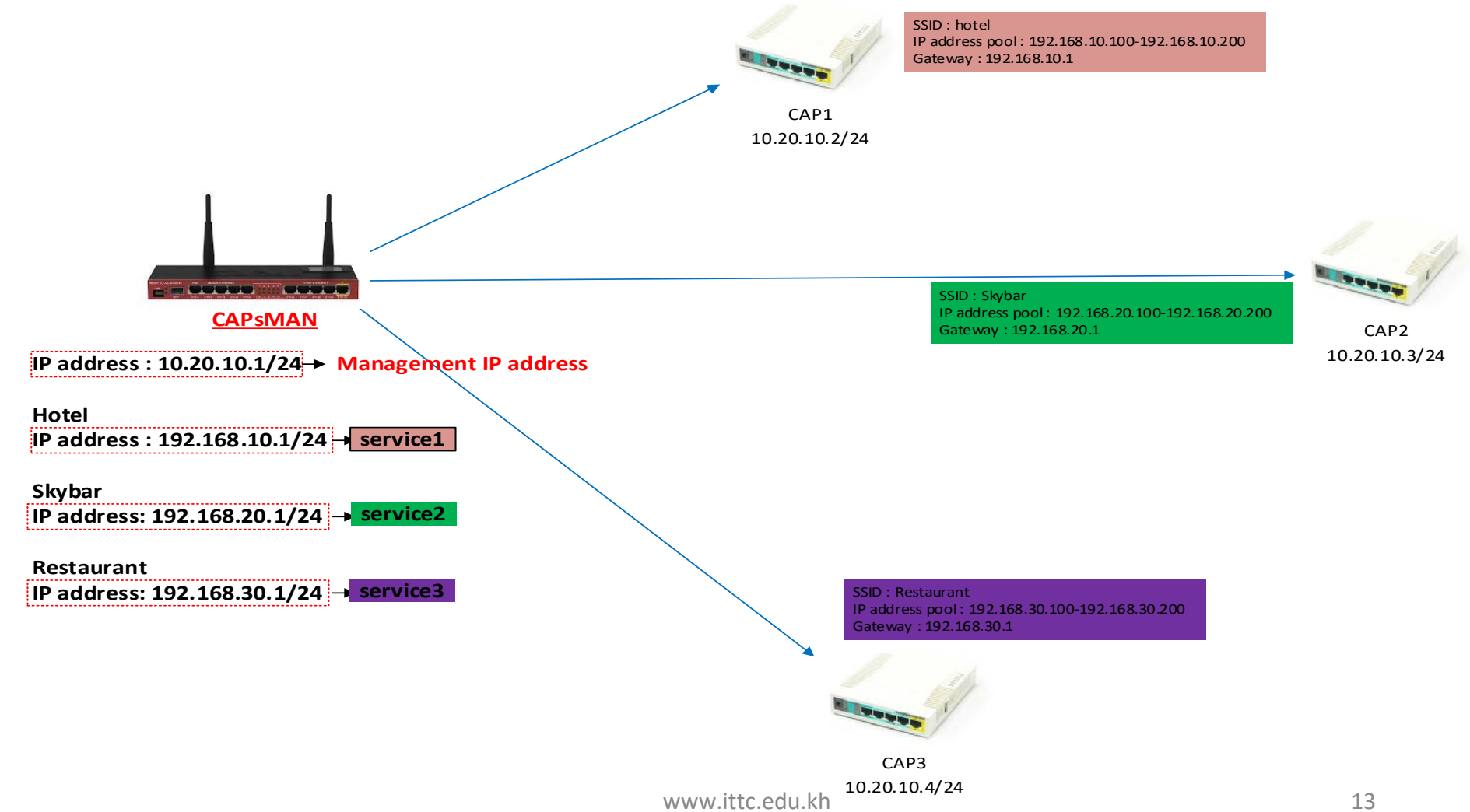


# Understanding CAPsMan and CAP (Cont.)

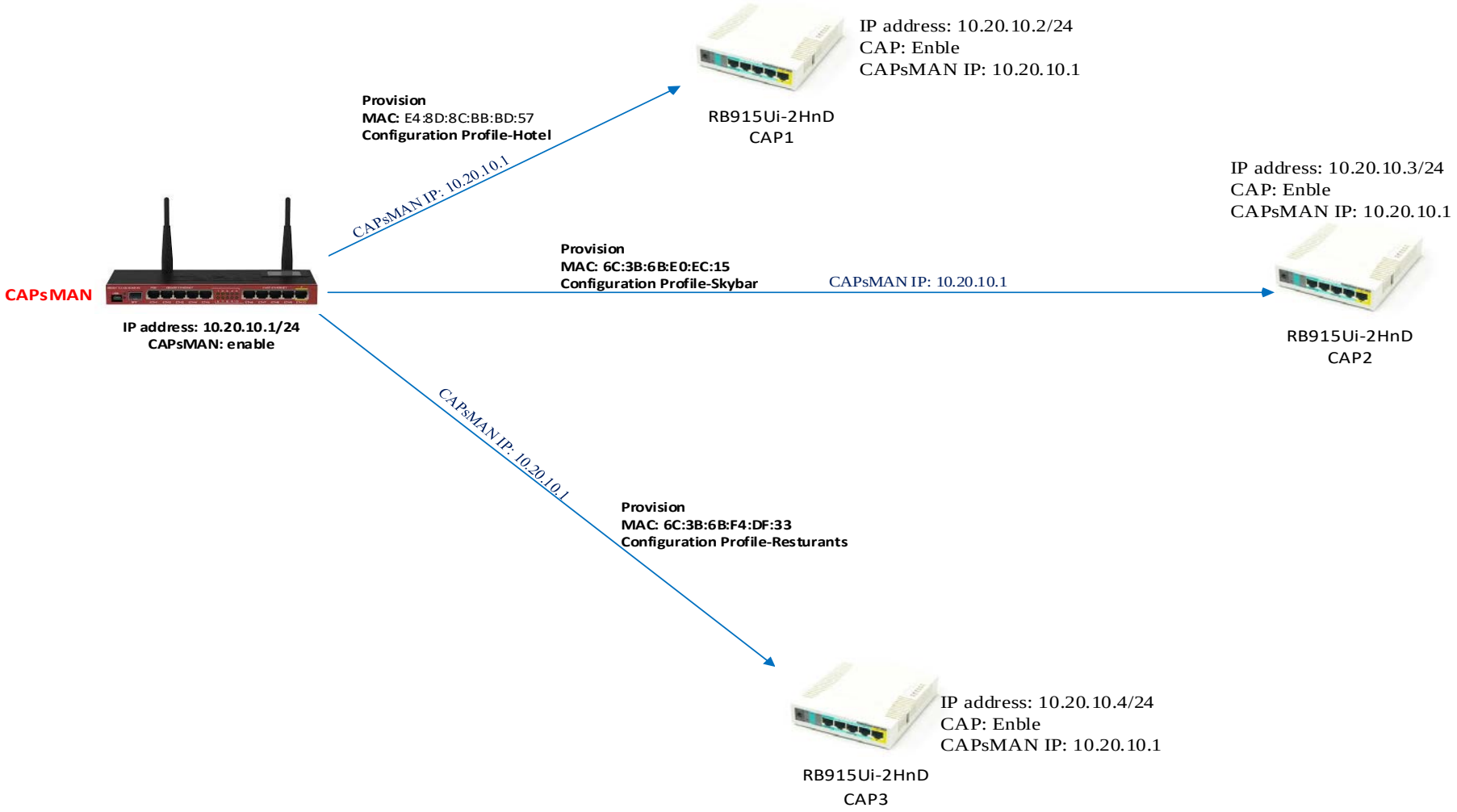



**Hybridge Connection Example**

# CAPsMAN Physical and Logical Topology



# Services via IP management diagram



# Services via IP management diagram (Cont.)

CAPsMAN

Provision
MAC: E4:8D:8C:BB:BD:53
Configuration Profile-Hotel

Provision
MAC: 6C:3B:6B:E0:EC:10
Configuration Profile-Skybar

Provision
MAC: 6C:3B:6B:F4:DF:2E
Configuration Profile-Restaurants

Management
IP address: 10.20.10.1/24
CAPsMAN: Enable
- Profile-Hotel
    - Mode AP
    - Band 2hgz-b/g/n
    - SSID: Hotel
    - Data Path: Bridge-Hotel

- Profile-Skybar
    - Mode AP
    - Band 2hgz-b/g/n
    - SSID: Skybar
    - Data Path: Bridge-Skybar

- Profile-Restaurants
    - Mode AP
    - Band 2hgz-b/g/n
    - SSID: Hotel
    - Data Path: Bridge-Restaurants

Bridge Configuration

- Bridge-Hotel
    - IP address 192.168.10.1/24
    - DHCP Server : Enable
    - IP Pool: 192.168.10.100-200

- Bridge-Skybar
    - IP address 192.168.20.1/24
    - DHCP Server : Enable
    - IP Pool: 192.168.20.100-200

- Bridge-Restaurants
    - IP address 192.168.30.1/24
    - DHCP Server : Enable
    - IP Pool: 192.168.30.100-200

# CAP configuration diagram

RB915Ui-2HnD
CAP1

**Management**
**IP address: 10.20.10.2/24**
**CAP: Enable**
**Interface: wlan1**
**CAPsMAN IP address: 10.20.10.1**

RB915Ui-2HnD
CAP2

**Management**
**IP address: 10.20.10.3/24**
**CAP: Enable**
**Interface: wlan1**
**CAPsMAN IP address: 10.20.10.1**

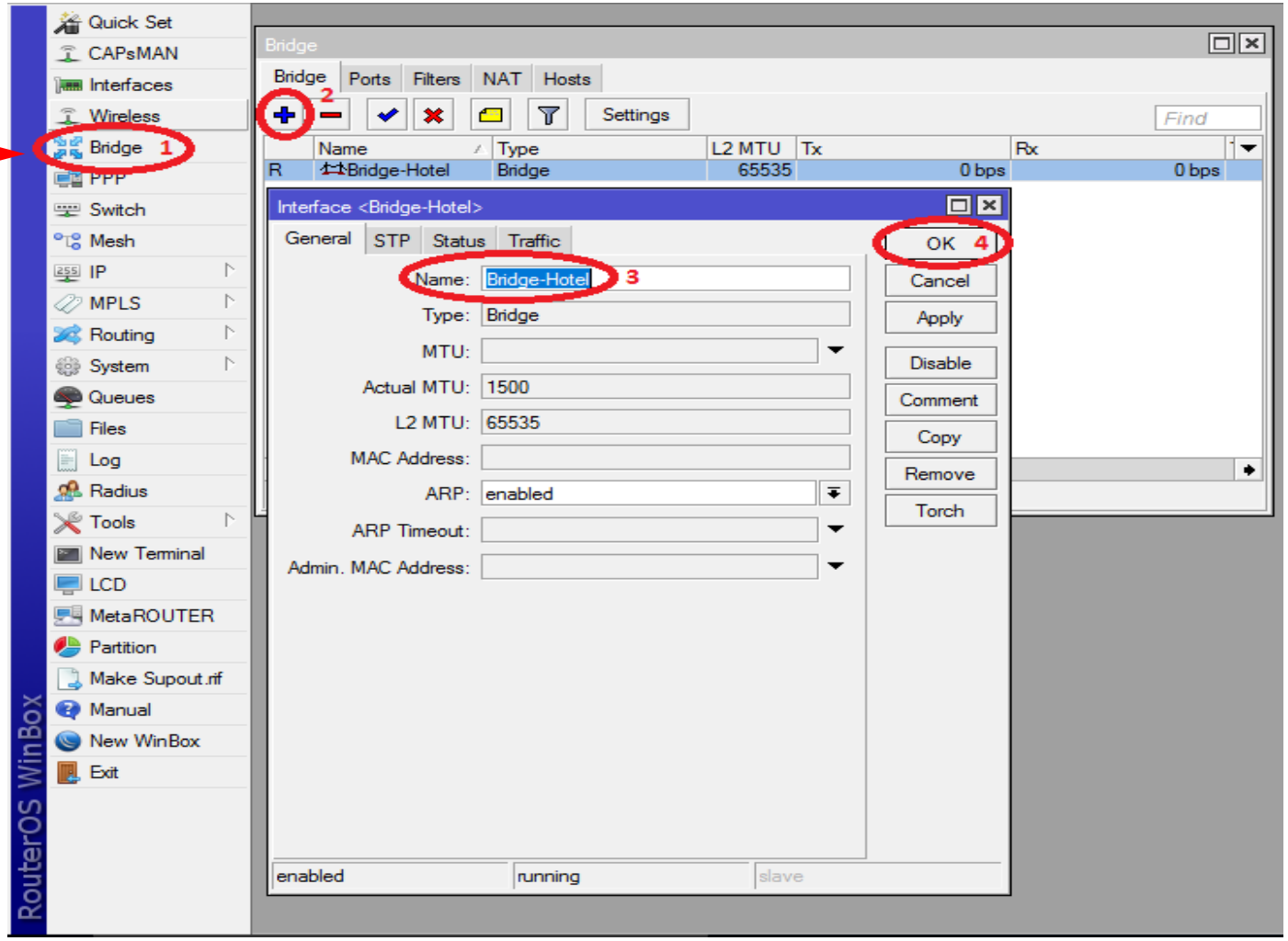
RB915Ui-2HnD
CAP3

**Management**
**IP address: 10.20.10.4/24**
**CAP: Enable**
**Interface: wlan1**
**CAPsMAN IP address: 10.20.10.1**

# CAPsMAN Configuration

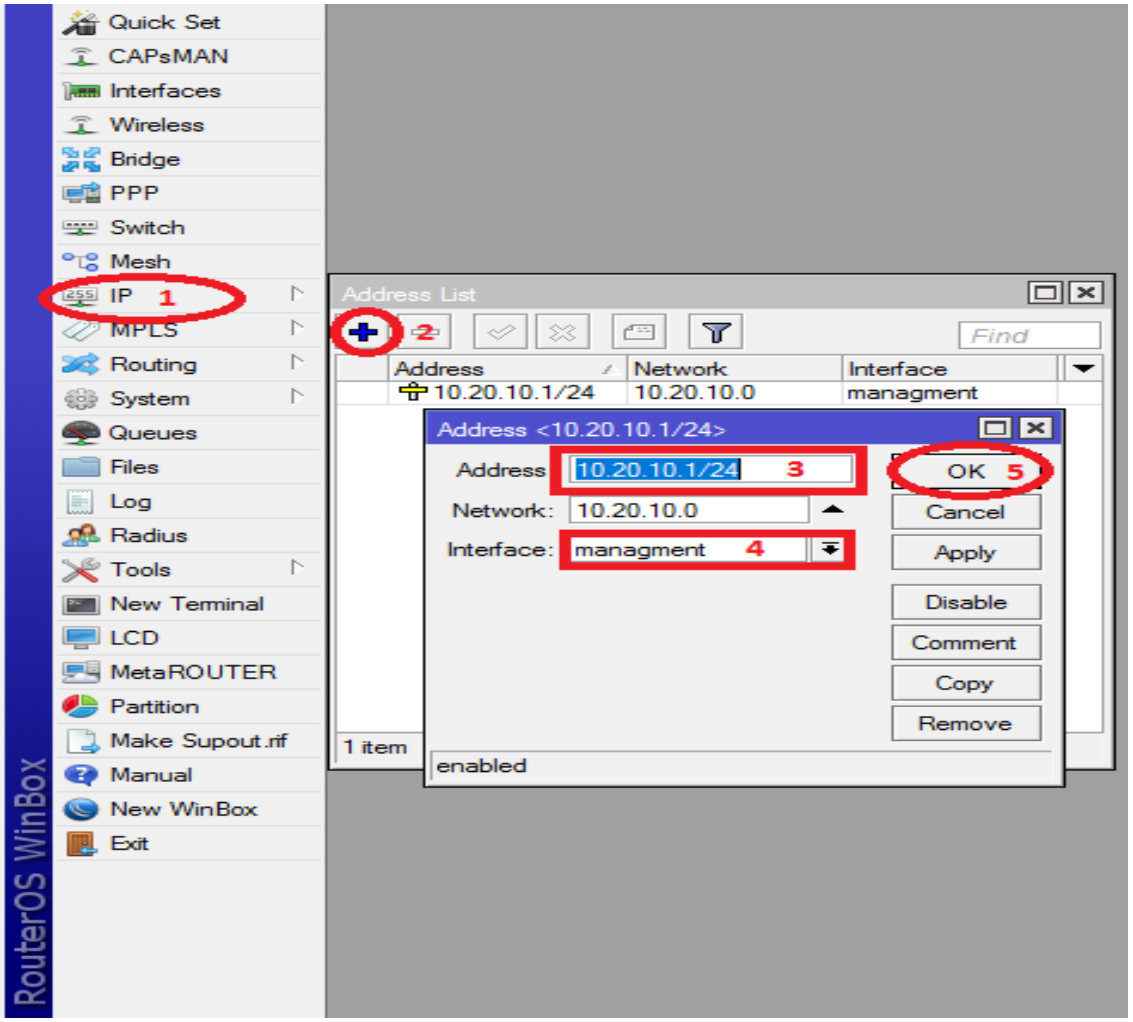
**Step 1: Add Bridge Interface**
**Set name example: Bridge-Hotel**

**Repeat 3 time**
**- Bridge-Hotel**
**- Bridge-Skybar**
**- Bridge-Restaurants**



# CAPsMAN Configuration (Cont.)

**Add Management IP address to Local Interface**



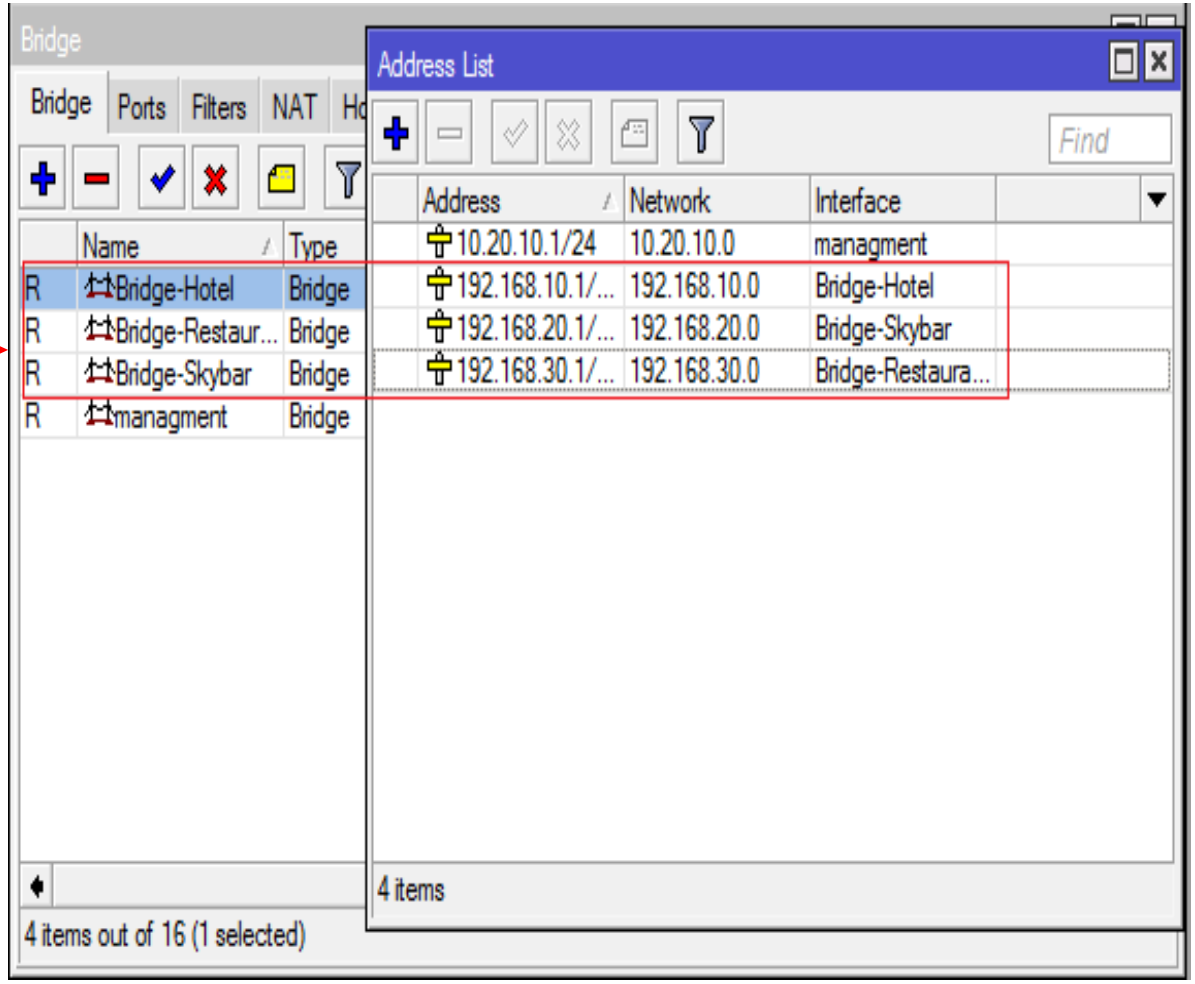
# CAPsMAN Configuration (Cont.)

Create Profile Service IP address on Bridge Interface and enable DHCP Server

Bridge-Hotel
IP Address: 192.168.10.1/24

Bridge-Skybar
IP Address: 192.168.20.1/24

Bridge-Restaurants
IP Address: 192.168.30.1/24

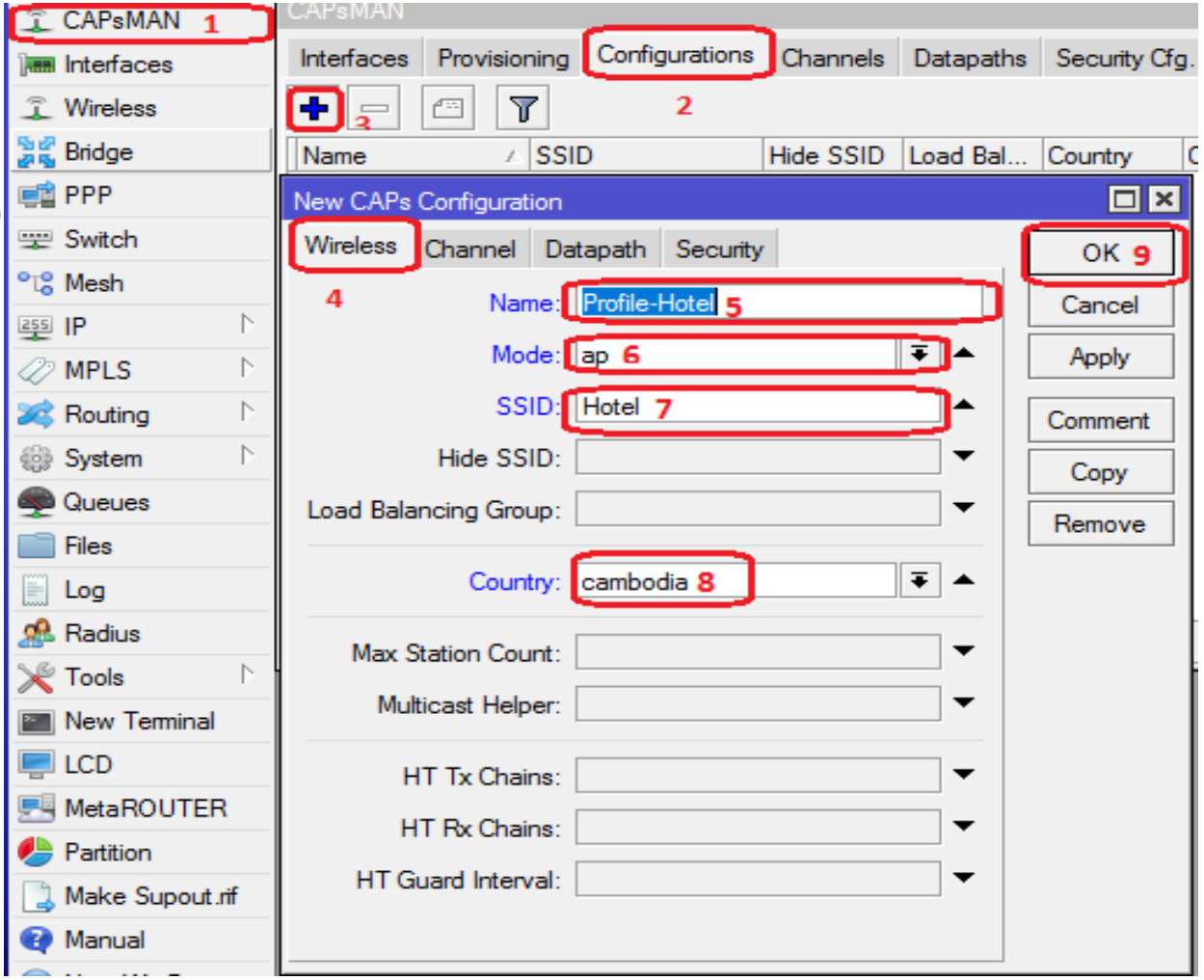


# CAPsMAN Configuration (Cont.)

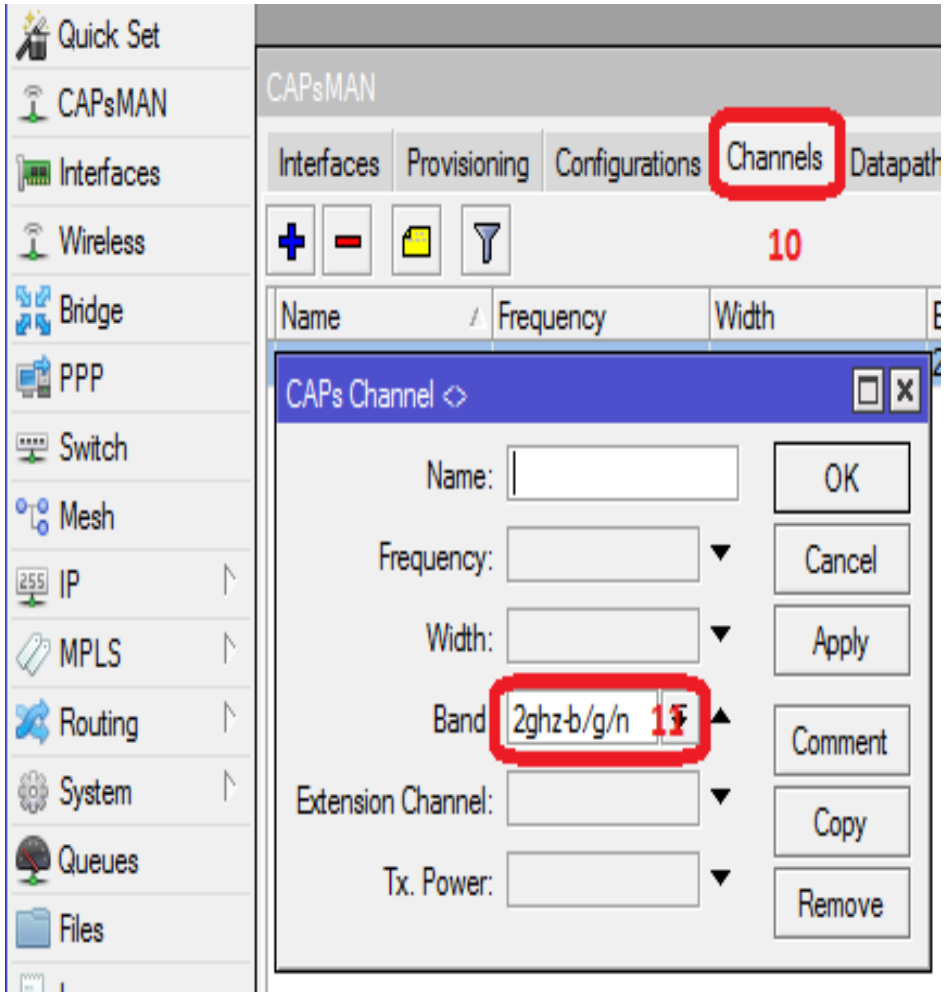
**Create CAPsMAN Profile 3 time, name (step 5) and Data Path (step 13) different Path**

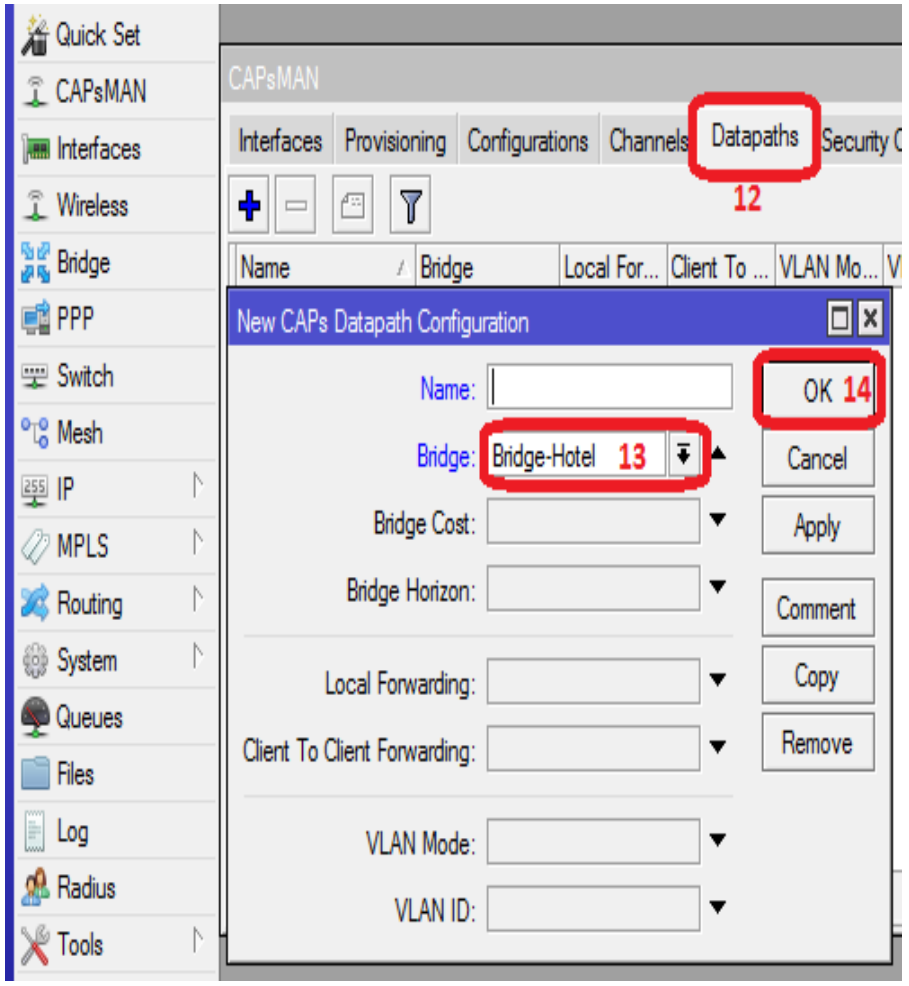
**Profile name:**

- **Profile-Hotel**
- **Profile-Skybar**
- **Profile-Restaurants**



# CAPsMAN Configuration (Cont.)

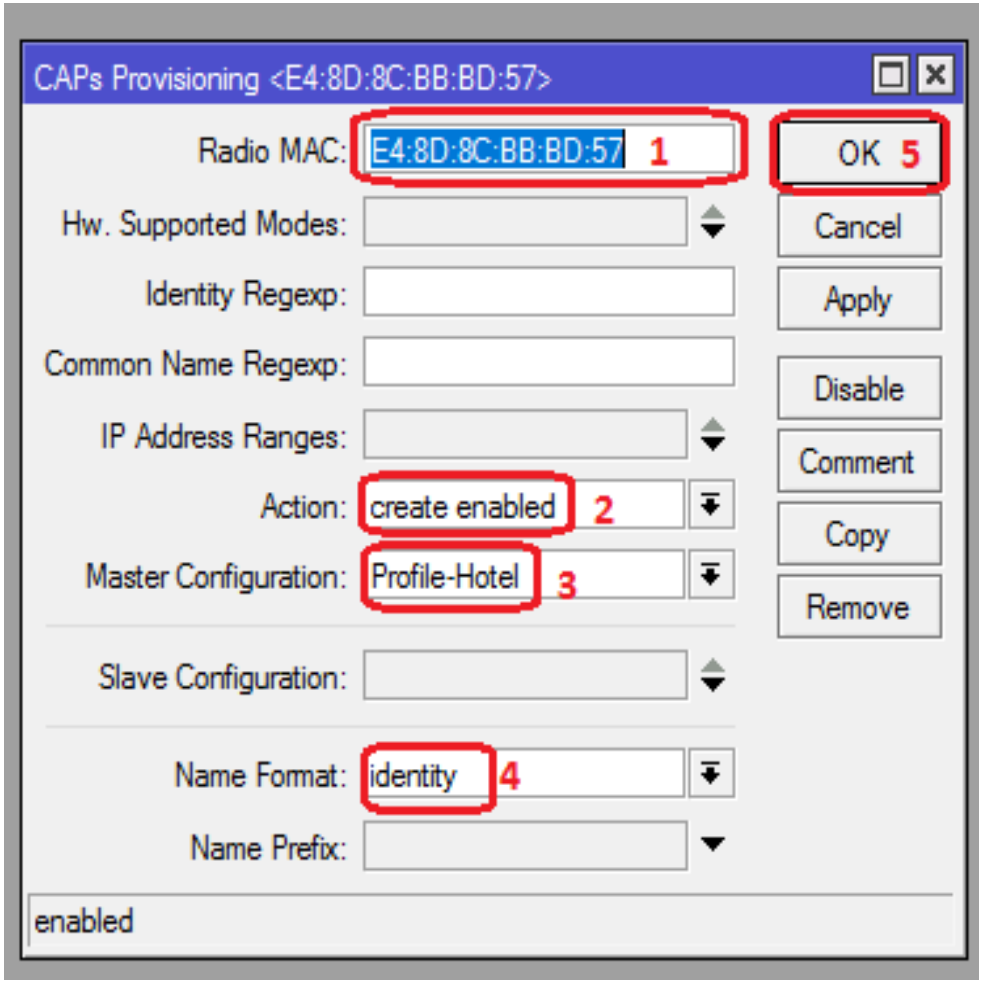


# CAPsMAN Configuration (Cont.)

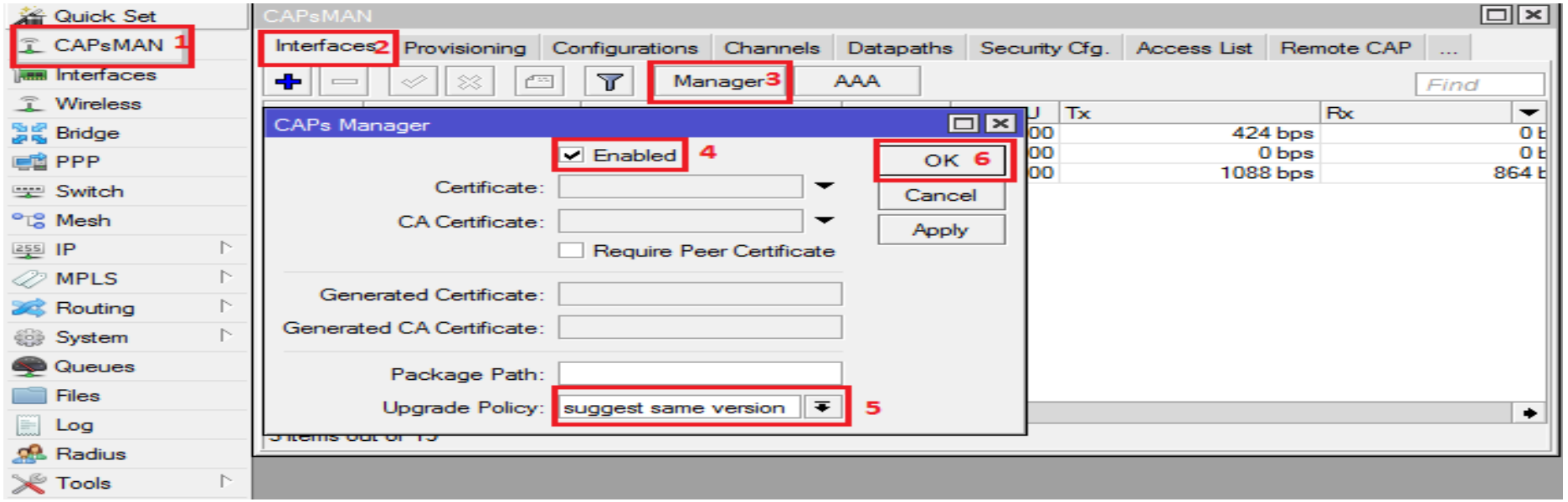
**Create CAPsMAN Provisioning for 3 Service, 3 time by different Master Configuration Profile and Radio MAC repeat profile step below:**

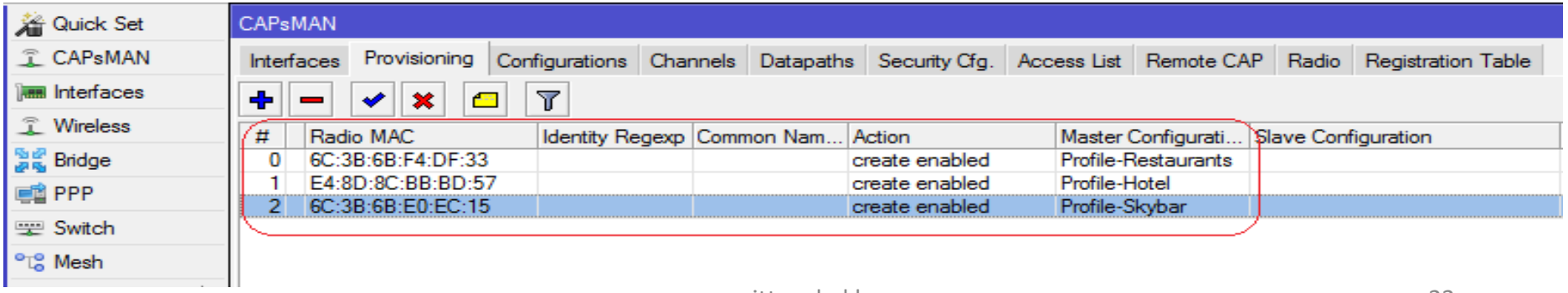
- **Profile-Hotel** E4:8D:8C:BB:BD:57
- **Profile-Skybar** 6C:3B:6B:E0:EC:15
- **Profile-Restaurants** 6C:3B:6B:F4:DF:33



# CAPsMAN Configuration (Cont.)

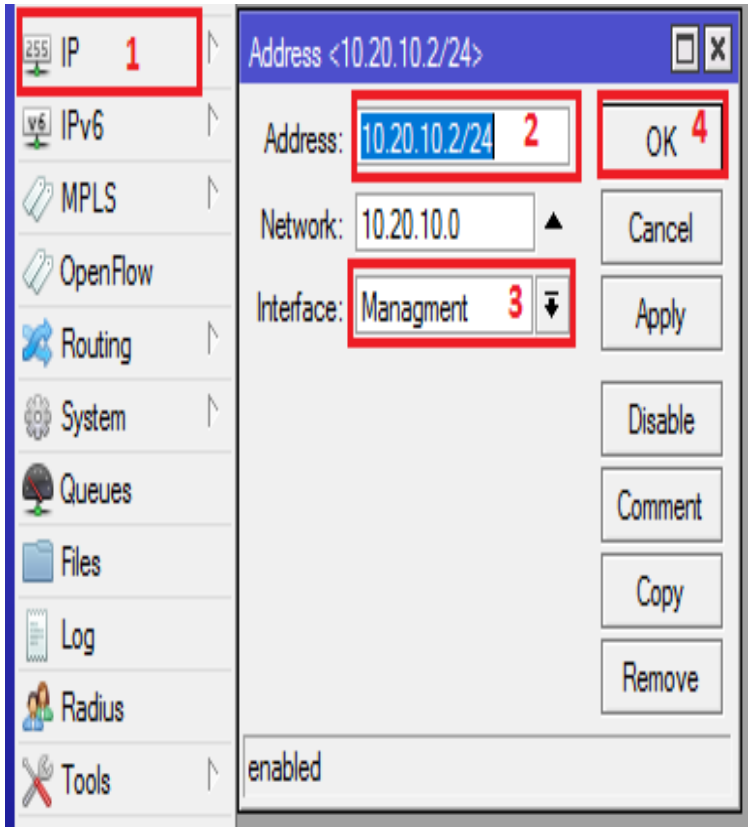
***Enable service CAPsMAN to manage CAP***



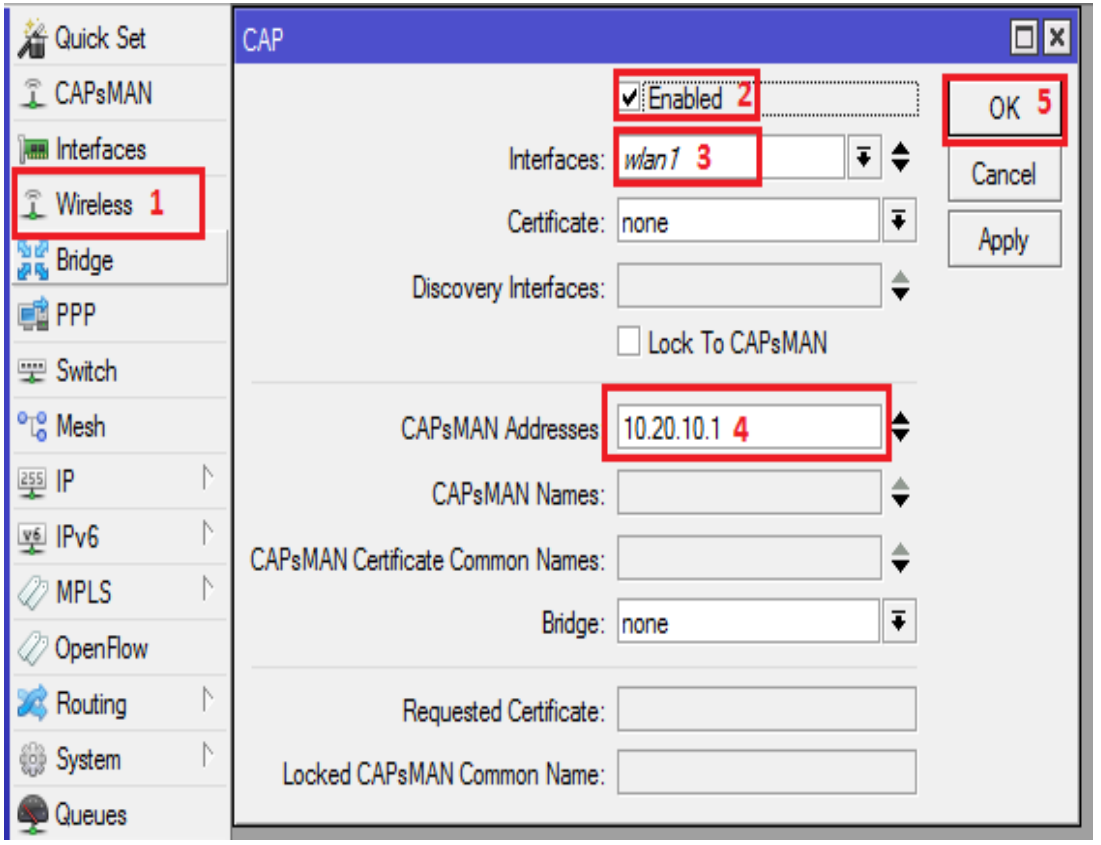



# CAP interface configuration

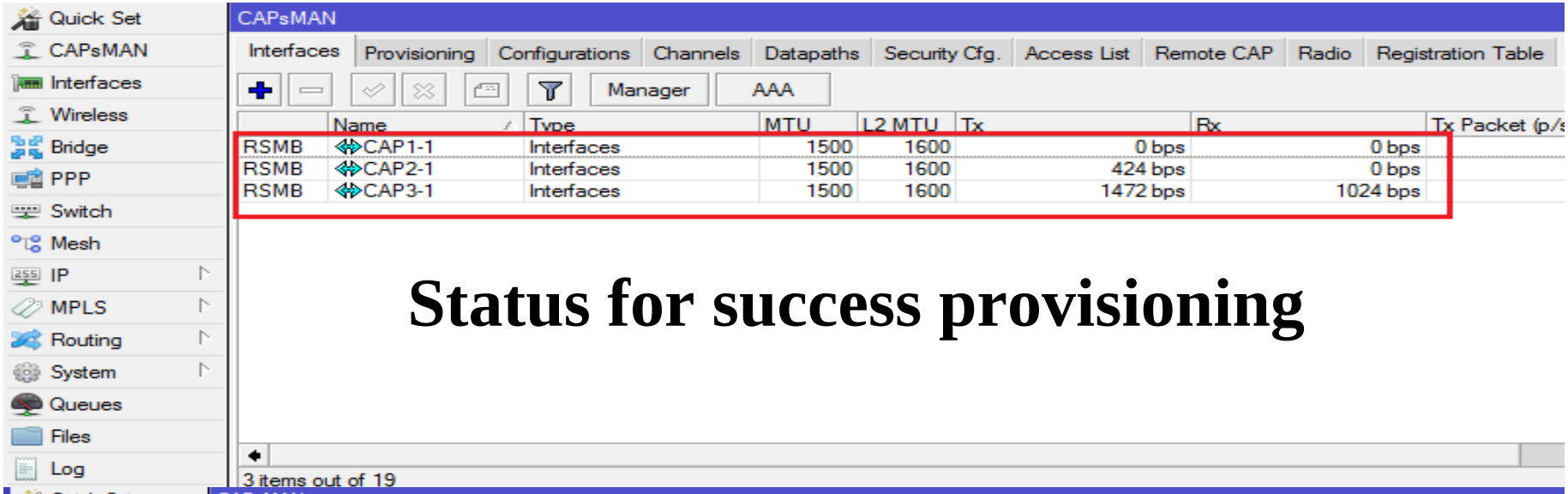
***Add IP management to CAP in local interface***



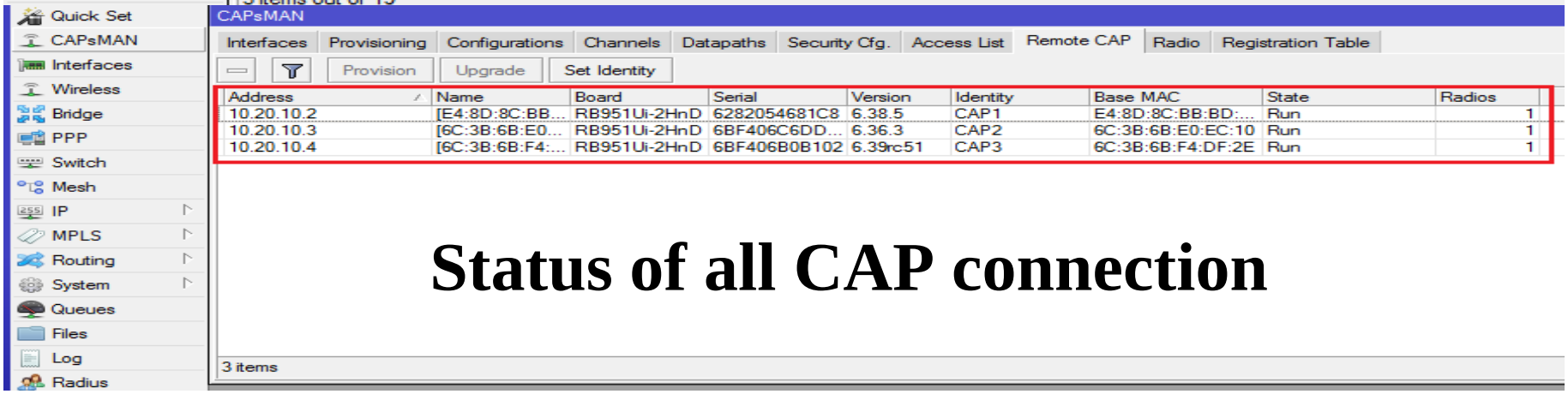

***Enable CAP service***



# Check status CAPsMAN & CAP




## Status for success provisioning




## Status of all CAP connection

# THANK YOU!

**Contact Us:**

Hotline : +855 17 680 886

+855 93 680 886

Website : www.ittc.edu.kh

Email : training@ittc.edu.kh

Social media : https://www.youtube.com/c/ittckh

: https://www.facebook.com/ITTCKH/