Assignment -3 solutions:

Write a config file so that wpa_supplicant can associate to FT Dot1x WLAN

Config file: /etc/wpa_supplicant/wpa_supplicant.conf

```
root@somes-ubuntu: /etc/wpa_supplicant
ctrl_interface=/var/run/wpa_supplicant
ctrl_interface_group=0
update_config=1

network={
    ssid="Somes02"
    proto=RSN
    key_mgmt=FT-EAP
    pairwise=CCMP
    group=CCMP
    eap=TTLS
    identity="somes"
    password="123456"
    phase2="auth=MSCHAPV2"
}
~
~
~
```

Bring up a Freeradius, wpa_supplicant in linux machine, use "eapol_test" utility in wpa_supplicant and try connecting successfully to the Freeradius. Also, please capture the radius packets that is exchanged between eapol_test and Freeradius using "tcpdump" command.

eapol_test.conf (/etc/wpa_supplicant/eapol_test.conf)

```
network{
        ssid="test-ssid"
        key_mgmt=WPA-EAP
        eap=TTLS
        idendity="testuser"
        password="password"
        phase2="auth=MSCHAPV2"
        eapol_flags=0
}
~
~
~
~
```

Freeradius clients.conf file (etc/freeradius/3.0/clients.conf)

```
#   the "ipaddr" or "ipv6addr" fields.  For com
#   format is still accepted.
#
client localhost {
        ipaddr = 127.0.0.1

        secret = testing123
        require_message_authenticator = no
        nas_type            = other         # loca
        limit {
                #
                #  Limit the number of simulta
                #
                #  The default is 16.
```

Freeradius users file: (etc/freeradius/3.0/users)

```
# See the example user "bob" above.
############################################
testuser Cleartext-Password := "password"
"users" 206L, 6635B
```