Implementasi 802.1x EAP-TLS & PEAP-MSCHAPv2 , FreeRADIUS + dialupadmin + MySQL

Hardware :

- Wireless Client Adapter (USB Senao SL-2511UB4)
- Access Point (Compex WP11B+)
- PCMCIA Samsung SWL-2100N dengan hostap daemon (sebagai Access Point)
- Laptop DellC400 (Server Autentikasi)

Software

- OS Linux Mandrake 10.0 Official dengan FreeRADIUS + dialupadmin, Apache+mod_php, MySQL-server, OpenSSL sebagai Authentikasi Server.
- OS Windows XP SP2 digunakan sebagai Supplicant (Client)
- Software Administrasi AP berbasis Web dari Compex WP11B+

Gambar Demo I

2. Wireless Access Point
WP11B+ sebagai Authenticator

KABEL UTP

1. Wireless Client Windows XP sebagai Supplicant

3. Laptop dengan freeRadius Sebagai Authentication Server

Gambar Demo 2

1. Wireless Client Windows XP sebagai Supplicant

2. Linux dengan PCMCIA Card yang berfungsi sebagai AP authenticator (hostAP dan menyediakan freeRadius sebagai Authentication Server

Tahap-tahap : Instalasi Server Autentikasi

1. Install MySQL server dan library MySQL-devel (CD Mandrake 10.0 Official)

   Nama paket RPM : - MySQL-client-4.0.18-1mdk
   - MySQL-4.0.18-1mdk
   - MySQL-common-4.0.18-1mdk
   - libmysql12-4.0.18-1mdk
   - php-mysql-4.3.4-1mdk
   - perl-Mysql-1.22_19-9mdk
   - libmysql12-devel-4.0.18-1mdk

   Pastikan paket paket diatas sudah terinstall dengan mengetik :

   rpm -qa |grep sql
   rpm -qa |grep SQL

Tahap-tahap : Instalasi Server Autentikasi

2. Install Apache + mod_php (CD Mandrake 10.0 Official)
   Nama paket RPM : - apache2-common-2.0.48-6mdk
   - apache2-modules-2.0.48-6mdk
   - apache-conf-2.0.48-2mdk
   - apache2-2.0.48-6mdk
   - apache2-mod_php-2.0.48_4.3.4-1mdk
   - php-ini-4.3.4-1mdk

   Pastikan paket paket diatas sudah terinstall dengan mengetik :
   rpm -qa |grep apache
   rpm -qa |grep php

Tahap-tahap : Instalasi Server Autentikasi

3. Install OpenSSL (CD Mandrake 10.0 Official)

Nama paket RPM :

- openssl-0.9.7c-3mdk
- libopenssl0.9.7-0.9.7c-3mdk
- libopenssl0.9.7-devel-0.9.7c-3mdk

Pastikan paket paket diatas sudah terinstall dengan mengetik :

```
rpm -qa |grep ssl
```

Tahap-tahap : Instalasi Server Autentikasi

4. Install FreeRadius (tarball)

Nama Paket tarball : - freeradius-1.0.0.tar.gz

http://www.freeradius.org

Tahap Instalasi FreeRadius

```
[root@lognight root]# mv freeradius-1.0.0.tar.gz /usr/local/
[root@lognight root]# cd /usr/local/
[root@lognight local]# tar -zxvf freeradius-1.0.0.tar.gz
[root@lognight local]# cd freeradius-1.0.0
[root@lognight freeradius-1.0.0]# ./configure --prefix=/usr/local/radius
[root@lognight freeradius-1.0.0]# make
[root@lognight freeradius-1.0.0]# make install
```

Tahap-tahap : Instalasi Server Autentikasi

Menyiapkan database radius di mysql server dengan cara :

Pastikan mySQL server aktif

```
[root@lognight freeradius-1.0.0]# /etc/init.d/mysql restart
  Stopping MySQL Server
  (pid 1638)                                                 [  OK  ]
  Starting MySQL Server                                      [  OK  ]
[root@lognight freeradius-1.0.0]# mysql -uroot -p<passwordrootsql>
  radius  < src/modules/rlm_sql/drivers/rlm_sql_mysql/db_mysql.sql
```

Untuk mempermudah gunakan MySQL admin seperti phpMyAdmin untuk membuat user khusus menangani database radius..

Misal dengan phpMyAdmin create user "radius" dengan password "radius", maka untuk menyiapkan database radius dengan cara :

```
[root@lognight freeradius-1.0.0]# mysql -uradius -pradius radius <
  src/modules/rlm_sql/drivers/rlm_sql_mysql/db_mysql.sql
```

Tahap-tahap : Instalasi Server Autentikasi

5. Instalasi DialAdmin (dari source FreeRadius diatas)

```
[root@lognight freeradius-1.0.0]# ls
acconfig.h      configure*     INSTALL      Makefile     README
aclocal.m4      configure.in   install-sh*  Make.inc     redhat/
config.cache    COPYRIGHT      libltdl/     Make.inc.in  scripts/
config.guess*   CREDITS        libtool*     man/         share/
config.log      debian/        LICENSE      mibs/        src/
config.status*  dialup_admin/  ltconfig*    missing*     suse/
config.sub*     doc/           ltmain.sh*   raddb/       todo/

[root@lognight freeradius-1.0.0]# mv dialup_admin
 /usr/local/dialup_admin
```

Tahap-tahap : Instalasi Server Autentikasi

Menyiapkan table-table database radius untuk dapat menggunakan dialupadmin

```
[root@lognight freeradius-1.0.0]# cd /usr/local/dialup_admin/
[root@lognight dialup_admin]# ls
bin/  Changelog  conf/  doc/  htdocs/  html/  lib/  README  sql/
[root@lognight dialup_admin]# mysql -uradius -pradius radius < sql/badusers.sql
[root@lognight dialup_admin]# mysql -uradius -pradius radius < sql/mtotacct.sql
[root@lognight dialup_admin]# mysql -uradius -pradius radius < sql/totacct.sql
[root@lognight dialup_admin]# mysql -uradius -pradius radius < sql/userinfo.sql
```

Tahap-tahap : Instalasi Server Autentikasi

6. Setting konfigurasi FreeRadius untuk Implementasi EAP-TLS dan PEAP-MSCHAPv2 dengan MySQL sebagai database

- cd /usr/local/radius/etc/raddb/
- vi radiusd.conf

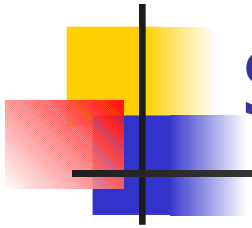
user = nobody

group = nobody

port = 1812

radiusd.conf

```
authorize {
        preprocess
        auth_log
        chap
        mschap
        suffix
        sql
        eap
}

accounting {
        detail
        sql
        radutmp
}
```

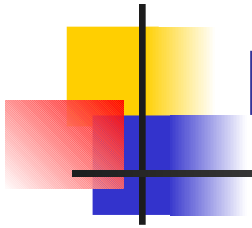


sql.conf

```
sql {
        driver = "rlm_sql_mysql"
        server = "localhost"
        port = "3306"
        login = "radius"
        password = "radius"
        radius_db = "radius"
        acct_table1 = "radacct"
        acct_table2 = "radacct"
        postauth_table = "radpostauth"
        authcheck_table = "radcheck"
        authreply_table = "radreply"
        groupcheck_table = "radgroupcheck"
        groupreply_table = "radgroupreply"
        usergroup_table = "usergroup"
        sql_user_name = "%{User-Name}“
       ... dst ...
```

clients.conf

```
client 127.0.0.1 {
        secret          = rahasia
       shortname       = DellC400
        nastype     = other     # localhost isn't usually a NAS...
}

client 172.20.2.62 {
        secret          = 1234rahas14
        shortname       = cisco
        nastype         = cisco
}
client 172.20.2.0/26 {
        secret          = rahasia
       shortname       = compex
       nastype                 = other
}
client 172.16.1.0/24 {
        secret          = rahasia
        shortname       = DellC400
        nastype         = other
}
```



naslist

```
# NAS Name             Short Name      Type
#---------------       ----------      ----
localhost              local           portslave
172.20.2.59            compex          other
127.0.0.1              local           portslave
lognight.te.ugm.ac.id  DellC400        other
172.20.2.62            cisco           cisco
```

eap.conf (untuk EAP-TLS)

```
eap {
        default_eap_type = tls
        timer_expire     = 60
        ignore_unknown_eap_types = no

       tls {
              private_key_password = rahasiaeuy
              private_key_file = ${raddbdir}/certs/cert-srv.pem
              certificate_file = ${raddbdir}/certs/cert-srv.pem
              #  Trusted Root CA list
              CA_file = ${raddbdir}/certs/demoCA/cacert.pem
              dh_file = ${raddbdir}/certs/dh
              random_file = ${raddbdir}/certs/random
       }
   }
```

eap.conf (untuk PEAP-MSCHAPv2)

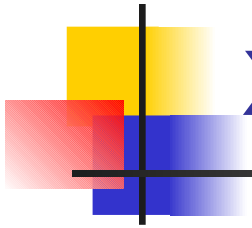
```
eap {
        default_eap_type = peap
        timer_expire     = 60
        ignore_unknown_eap_types = no

        tls {
                private_key_password = rahasiaeuy
                private_key_file = ${raddbdir}/certs/cert-srv.pem
                certificate_file = ${raddbdir}/certs/cert-srv.pem
                #  Trusted Root CA list
                CA_file = ${raddbdir}/certs/demoCA/cacert.pem
                dh_file = ${raddbdir}/certs/dh
                random_file = ${raddbdir}/certs/random
        }

        peap {
                default_eap_type = mschapv2
        }
    }
```

Membuat Sertifikat

- FreeRADIUS menyediakan script CA.all (Interactive Script) dan CA.cert (Non-Interactive Script)
- cp /path/to/freeradius-1.0.0/scripts/CA.cert /usr/local/radius/etc/raadb/cert/
- cd /usr/local/radius/etc/raddb/certs/
- vi CA.certs

CA.certs

```
COUNTRY="ID"
PROVINCE="D.I.Yogyakarta"
CITY="Yogyakarta"
ORGANIZATION="Gadjah Mada University"
ORG_UNIT="Teknik.Elektro.UGM"
PASSWORD="rahasia"

COMMON_NAME_CLIENT="KPLI-Jogja"
EMAIL_CLIENT="jogja-linux@yahoogroups.com"
PASSWORD_CLIENT=$PASSWORD

COMMON_NAME_SERVER="nightlogin"
EMAIL_SERVER="nightlogin@gmail.com"
PASSWORD_SERVER=$PASSWORD

COMMON_NAME_ROOT="Teknik Elektro UGM"
EMAIL_ROOT="josh@ugm.ac.id"
PASSWORD_ROOT=$PASSWORD
```



xpextensions

```
[root@lognight certs]# vi xpextensions
[ xpclient_ext]
extendedKeyUsage = 1.3.6.1.5.5.7.3.2.2.2
[ xpserver_ext ]
extendedKeyUsage = 1.3.6.1.5.5.7.3.1.2.1
```

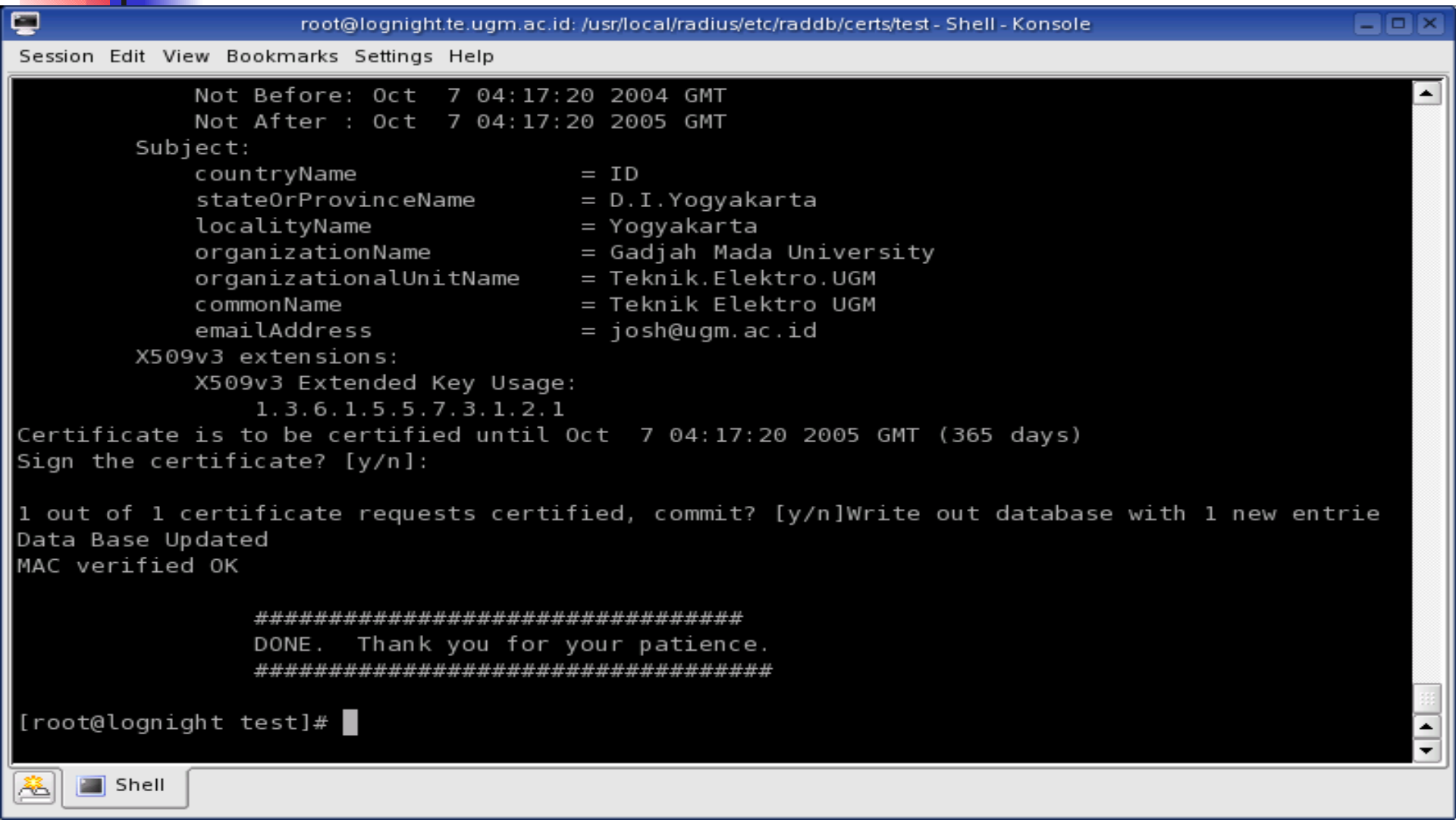
Create Certs

- sh CA.certs or ./CA.certs

```
####################
create private key
name : name-root
CA.pl -newcert
####################

Generating a 1024 bit RSA private key
.....++++++ .....++++++
```

.... dst

Create Certs



Hasil Sertifikat

```
[root@lognight certs]# ls
CA.certs*     cert-clt.p12  cert-srv.der  cert-srv.pem  newcert.pem  root.der
    root.pem
cert-clt.der  cert-clt.pem  cert-srv.p12  demoCA/       newreq.pem   root.p12
    xpextensions
[root@lognight certs]#
```

Siap di gunakan untuk Radius Server dan Client/Supplicant

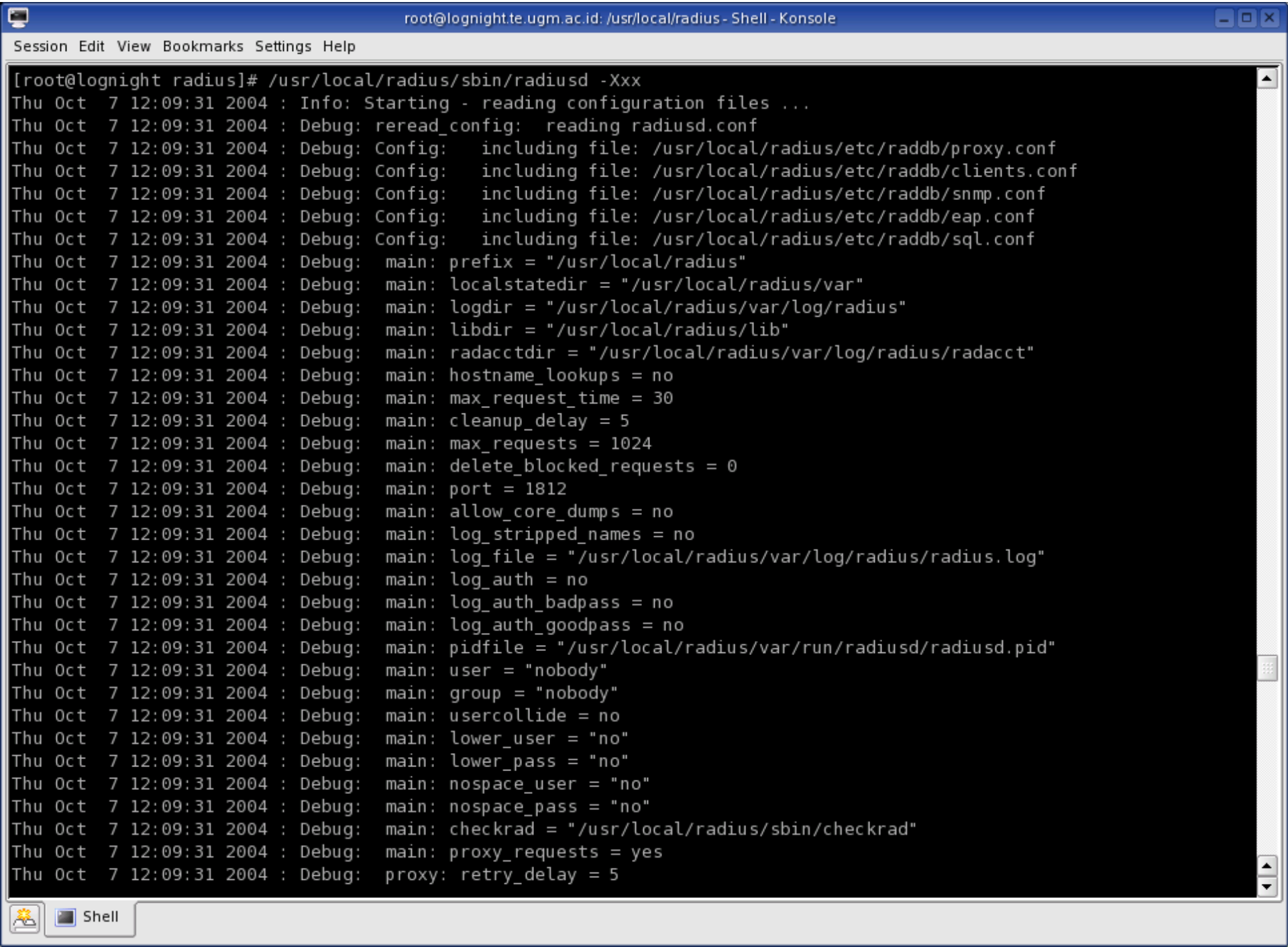
Mengaktifkan Radiusd

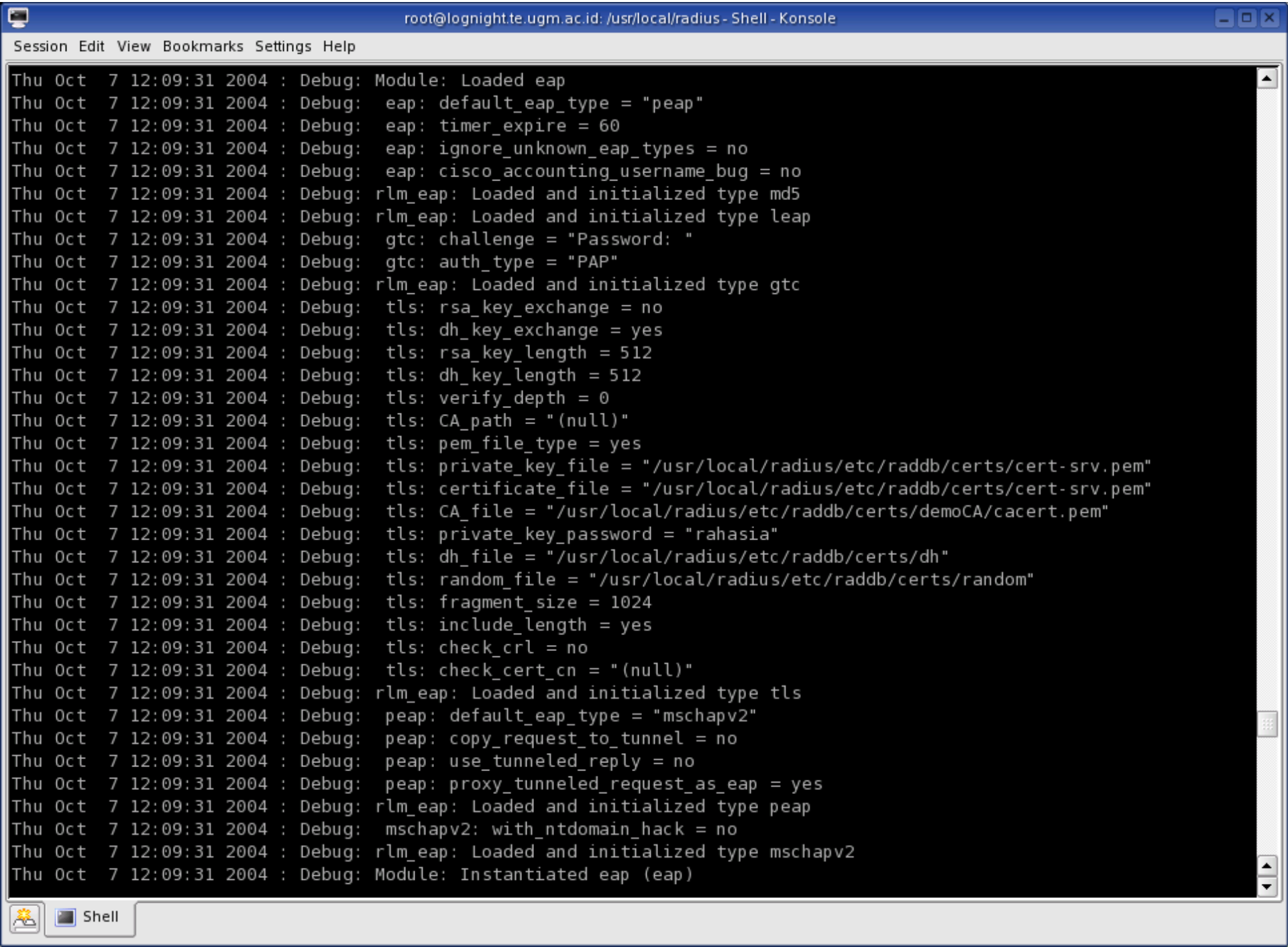
Mode debugging

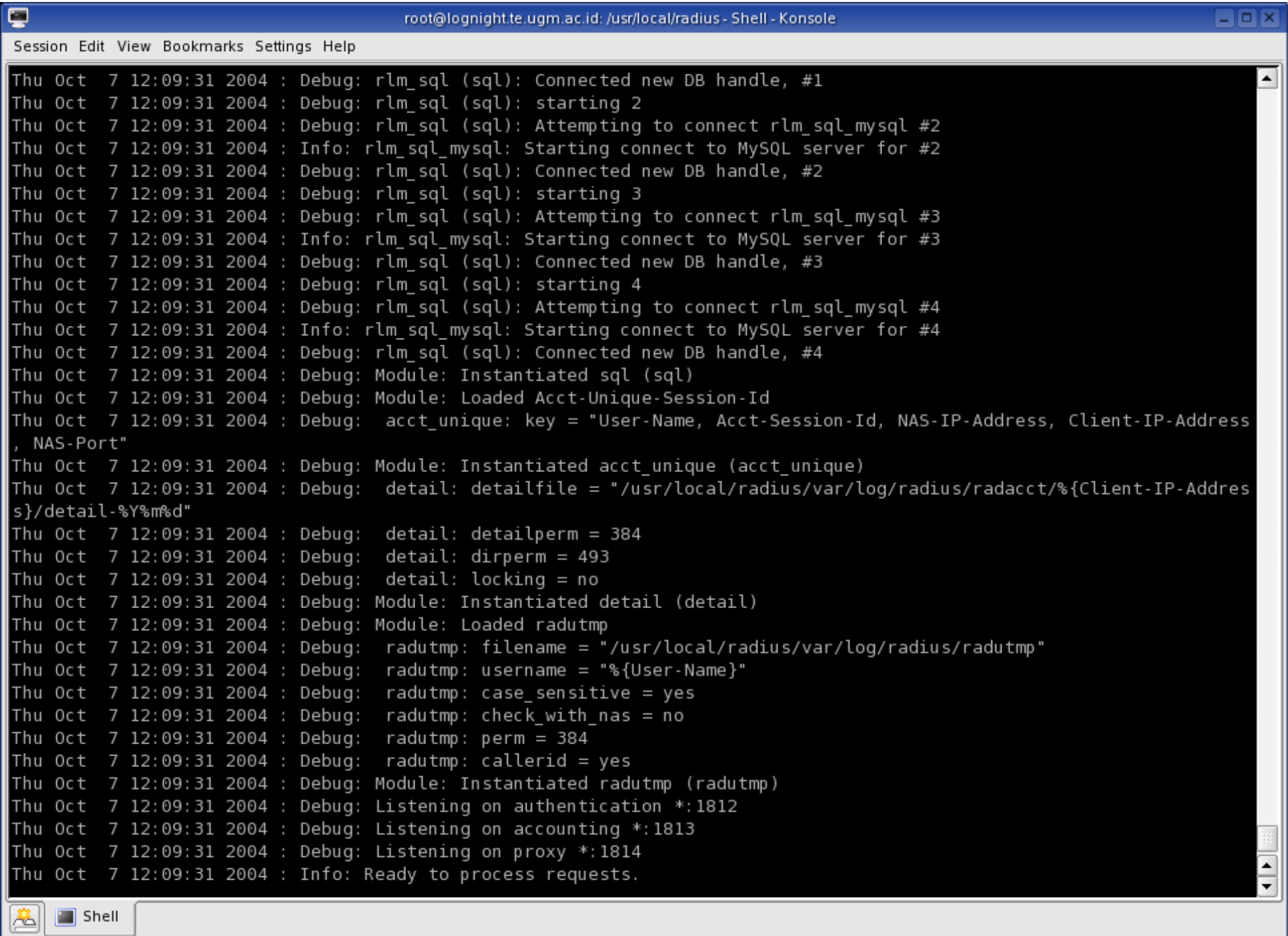
#/usr/local/radius/sbin/radiusd –Xxx

Mode Background

#/usr/local/radius/sbin/radiusd


root@lognight.te.ugm.ac.id: /usr/local/radius - Shell - Konsole
Session Edit View Bookmarks Settings Help
[root@lognight radius]# /usr/local/radius/sbin/radiusd -Xxx
Thu Oct 7 12:09:31 2004 : Info: Starting - reading configuration files ...
Thu Oct 7 12:09:31 2004 : Debug: reread_config: reading radiusd.conf
Thu Oct 7 12:09:31 2004 : Debug: Config: including file: /usr/local/radius/etc/raddb/proxy.conf
Thu Oct 7 12:09:31 2004 : Debug: Config: including file: /usr/local/radius/etc/raddb/clients.conf
Thu Oct 7 12:09:31 2004 : Debug: Config: including file: /usr/local/radius/etc/raddb/snmp.conf
Thu Oct 7 12:09:31 2004 : Debug: Config: including file: /usr/local/radius/etc/raddb/eap.conf
Thu Oct 7 12:09:31 2004 : Debug: Config: including file: /usr/local/radius/etc/raddb/sql.conf
Thu Oct 7 12:09:31 2004 : Debug: main: prefix = "/usr/local/radius"
Thu Oct 7 12:09:31 2004 : Debug: main: localstatedir = "/usr/local/radius/var"
Thu Oct 7 12:09:31 2004 : Debug: main: logdir = "/usr/local/radius/var/log/radius"
Thu Oct 7 12:09:31 2004 : Debug: main: libdir = "/usr/local/radius/lib"
Thu Oct 7 12:09:31 2004 : Debug: main: radacctdir = "/usr/local/radius/var/log/radius/radacct"
Thu Oct 7 12:09:31 2004 : Debug: main: hostname_lookups = no
Thu Oct 7 12:09:31 2004 : Debug: main: max_request_time = 30
Thu Oct 7 12:09:31 2004 : Debug: main: cleanup_delay = 5
Thu Oct 7 12:09:31 2004 : Debug: main: max_requests = 1024
Thu Oct 7 12:09:31 2004 : Debug: main: delete_blocked_requests = 0
Thu Oct 7 12:09:31 2004 : Debug: main: port = 1812
Thu Oct 7 12:09:31 2004 : Debug: main: allow_core_dumps = no
Thu Oct 7 12:09:31 2004 : Debug: main: log_stripped_names = no
Thu Oct 7 12:09:31 2004 : Debug: main: log_file = "/usr/local/radius/var/log/radius/radius.log"
Thu Oct 7 12:09:31 2004 : Debug: main: log_auth = no
Thu Oct 7 12:09:31 2004 : Debug: main: log_auth_badpass = no
Thu Oct 7 12:09:31 2004 : Debug: main: log_auth_goodpass = no
Thu Oct 7 12:09:31 2004 : Debug: main: pidfile = "/usr/local/radius/var/run/radiusd/radiusd.pid"
Thu Oct 7 12:09:31 2004 : Debug: main: user = "nobody"
Thu Oct 7 12:09:31 2004 : Debug: main: group = "nobody"
Thu Oct 7 12:09:31 2004 : Debug: main: usercollide = no
Thu Oct 7 12:09:31 2004 : Debug: main: lower_user = "no"
Thu Oct 7 12:09:31 2004 : Debug: main: lower_pass = "no"
Thu Oct 7 12:09:31 2004 : Debug: main: nospace_user = "no"
Thu Oct 7 12:09:31 2004 : Debug: main: nospace_pass = "no"
Thu Oct 7 12:09:31 2004 : Debug: main: checkrad = "/usr/local/radius/sbin/checkrad"
Thu Oct 7 12:09:31 2004 : Debug: main: proxy_requests = yes
Thu Oct 7 12:09:31 2004 : Debug: proxy: retry_delay = 5
Shell


root@lognight.te.ugm.ac.id: /usr/local/radius - Shell - Konsole
Session Edit View Bookmarks Settings Help
Thu Oct 7 12:09:31 2004 : Debug: Module: Loaded eap
Thu Oct 7 12:09:31 2004 : Debug: eap: default_eap_type = "peap"
Thu Oct 7 12:09:31 2004 : Debug: eap: timer_expire = 60
Thu Oct 7 12:09:31 2004 : Debug: eap: ignore_unknown_eap_types = no
Thu Oct 7 12:09:31 2004 : Debug: eap: cisco_accounting_username_bug = no
Thu Oct 7 12:09:31 2004 : Debug: rlm_eap: Loaded and initialized type md5
Thu Oct 7 12:09:31 2004 : Debug: rlm_eap: Loaded and initialized type leap
Thu Oct 7 12:09:31 2004 : Debug: gtc: challenge = "Password: "
Thu Oct 7 12:09:31 2004 : Debug: gtc: auth_type = "PAP"
Thu Oct 7 12:09:31 2004 : Debug: rlm_eap: Loaded and initialized type gtc
Thu Oct 7 12:09:31 2004 : Debug: tls: rsa_key_exchange = no
Thu Oct 7 12:09:31 2004 : Debug: tls: dh_key_exchange = yes
Thu Oct 7 12:09:31 2004 : Debug: tls: rsa_key_length = 512
Thu Oct 7 12:09:31 2004 : Debug: tls: dh_key_length = 512
Thu Oct 7 12:09:31 2004 : Debug: tls: verify_depth = 0
Thu Oct 7 12:09:31 2004 : Debug: tls: CA_path = "(null)"
Thu Oct 7 12:09:31 2004 : Debug: tls: pem_file_type = yes
Thu Oct 7 12:09:31 2004 : Debug: tls: private_key_file = "/usr/local/radius/etc/raddb/certs/cert-srv.pem"
Thu Oct 7 12:09:31 2004 : Debug: tls: certificate_file = "/usr/local/radius/etc/raddb/certs/cert-srv.pem"
Thu Oct 7 12:09:31 2004 : Debug: tls: CA_file = "/usr/local/radius/etc/raddb/certs/demoCA/cacert.pem"
Thu Oct 7 12:09:31 2004 : Debug: tls: private_key_password = "rahasia"
Thu Oct 7 12:09:31 2004 : Debug: tls: dh_file = "/usr/local/radius/etc/raddb/certs/dh"
Thu Oct 7 12:09:31 2004 : Debug: tls: random_file = "/usr/local/radius/etc/raddb/certs/random"
Thu Oct 7 12:09:31 2004 : Debug: tls: fragment_size = 1024
Thu Oct 7 12:09:31 2004 : Debug: tls: include_length = yes
Thu Oct 7 12:09:31 2004 : Debug: tls: check_crl = no
Thu Oct 7 12:09:31 2004 : Debug: tls: check_cert_cn = "(null)"
Thu Oct 7 12:09:31 2004 : Debug: rlm_eap: Loaded and initialized type tls
Thu Oct 7 12:09:31 2004 : Debug: peap: default_eap_type = "mschapv2"
Thu Oct 7 12:09:31 2004 : Debug: peap: copy_request_to_tunnel = no
Thu Oct 7 12:09:31 2004 : Debug: peap: use_tunneled_reply = no
Thu Oct 7 12:09:31 2004 : Debug: peap: proxy_tunneled_request_as_eap = yes
Thu Oct 7 12:09:31 2004 : Debug: rlm_eap: Loaded and initialized type peap
Thu Oct 7 12:09:31 2004 : Debug: mschapv2: with_ntdomain_hack = no
Thu Oct 7 12:09:31 2004 : Debug: rlm_eap: Loaded and initialized type mschapv2
Thu Oct 7 12:09:31 2004 : Debug: Module: Instantiated eap (eap)
Shell


root@lognight.te.ugm.ac.id: /usr/local/radius - Shell - Konsole
Session Edit View Bookmarks Settings Help
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): Connected new DB handle, #1
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): starting 2
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): Attempting to connect rlm_sql_mysql #2
Thu Oct 7 12:09:31 2004 : Info: rlm_sql_mysql: Starting connect to MySQL server for #2
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): Connected new DB handle, #2
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): starting 3
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): Attempting to connect rlm_sql_mysql #3
Thu Oct 7 12:09:31 2004 : Info: rlm_sql_mysql: Starting connect to MySQL server for #3
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): Connected new DB handle, #3
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): starting 4
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): Attempting to connect rlm_sql_mysql #4
Thu Oct 7 12:09:31 2004 : Info: rlm_sql_mysql: Starting connect to MySQL server for #4
Thu Oct 7 12:09:31 2004 : Debug: rlm_sql (sql): Connected new DB handle, #4
Thu Oct 7 12:09:31 2004 : Debug: Module: Instantiated sql (sql)
Thu Oct 7 12:09:31 2004 : Debug: Module: Loaded Acct-Unique-Session-Id
Thu Oct 7 12:09:31 2004 : Debug: acct_unique: key = "User-Name, Acct-Session-Id, NAS-IP-Address, Client-IP-Address, NAS-Port"
Thu Oct 7 12:09:31 2004 : Debug: Module: Instantiated acct_unique (acct_unique)
Thu Oct 7 12:09:31 2004 : Debug: detail: detailfile = "/usr/local/radius/var/log/radius/radacct/%{Client-IP-Address}/detail-%Y%m%d"
Thu Oct 7 12:09:31 2004 : Debug: detail: detailperm = 384
Thu Oct 7 12:09:31 2004 : Debug: detail: dirperm = 493
Thu Oct 7 12:09:31 2004 : Debug: detail: locking = no
Thu Oct 7 12:09:31 2004 : Debug: Module: Instantiated detail (detail)
Thu Oct 7 12:09:31 2004 : Debug: Module: Loaded radutmp
Thu Oct 7 12:09:31 2004 : Debug: radutmp: filename = "/usr/local/radius/var/log/radius/radutmp"
Thu Oct 7 12:09:31 2004 : Debug: radutmp: username = "%{User-Name}"
Thu Oct 7 12:09:31 2004 : Debug: radutmp: case_sensitive = yes
Thu Oct 7 12:09:31 2004 : Debug: radutmp: check_with_nas = no
Thu Oct 7 12:09:31 2004 : Debug: radutmp: perm = 384
Thu Oct 7 12:09:31 2004 : Debug: radutmp: callerid = yes
Thu Oct 7 12:09:31 2004 : Debug: Module: Instantiated radutmp (radutmp)
Thu Oct 7 12:09:31 2004 : Debug: Listening on authentication *:1812
Thu Oct 7 12:09:31 2004 : Debug: Listening on accounting *:1813
Thu Oct 7 12:09:31 2004 : Debug: Listening on proxy *:1814
Thu Oct 7 12:09:31 2004 : Info: Ready to process requests.
Shell

Setting DialupAdmin

7. Setting DialupAdmin

- cd /usr/local/dialup_admin/conf
- ls

accounting.attrs auth.request default.vals sql.attrmap user_edit.attrs

admin.conf captions.conf extra.ldap-attrmap sql.attrs username.mappings

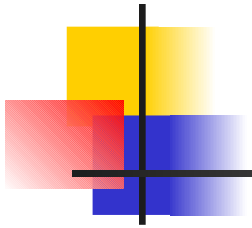
admin.conf.default config.php3 naslist.conf sql.attrs.default

admin.conf

general_base_dir: /usr/local/dialup_admin
general_radiusd_base_dir: /usr/local/radius/sbin/
general_radius_server: localhost
general_domain: te.ugm.ac.id
general_radius_server_port: 1812
sql_type: mysql
sql_server: localhost
sql_port: 3306
sql_username: radius
sql_password: radius
sql_database: radius
sql_accounting_table: radacct
sql_badusers_table: badusers
sql_check_table: radcheck
sql_reply_table: radreply
sql_user_info_table: userinfo
sql_groupcheck_table: radgroupcheck
sql_groupreply_table: radgroupreply
sql_usergroup_table: usergroup
sql_total_accounting_table: totacct
sql_nas_table: nas
sql_command: /usr/bin/mysql

naslist.conf

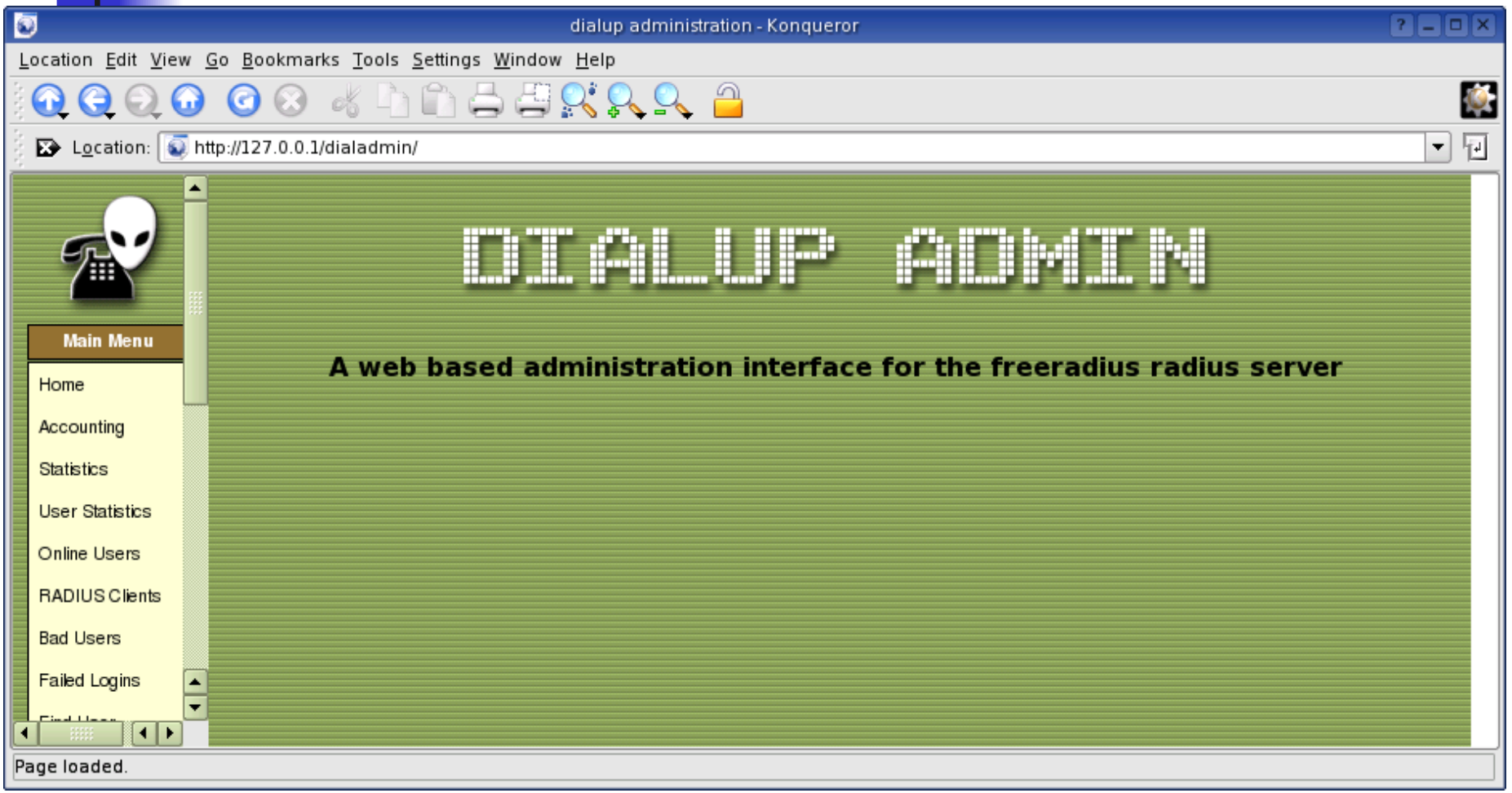
```
#nas1_name: lantai_1.%{general_domain}
#nas1_model: Compex WP11B+
#nas1_ip: 172.16.0.201
#nas1_community: public
#nas2_name: lantai_2.%{general_domain}
#nas2_model: Compex WP11B+
#nas2_ip: 172.16.80.201
#nas2_community:public
#nas2_type: cisco
#nas3_name: lantai_3.%{general_domain}
#nas3_model: Compex WP11B+
#nas3_ip: 172.16.160.201
#nas3_community: public
nas4_name: DellC400
nas4_model: HostAP
nas4_type: other
nas4_ip: 172.16.1.1
nas4_community: public
nas5_name: compex
nas5_model: Compex WP11B+
nas5_type: other
nas5_ip: 172.20.2.59
nas5_community: public
```



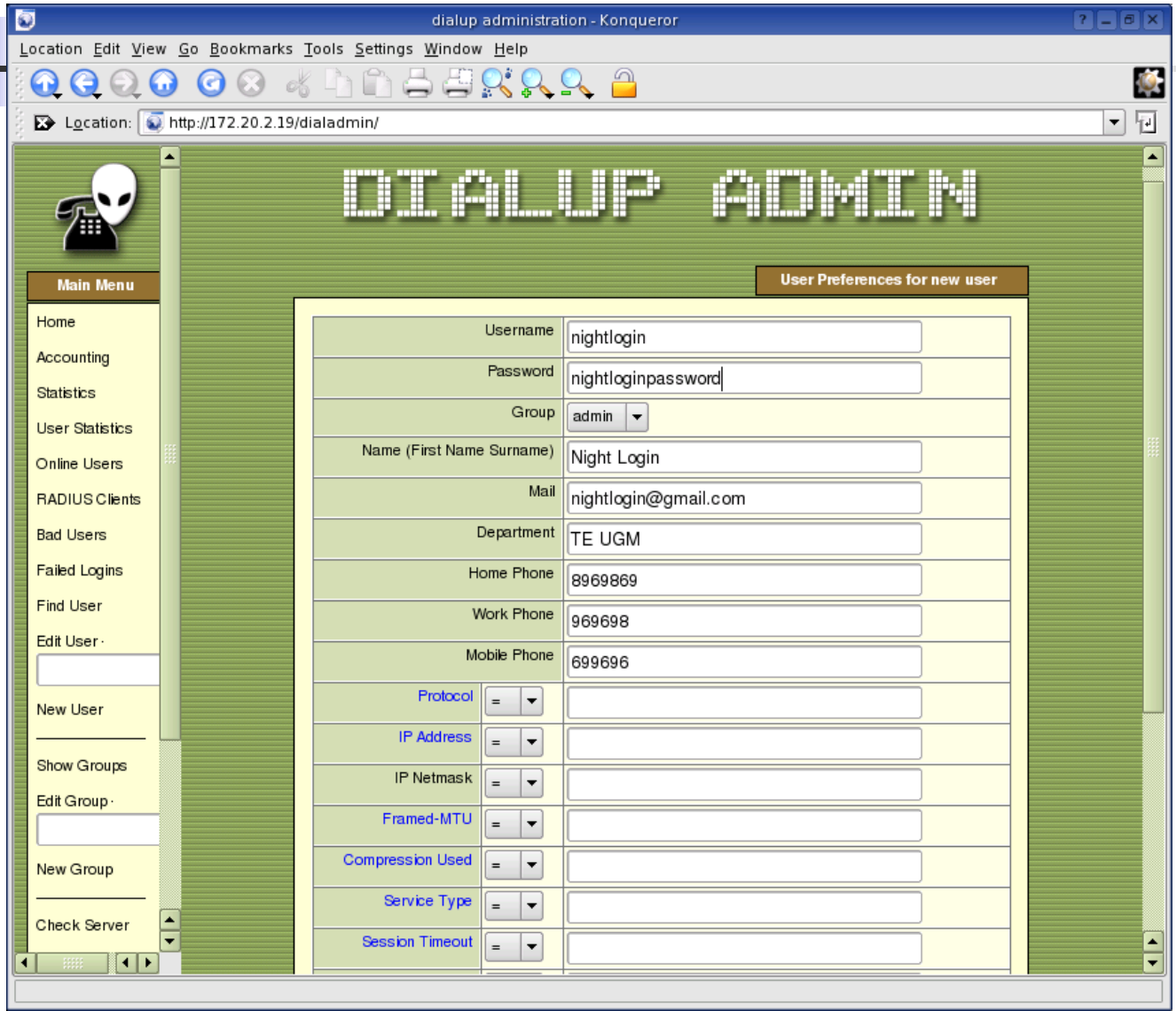
- Setting Apache untuk dialupadmin

```
# grep DocumentRoot /etc/httpd/conf/httpd2.conf
DocumentRoot /var/www/html

# ln -s /usr/local/dialupadmin/htdocs
    /var/www/html/dialadmin

# /etc/init.d/httpd restart
Shutting down httpd2:                                  [  OK  ]
Starting httpd2:                                       [  OK  ]
```

DialupAdmin interface

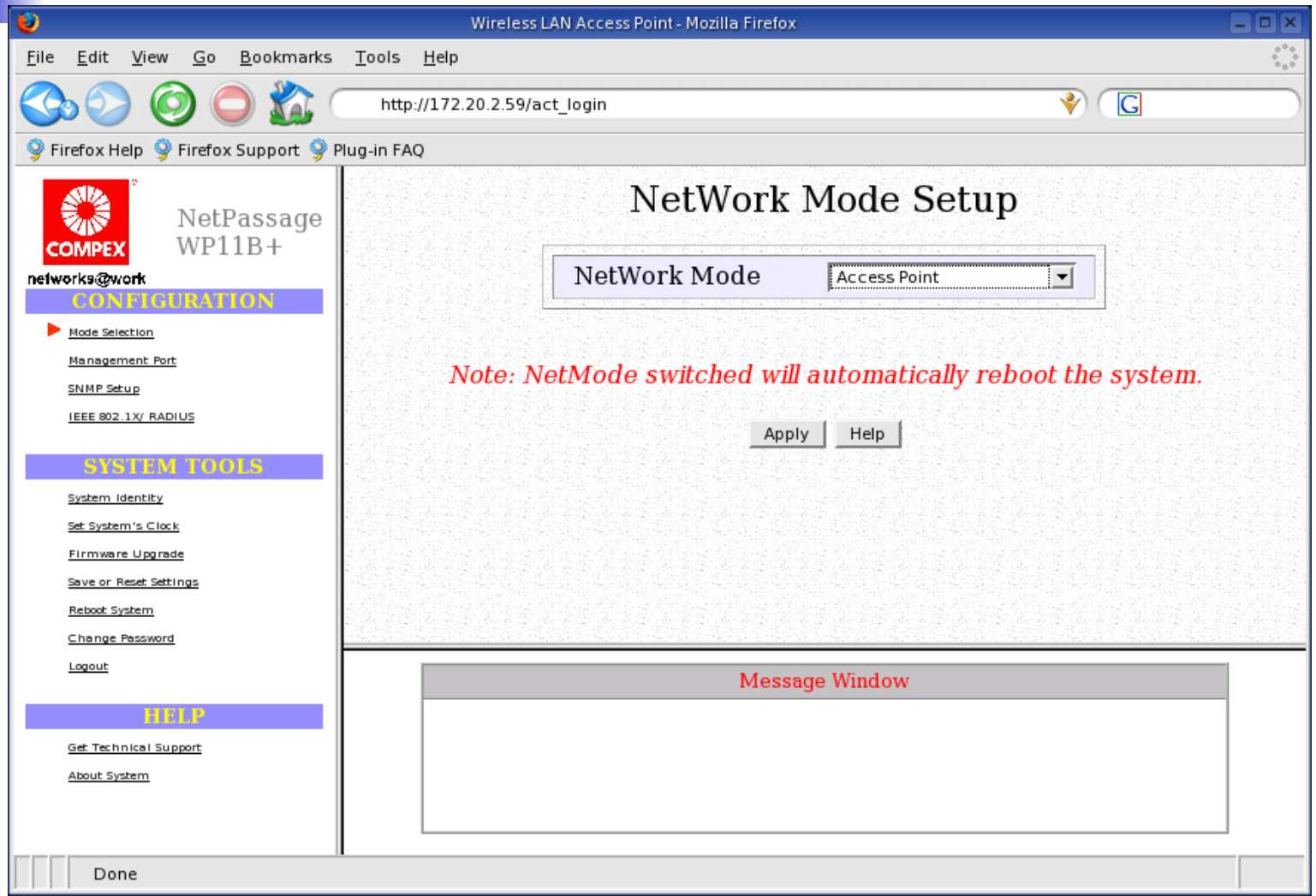


Menambah User

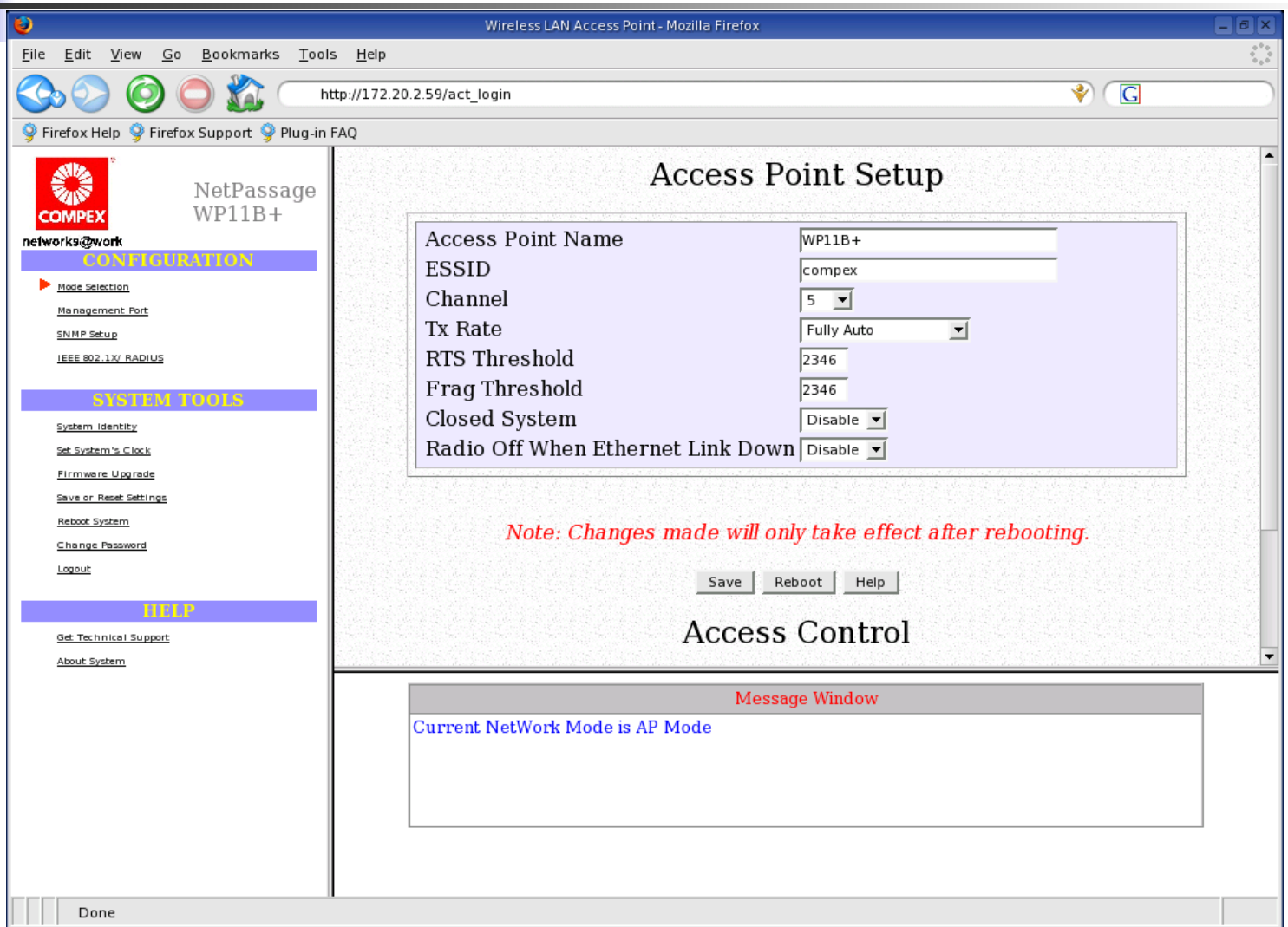


Setting Authenticator Access Point Compex WP11B+

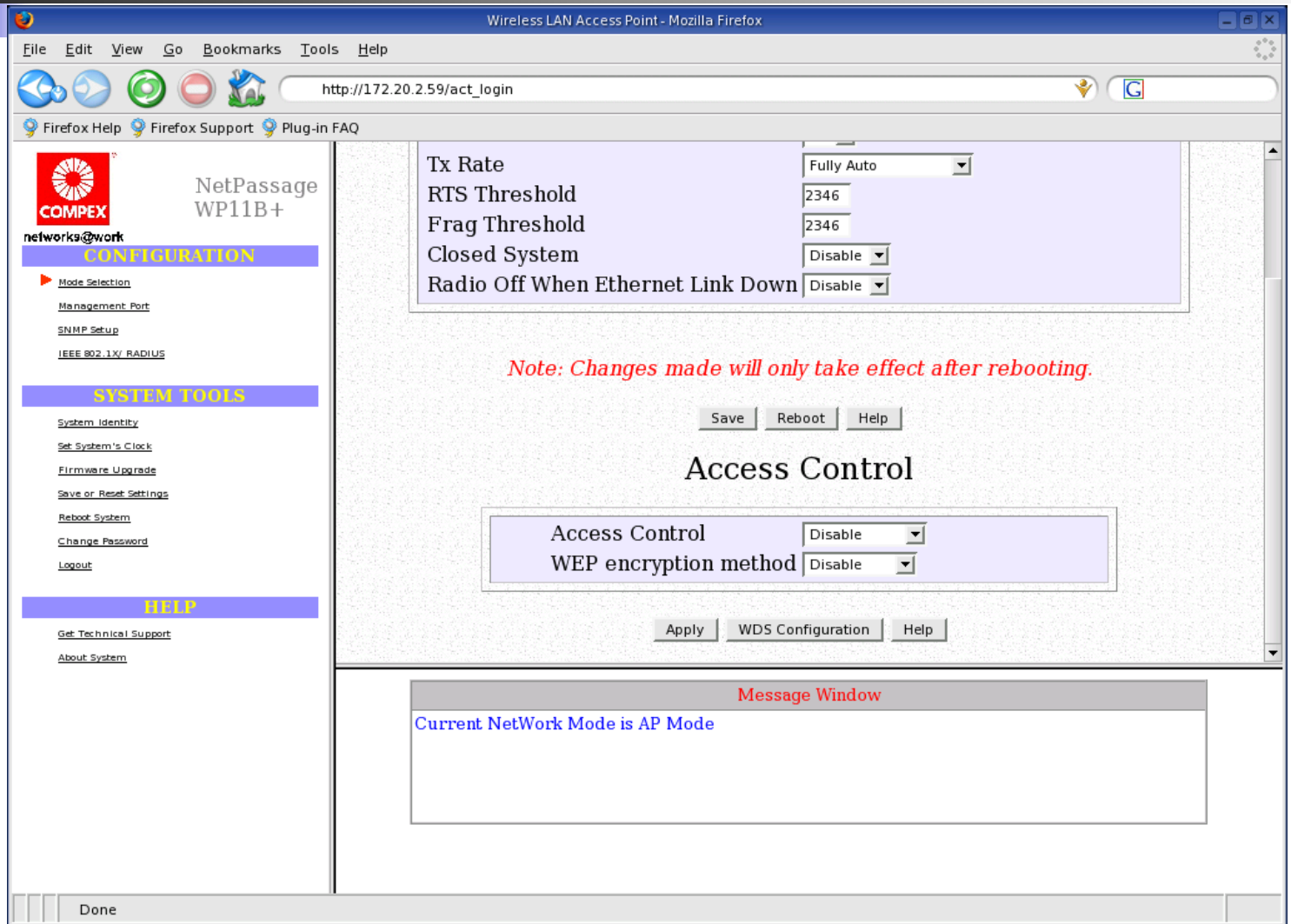
Setting Authenticator Access Point Compex WP11B+



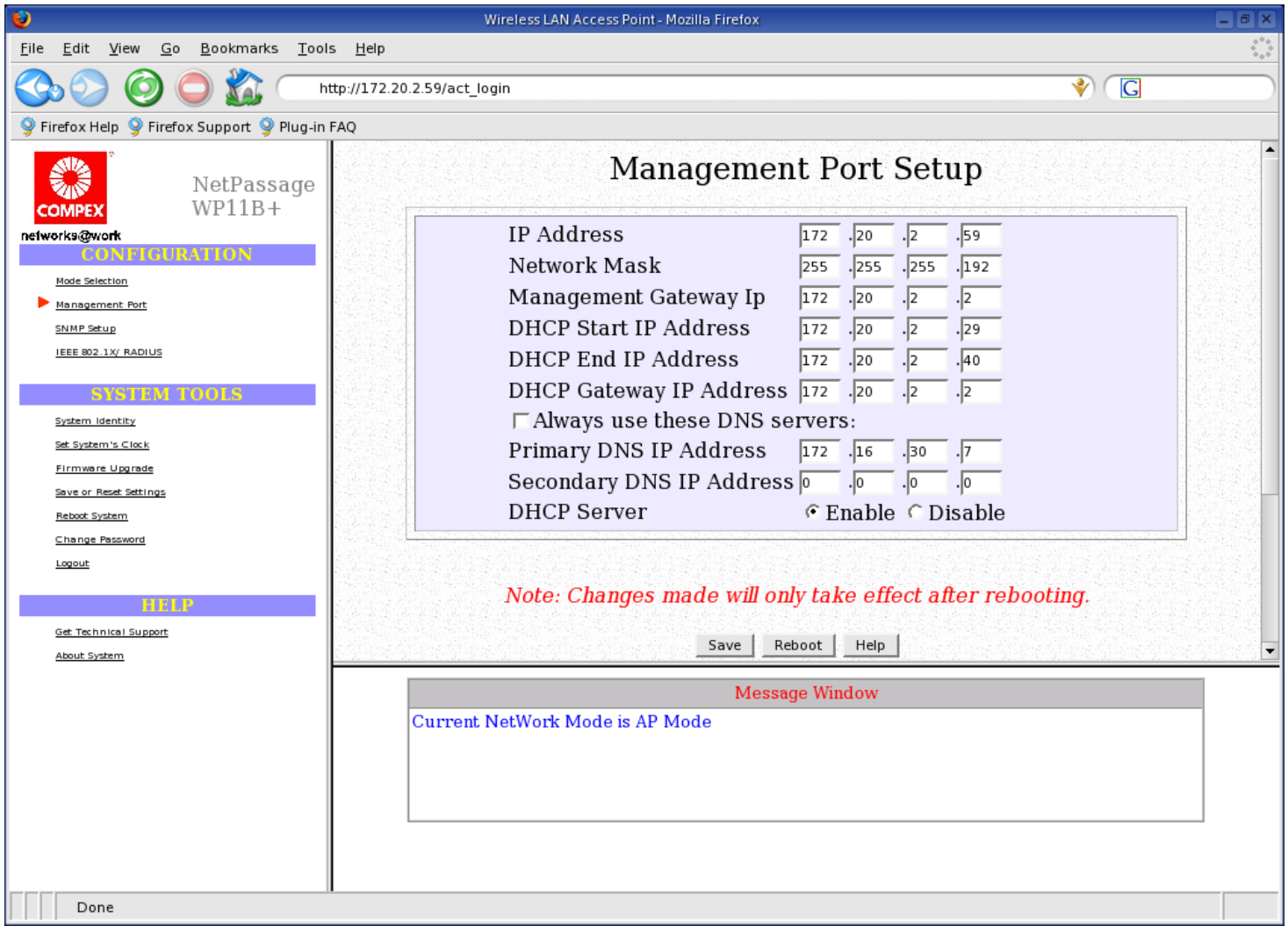
Setting Authenticator Access Point Compex WP11B+



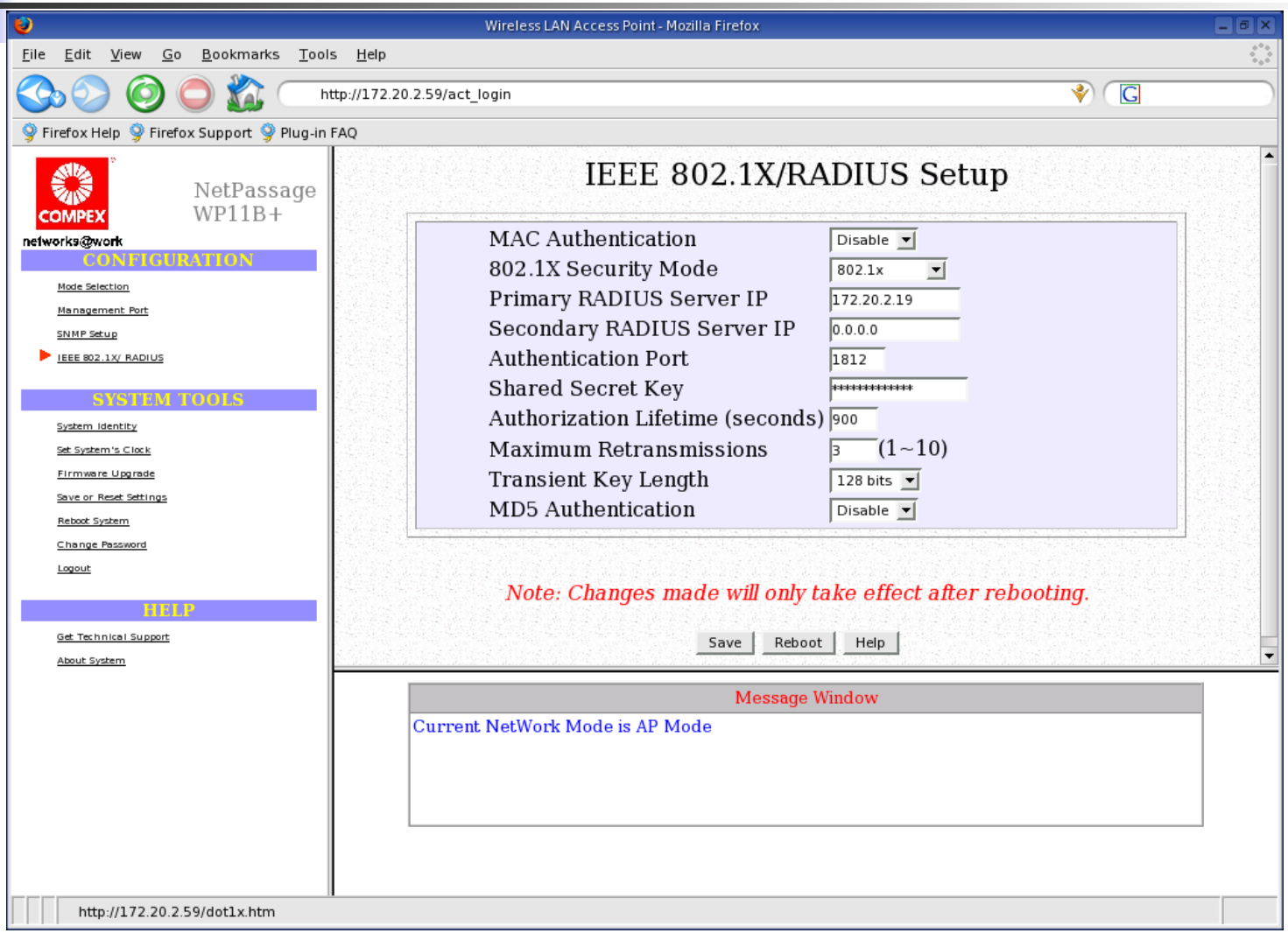
Setting Authenticator Access Point Compex WP11B+



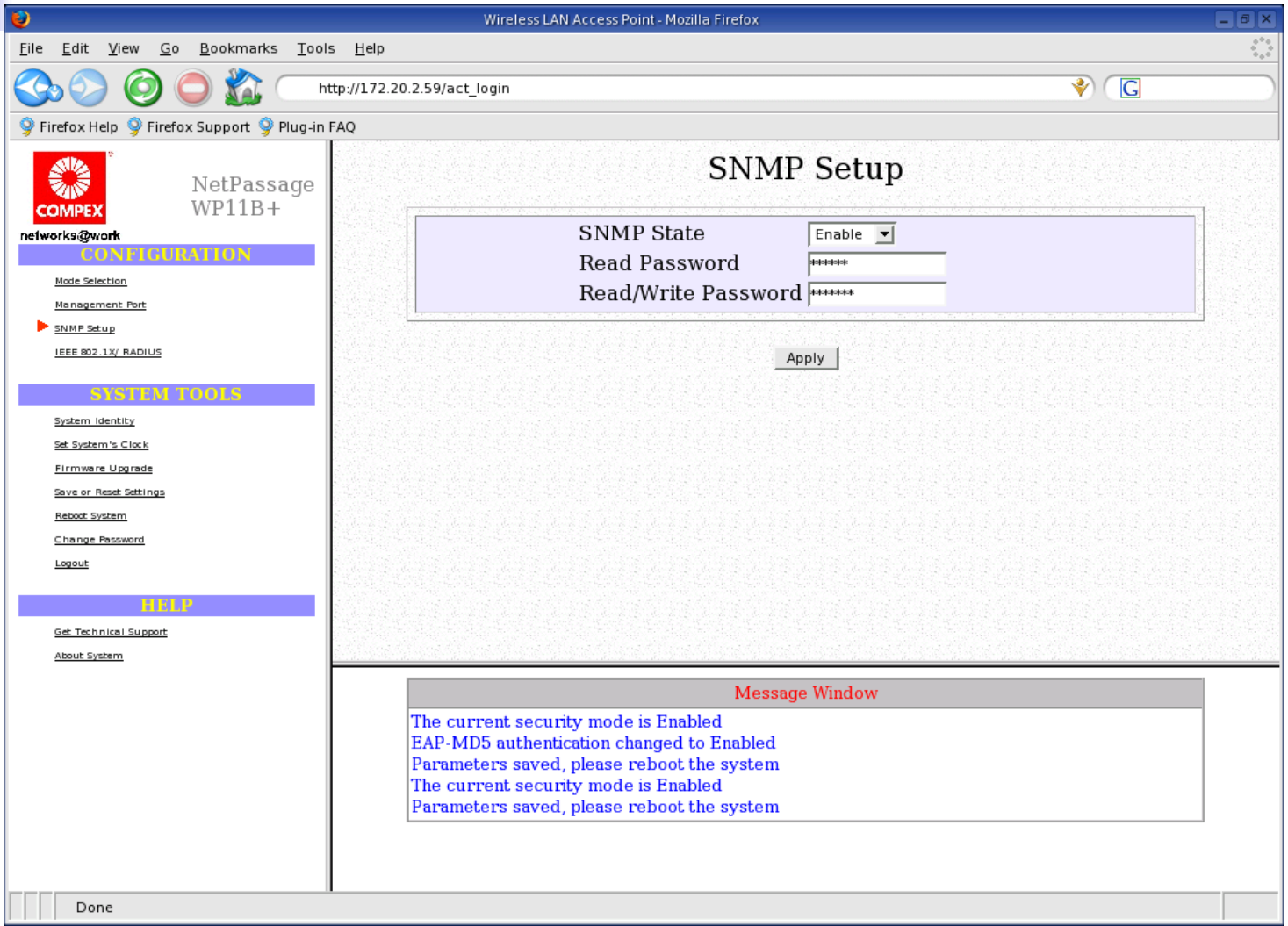
Setting Authenticator Access Point Compex WP11B+



Setting Authenticator Access Point Compex WP11B+



Setting Authenticator Access Point Compex WP11B+

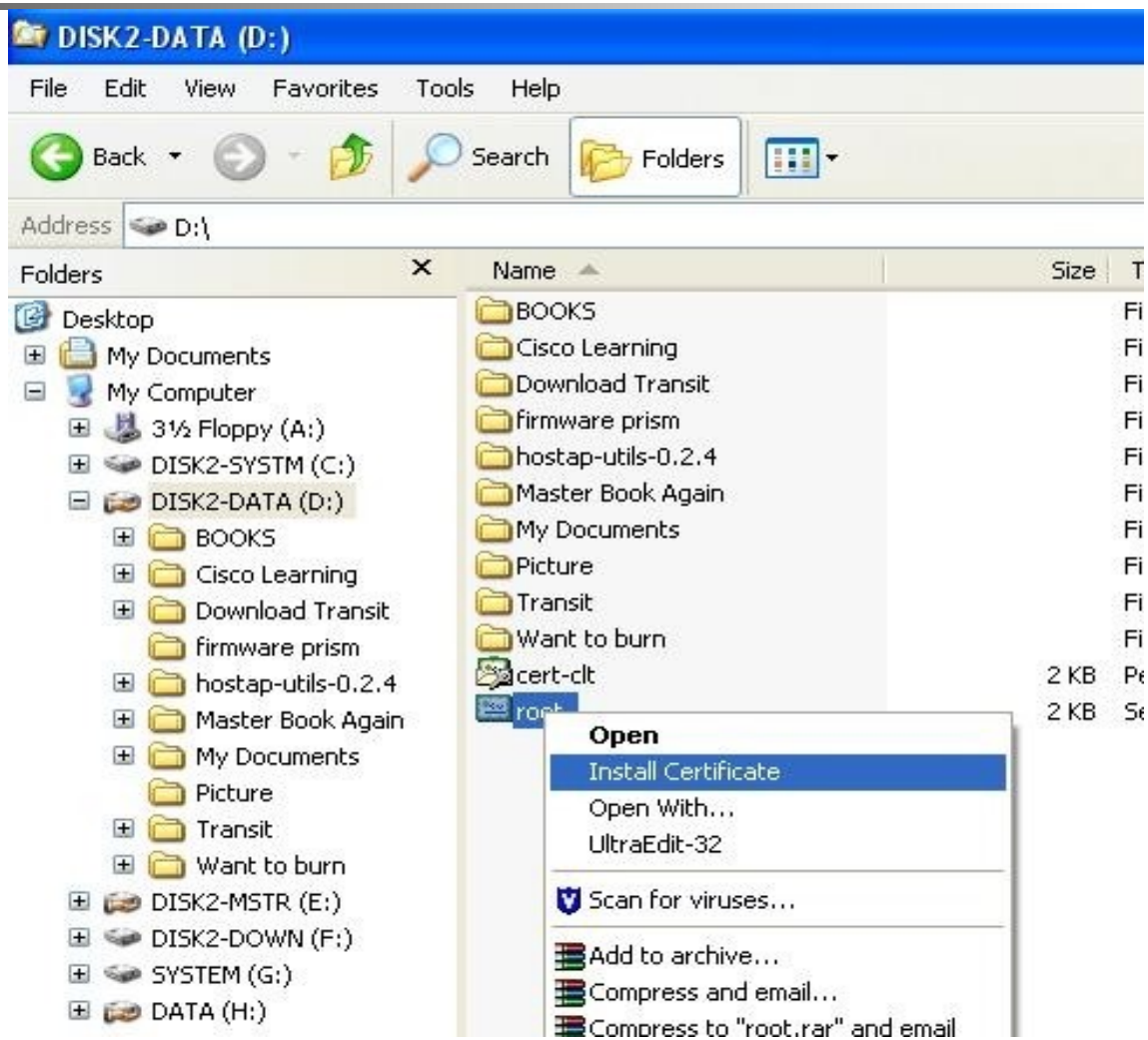


Setting Supplicant WinXP SP2 menggunakan 802.1x EAP-TLS

- Untuk menggunakan EAP-TLS, Supplicant Windows XP membutuhkan sertifikat public (root.der) dan sertifikat private client (cert-clt.p12)
- Sedangkan Server authentikasi menggunakan private key, sertifikat public dan private server (cert-srv.pem) dan CA (cacert.pem)

Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install root.der

Install
ROOT Sertificate
Public
File : root.der



Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install root.der

Klik NEXT

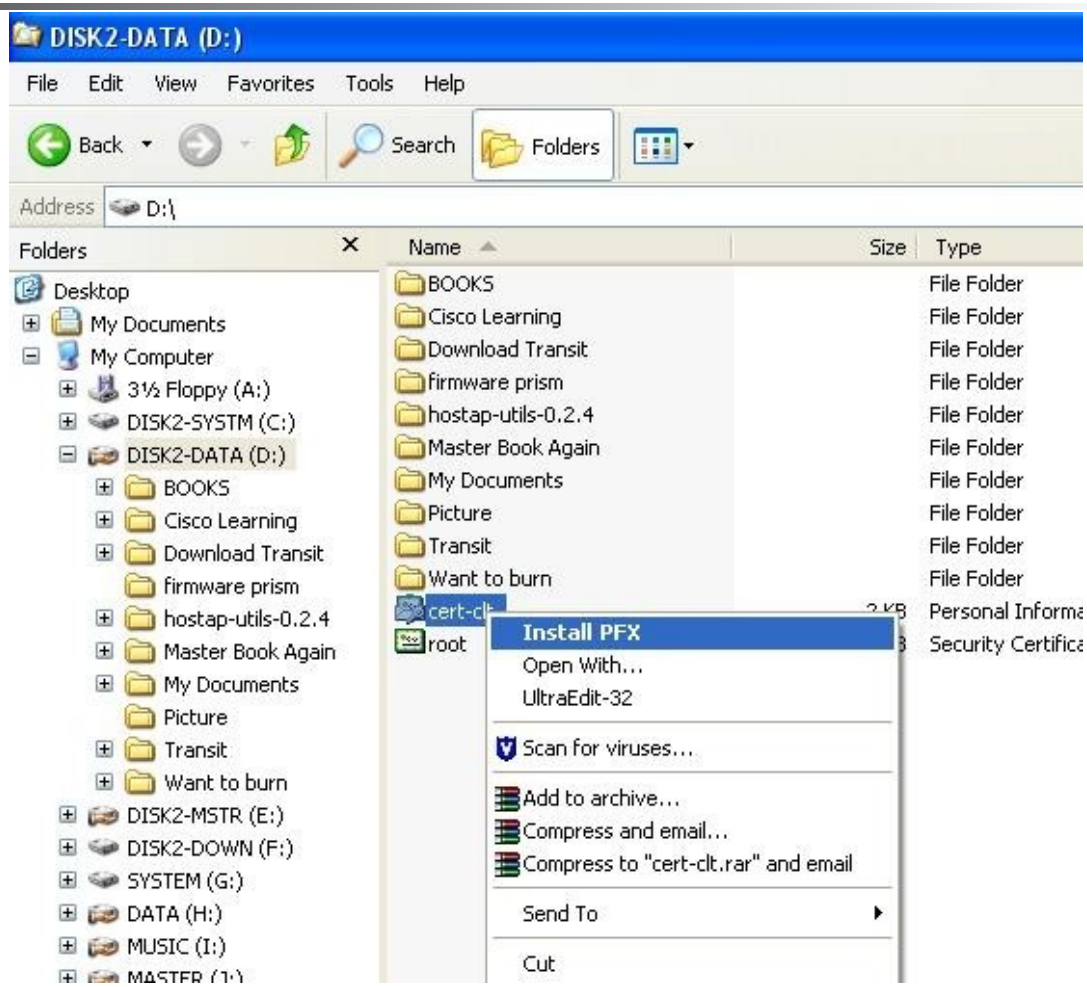
Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install root.der

Klik NEXT

Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install root.der

Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install client.p12

KLIK KANAN
Private Key Client
File : cert-clt.p12



Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install client.p12

Klik NEXT

Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install client.p12

Klik NEXT

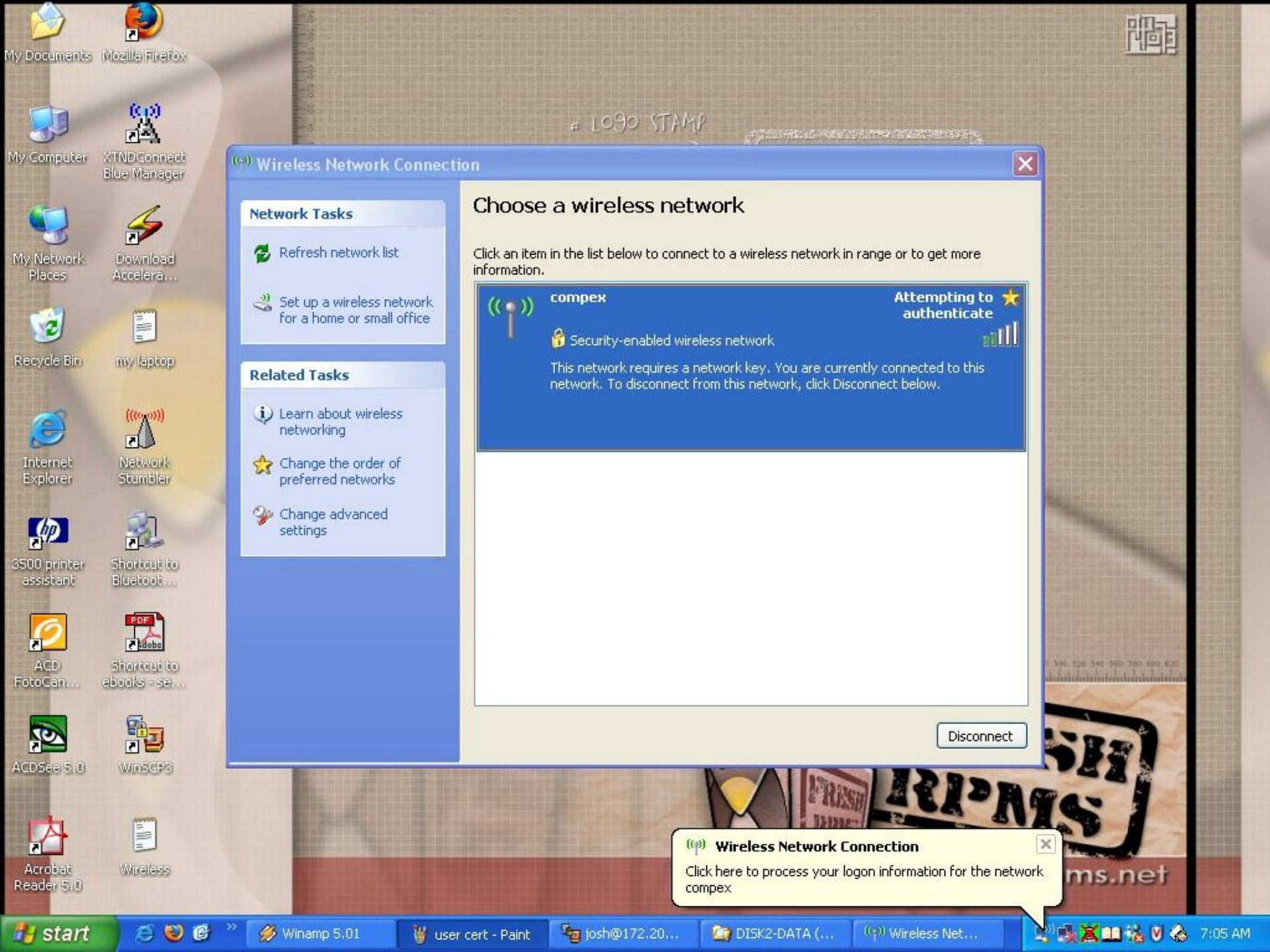
Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install client.p12

Masukkan Kunci Private Client
Lalu Klik NEXT

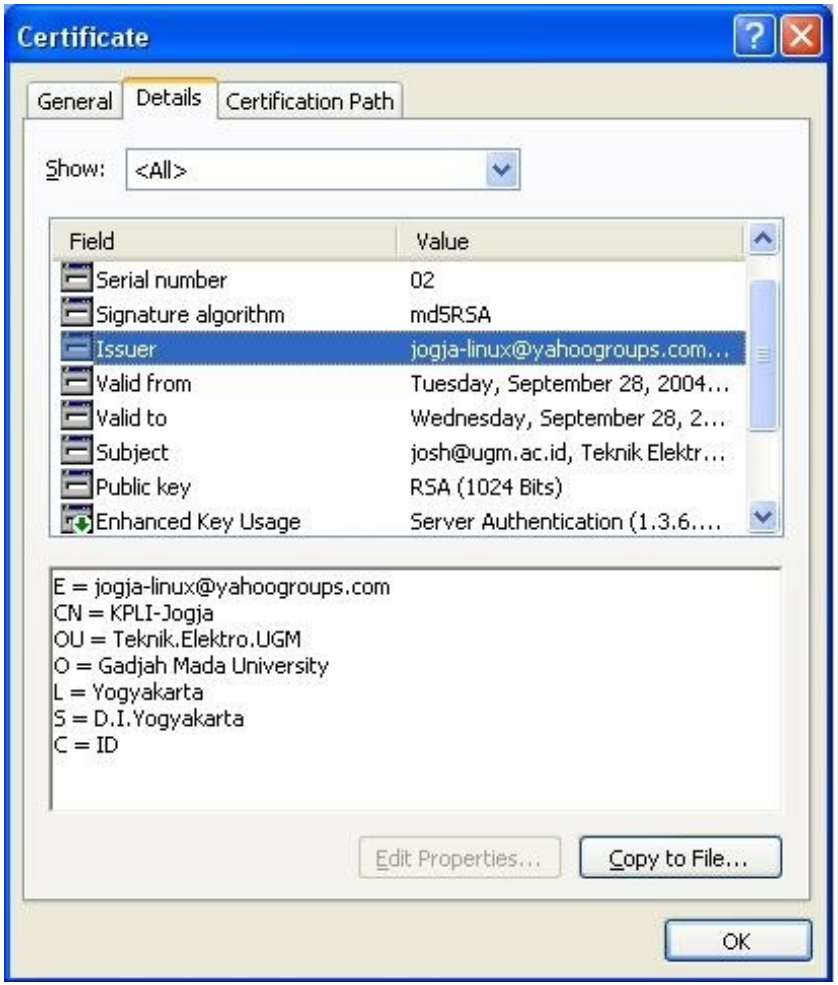
Tahap tahap setting Supplicant EAP-TLS di WinXP SP2 : Install client.p12

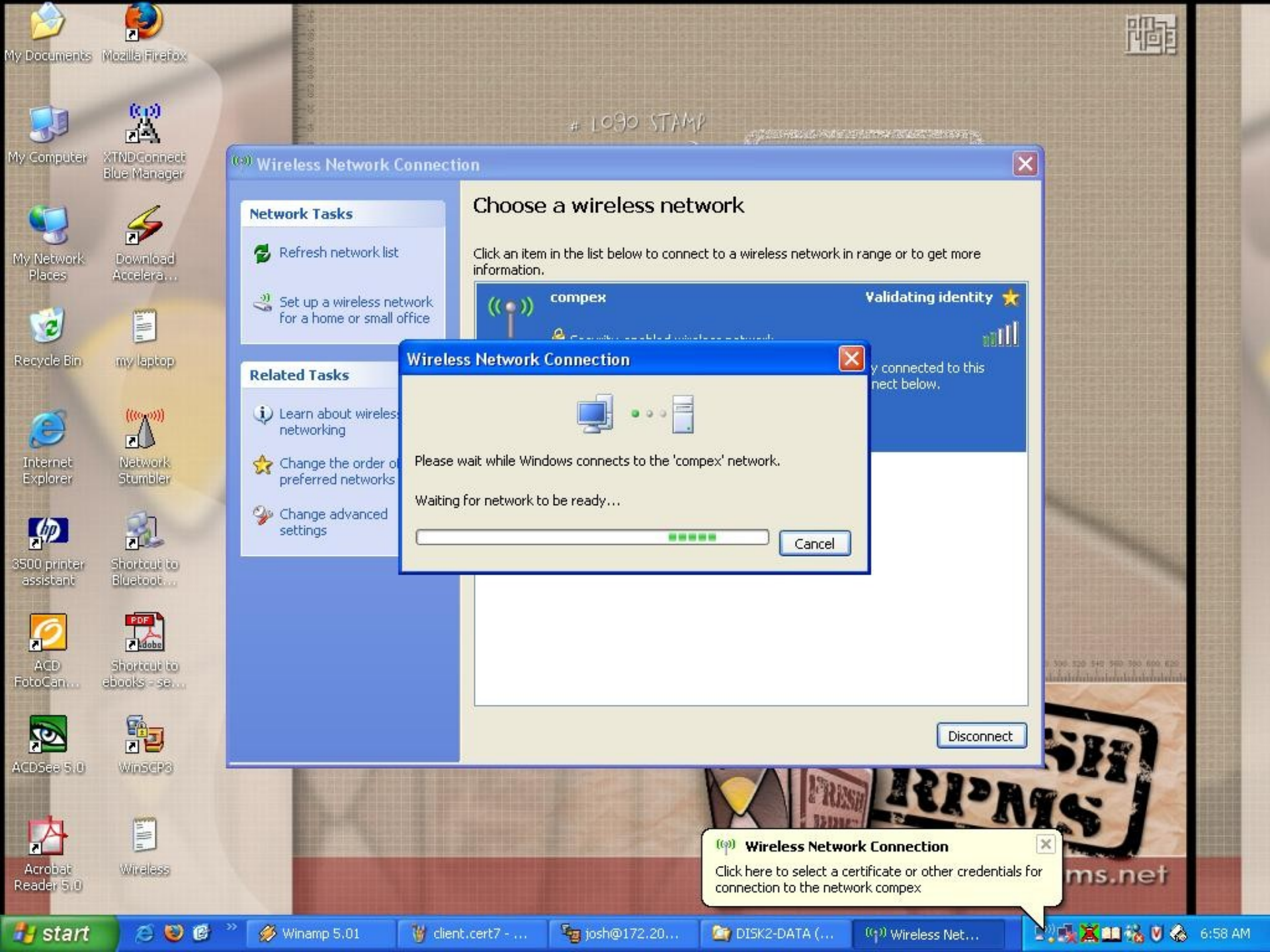
Certificate Import Wizard
Completing the Certificate Import Wizard
You have successfully completed the Certificate Import wizard.
You have specified the following settings:
Certificate Store Selected
Automatically determined by t
Content
PFX
File Name
D:\cert-clt.p12
< Back
Finish
Cancel

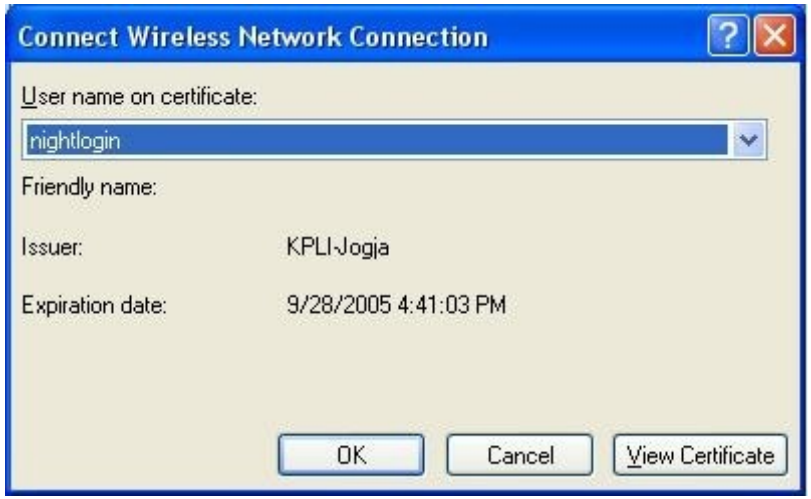
Certificate Import Wizard
The import was successful.
OK

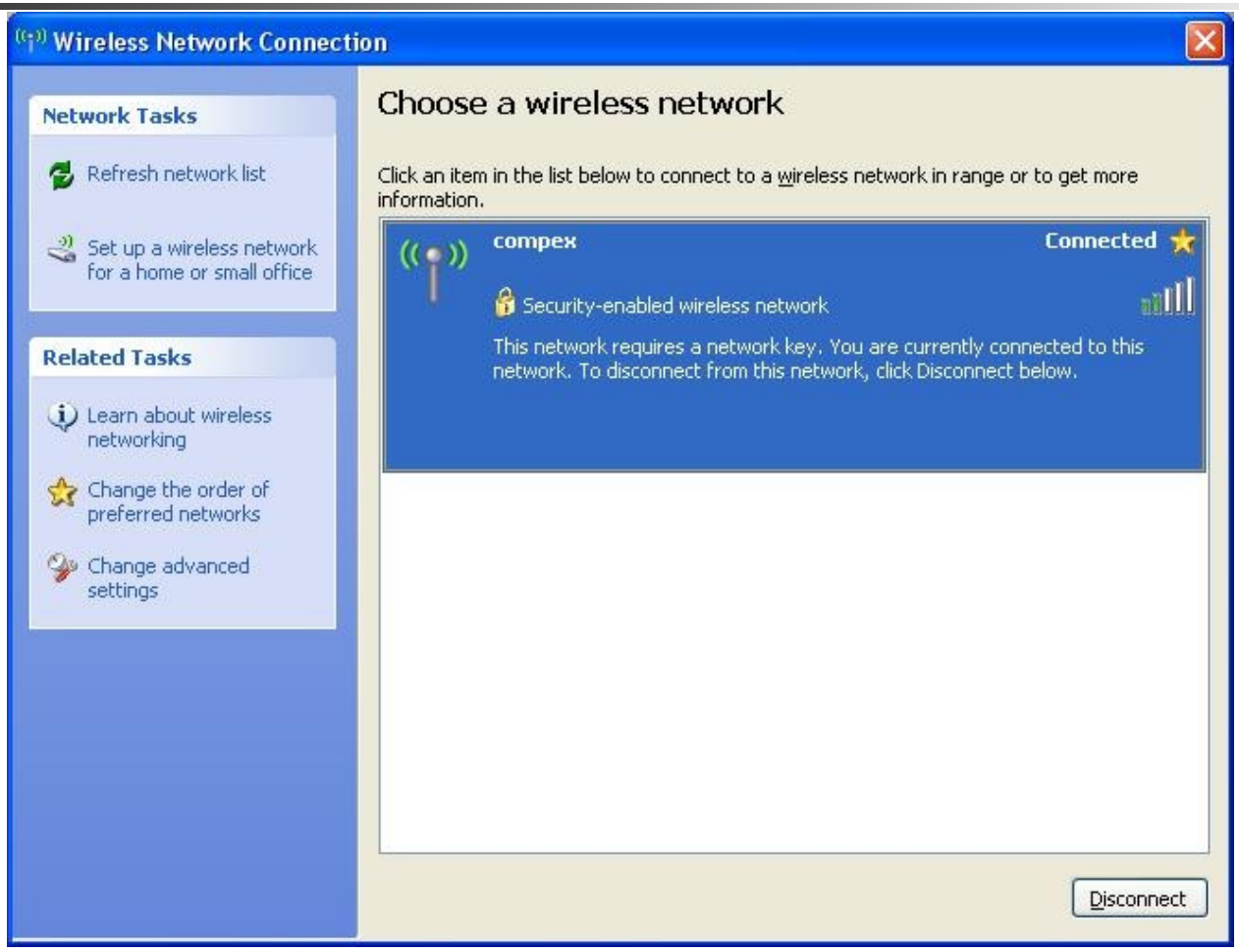

My Documents
Mozilla Firefox
My Computer
XTNDConnect Blue Manager
My Network Places
Download Accelera...
Recycle Bin
my laptop
Internet Explorer
Network Stumbler
3500 printer assistant
Shortcut to Bluetoot...
ACD FotoCan...
Shortcut to ebooks - se...
ACDSee 5.0
WinSCP3
Acrobat Reader 5.0
Wireless
Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
compex
Attempting to authenticate
Security-enabled wireless network
This network requires a network key. You are currently connected to this network. To disconnect from this network, click Disconnect below.
Disconnect
Wireless Network Connection
Click here to process your logon information for the network compex
start
Winamp 5.01
user cert - Paint
josh@172.20...
DISK2-DATA (...
Wireless Net...
7:05 AM

Validate Server Certificate
The Root Certification Authority for the server's certificate is:
KPLI-Jogja
If this is the correct certificate, click OK to connect and you will not see this message again. Click CANCEL to drop connection.
View Server Certificate
OK
Cancel

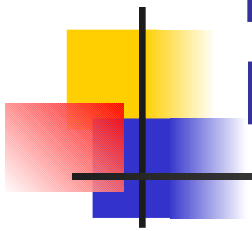

Certificate
General
Details
Certification Path
Show:
<All>
Field
Value
Serial number
02
Signature algorithm
md5RSA
Issuer
jogja-linux@yahoogroups.com...
Valid from
Tuesday, September 28, 2004...
Valid to
Wednesday, September 28, 2...
Subject
josh@ugm.ac.id, Teknik Elektr...
Public key
RSA (1024 Bits)
Enhanced Key Usage
Server Authentication (1.3.6....
E = jogja-linux@yahoogroups.com
CN = KPLI-Jogja
OU = Teknik.Elektro.UGM
O = Gadjah Mada University
L = Yogyakarta
S = D.I.Yogyakarta
C = ID
Edit Properties...
Copy to File...
OK


My Documents
Mozilla Firefox
My Computer
XTNDConnect Blue Manager
My Network Places
Download Accelera...
Recycle Bin
my laptop
Internet Explorer
Network Stumbler
3500 printer assistant
Shortcut to Bluetoot...
ACD FotoCan...
Shortcut to ebooks - se...
ACDSee 5.0
WinSCP3
Acrobat Reader 5.0
Wireless
Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
compex
Validating identity
Disconnect
Wireless Network Connection
Please wait while Windows connects to the 'compex' network.
Waiting for network to be ready...
Cancel
Wireless Network Connection
Click here to select a certificate or other credentials for connection to the network compex
start
Winamp 5.01
client.cert7 - ...
josh@172.20...
DISK2-DATA (...
Wireless Net...
6:58 AM


Connect Wireless Network Connection
User name on certificate:
nightlogin
Friendly name:
Issuer:
KPLI-Jogja
Expiration date:
9/28/2005 4:41:03 PM
OK
Cancel
View Certificate

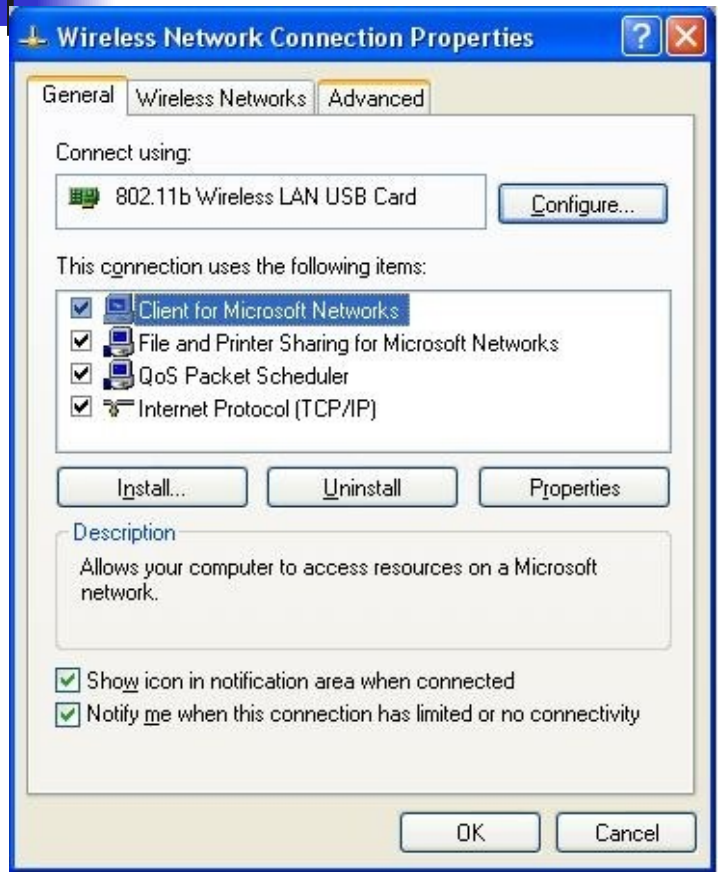

Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
compex
Connected
Security-enabled wireless network
This network requires a network key. You are currently connected to this network. To disconnect from this network, click Disconnect below.
Disconnect

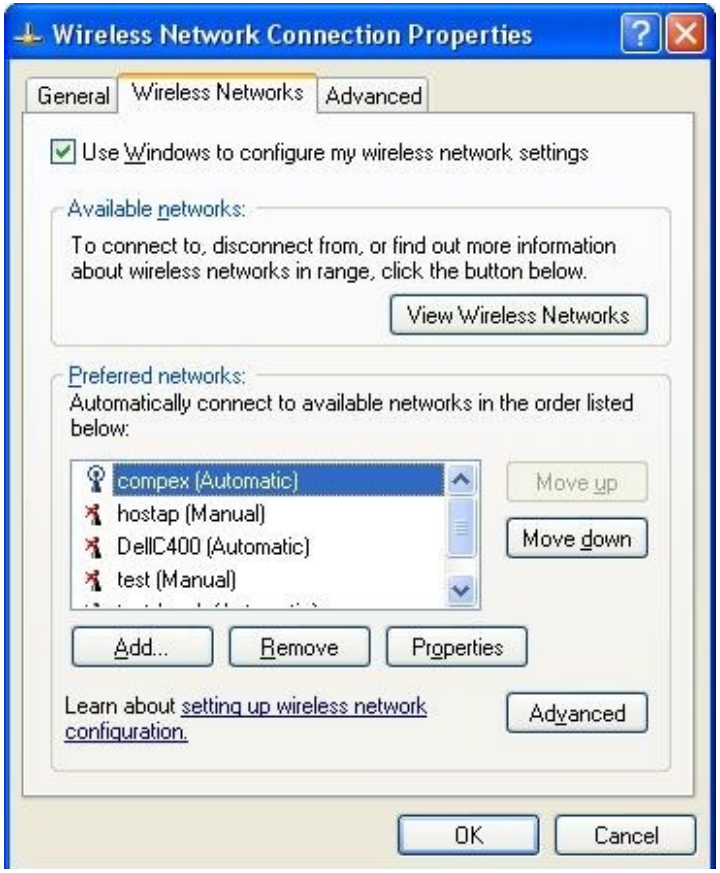
Setting Supplicant WinXP SP2 menggunakan 802.1x PEAP-MSCHAPv2



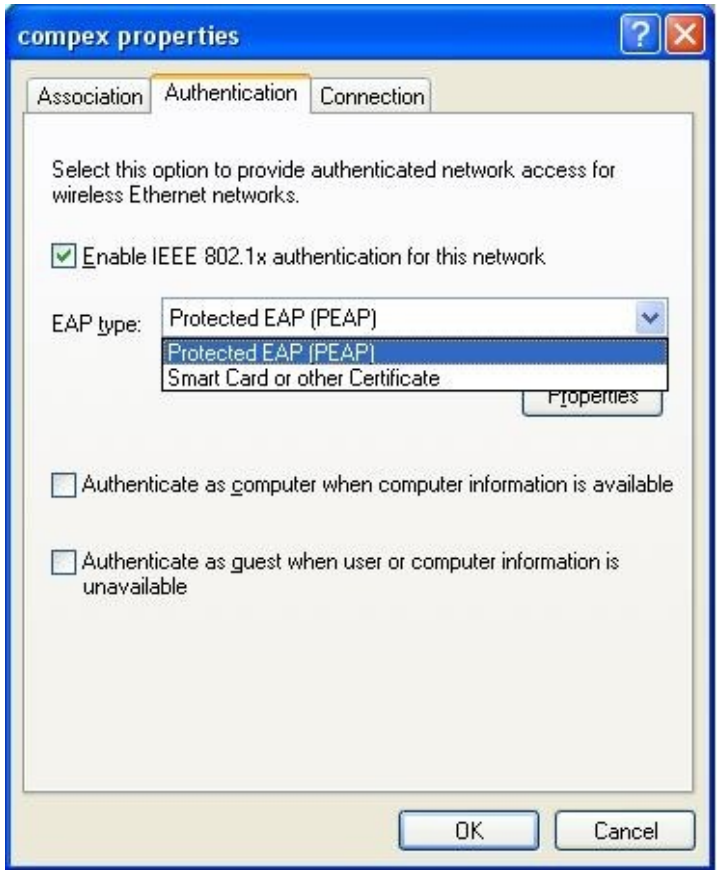
- Untuk menggunakan PEAP-MSCHAPv2, Supplicant Windows XP hanya membutuhkan sertifikat public root (root.der)
- Sedangkan Server authentikasi menggunakan private key, sertifikat public dan private server (cert-srv.pem) dan CA (cacert.pem)

Setting Supplicant WinXP SP2 menggunakan 802.1x PEAP-MSCHAPv2

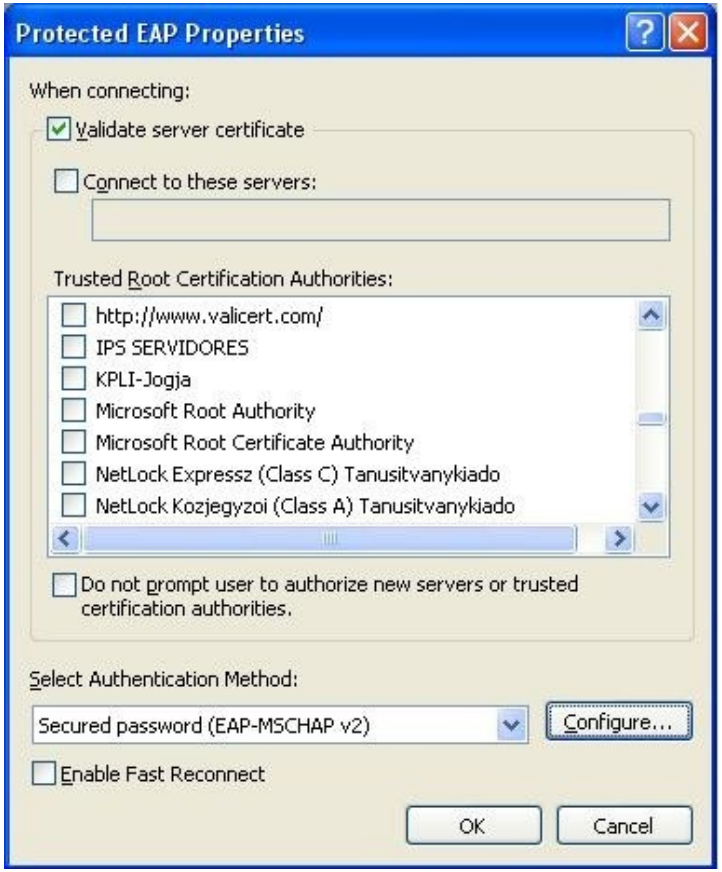




Setting Supplicant WinXP SP2 menggunakan 802.1x PEAP-MSCHAPv2

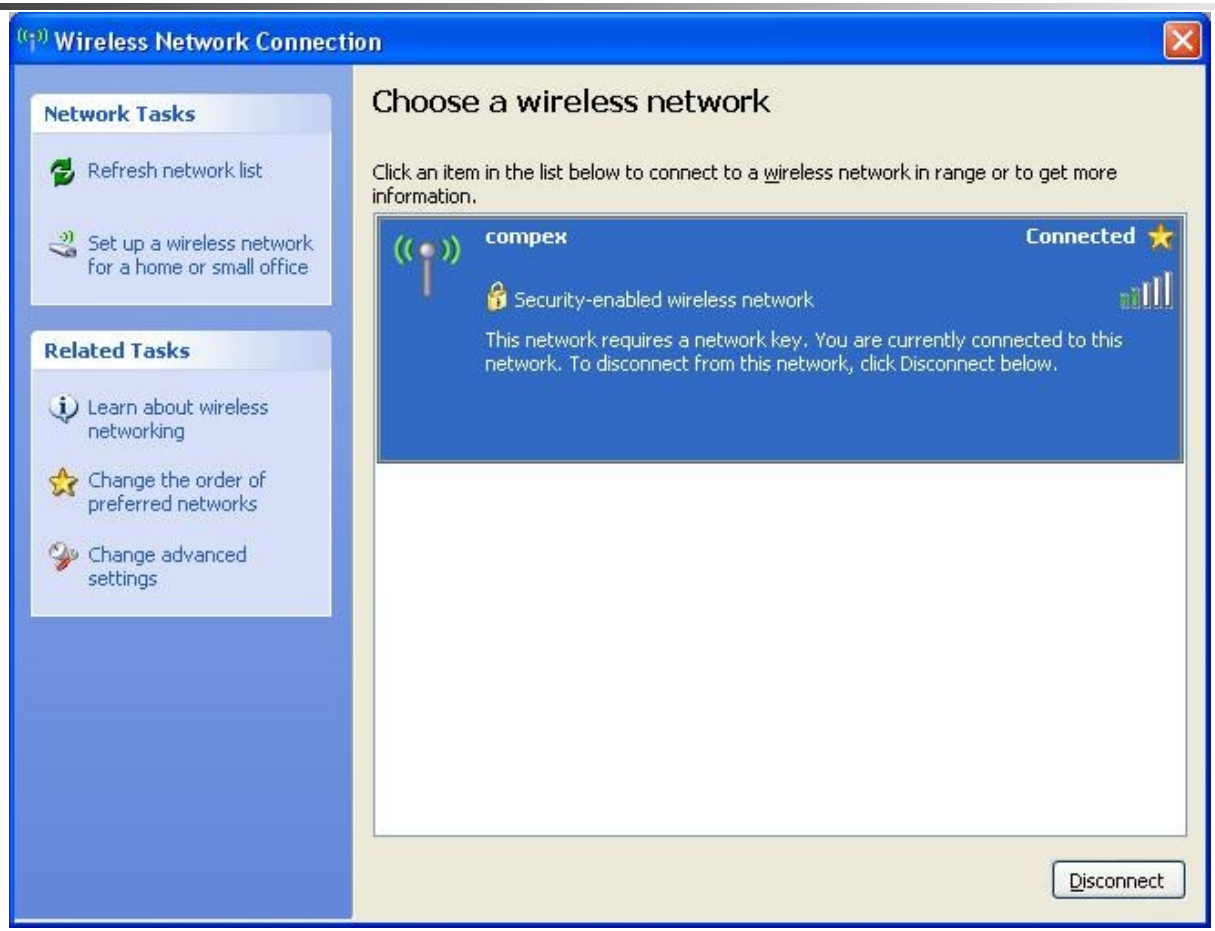


Setting Supplicant WinXP SP2 menggunakan 802.1x PEAP-MSCHAPv2



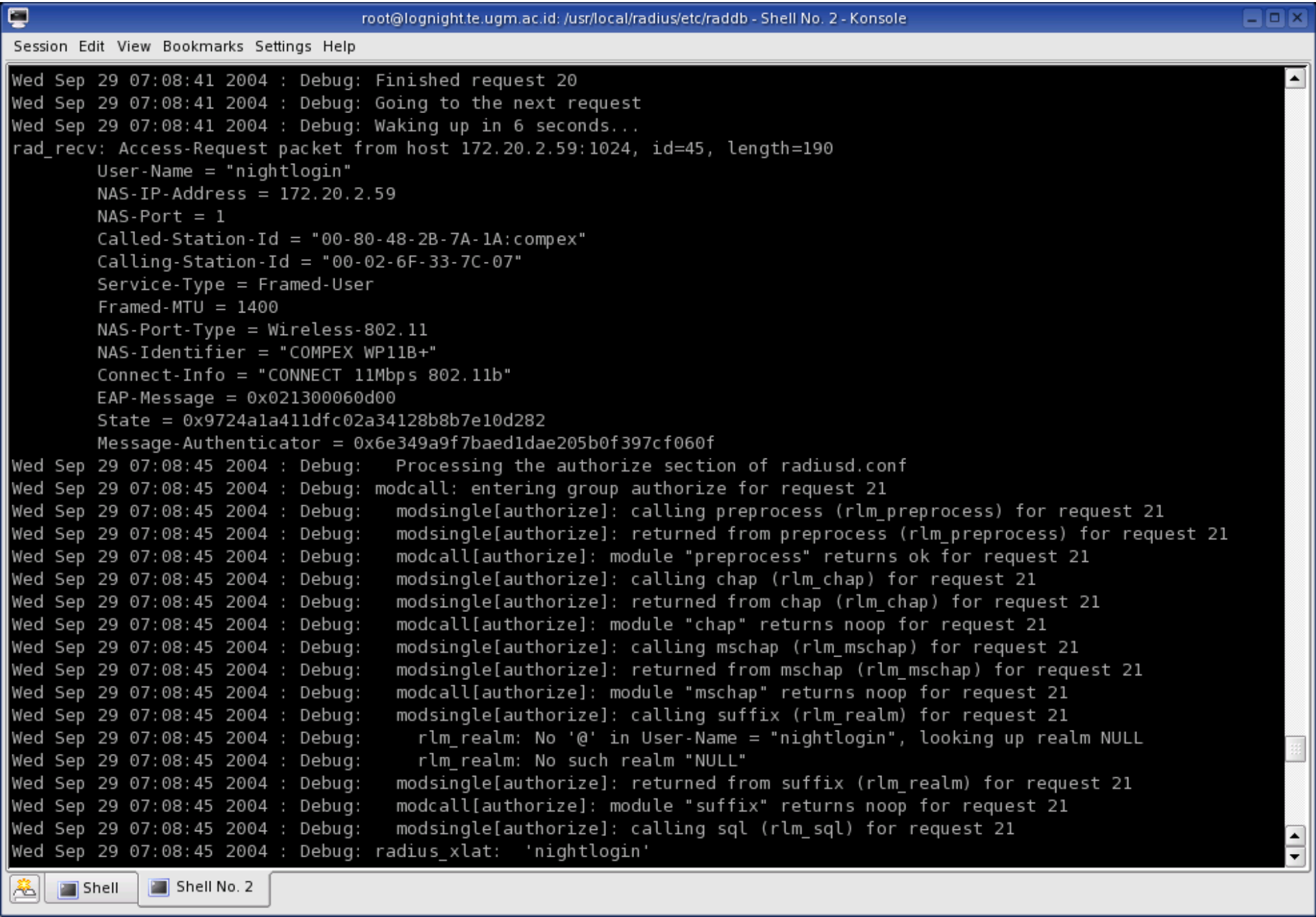
Setting Supplicant WinXP SP2 menggunakan 802.1x PEAP-MSCHAPv2

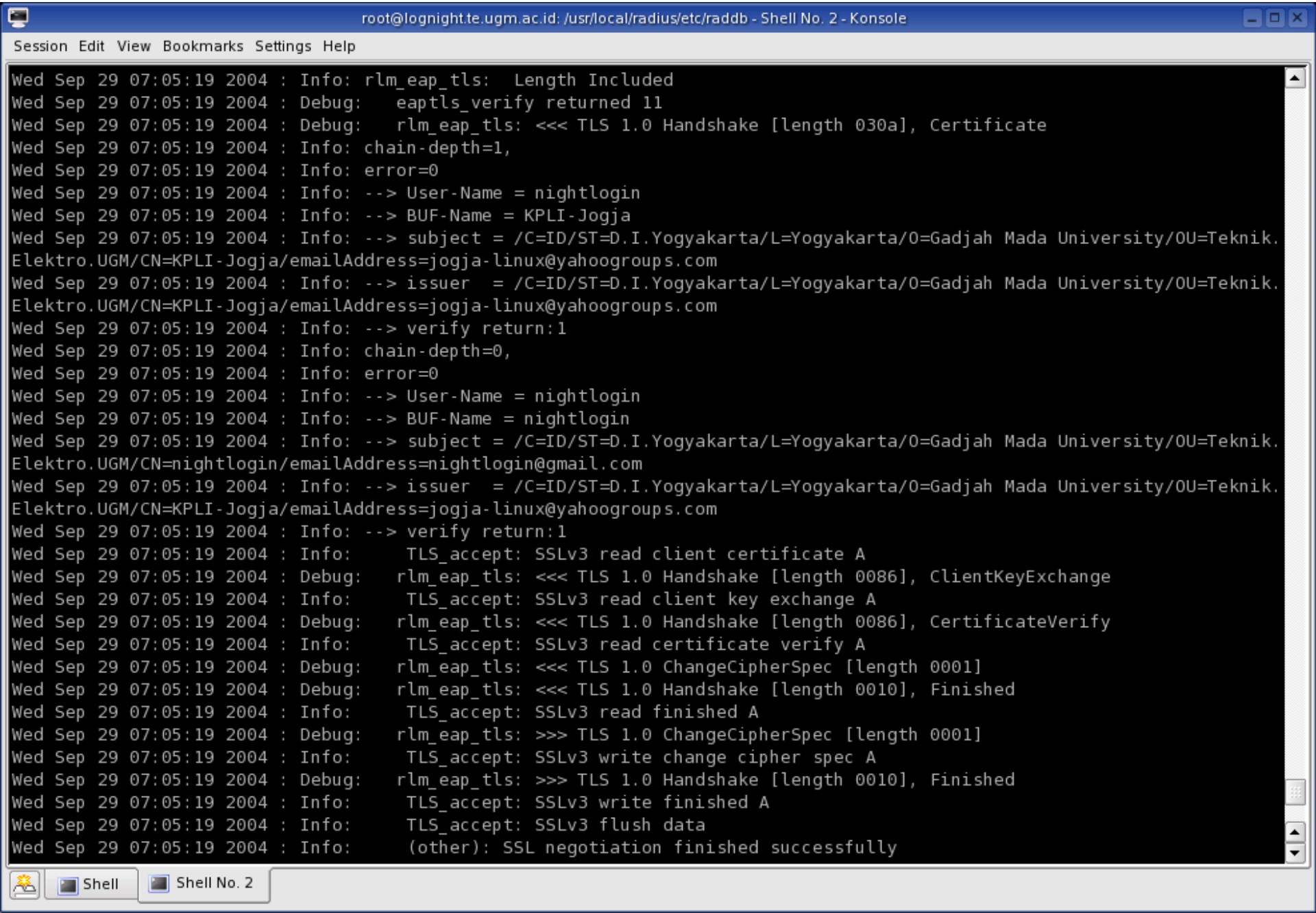
Setting Supplicant WinXP SP2 menggunakan 802.1x PEAP-MSCHAPv2

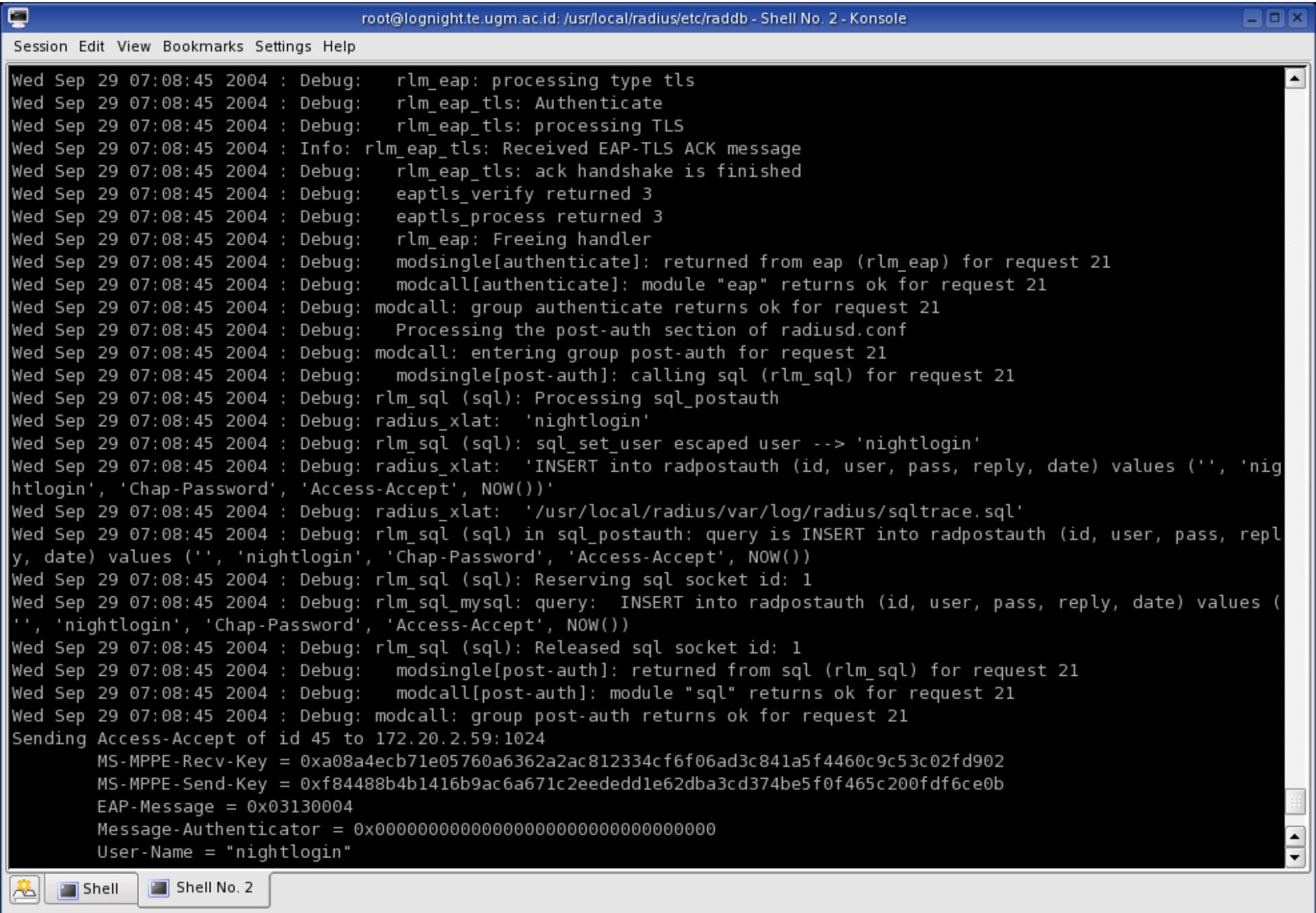


Setting Client selesai..

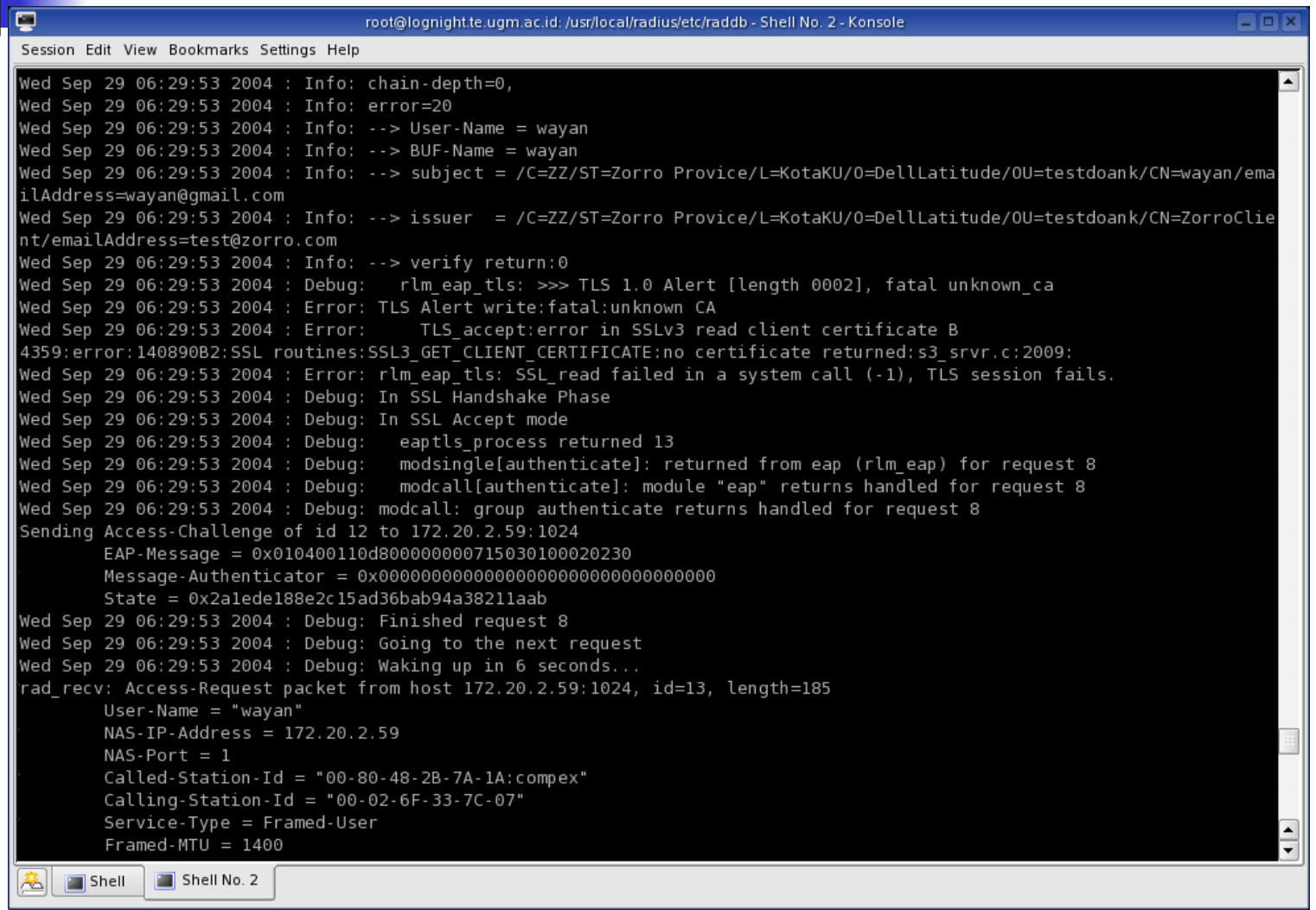
Berikut ini hasil debugging radiusd :


root@lognight.te.ugm.ac.id: /usr/local/radius/etc/raddb - Shell No. 2 - Konsole
Session Edit View Bookmarks Settings Help
Wed Sep 29 07:08:41 2004 : Debug: Finished request 20
Wed Sep 29 07:08:41 2004 : Debug: Going to the next request
Wed Sep 29 07:08:41 2004 : Debug: Waking up in 6 seconds...
rad_recv: Access-Request packet from host 172.20.2.59:1024, id=45, length=190
User-Name = "nightlogin"
NAS-IP-Address = 172.20.2.59
NAS-Port = 1
Called-Station-Id = "00-80-48-2B-7A-1A:compex"
Calling-Station-Id = "00-02-6F-33-7C-07"
Service-Type = Framed-User
Framed-MTU = 1400
NAS-Port-Type = Wireless-802.11
NAS-Identifier = "COMPEX WP11B+"
Connect-Info = "CONNECT 11Mbps 802.11b"
EAP-Message = 0x021300060d00
State = 0x9724a1a411dfc02a34128b8b7e10d282
Message-Authenticator = 0x6e349a9f7baed1dae205b0f397cf060f
Wed Sep 29 07:08:45 2004 : Debug: Processing the authorize section of radiusd.conf
Wed Sep 29 07:08:45 2004 : Debug: modcall: entering group authorize for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: calling preprocess (rlm_preprocess) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: returned from preprocess (rlm_preprocess) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall[authorize]: module "preprocess" returns ok for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: calling chap (rlm_chap) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: returned from chap (rlm_chap) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall[authorize]: module "chap" returns noop for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: calling mschap (rlm_mschap) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: returned from mschap (rlm_mschap) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall[authorize]: module "mschap" returns noop for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: calling suffix (rlm_realm) for request 21
Wed Sep 29 07:08:45 2004 : Debug: rlm_realm: No '@' in User-Name = "nightlogin", looking up realm NULL
Wed Sep 29 07:08:45 2004 : Debug: rlm_realm: No such realm "NULL"
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: returned from suffix (rlm_realm) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall[authorize]: module "suffix" returns noop for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authorize]: calling sql (rlm_sql) for request 21
Wed Sep 29 07:08:45 2004 : Debug: radius_xlat: 'nightlogin'
Shell
Shell No. 2

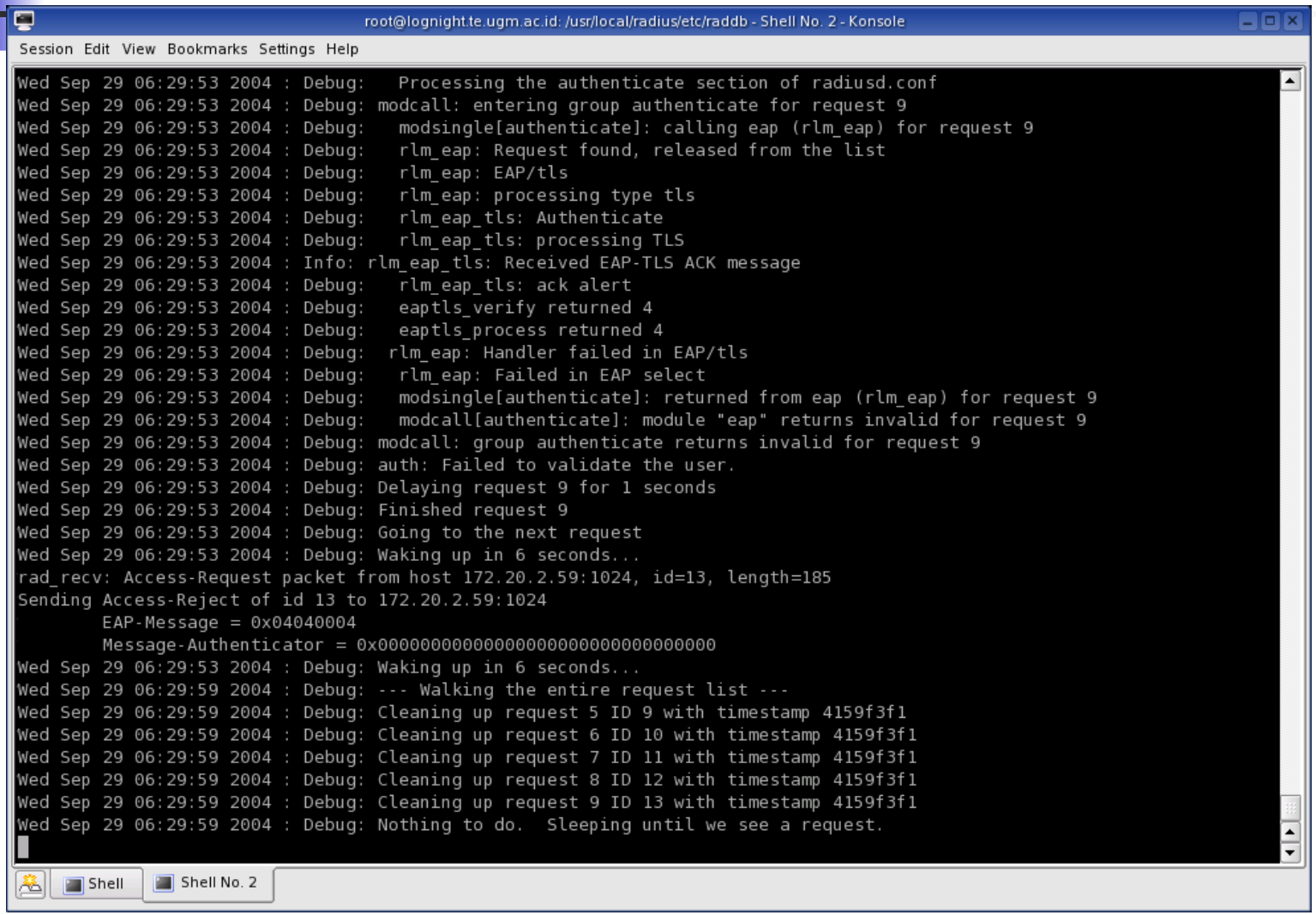

root@lognight.te.ugm.ac.id: /usr/local/radius/etc/raddb - Shell No. 2 - Konsole
Session Edit View Bookmarks Settings Help
Wed Sep 29 07:05:19 2004 : Info: rlm_eap_tls: Length Included
Wed Sep 29 07:05:19 2004 : Debug: eaptls_verify returned 11
Wed Sep 29 07:05:19 2004 : Debug: rlm_eap_tls: <<< TLS 1.0 Handshake [length 030a], Certificate
Wed Sep 29 07:05:19 2004 : Info: chain-depth=1,
Wed Sep 29 07:05:19 2004 : Info: error=0
Wed Sep 29 07:05:19 2004 : Info: --> User-Name = nightlogin
Wed Sep 29 07:05:19 2004 : Info: --> BUF-Name = KPLI-Jogja
Wed Sep 29 07:05:19 2004 : Info: --> subject = /C=ID/ST=D.I.Yogyakarta/L=Yogyakarta/O=Gadjah Mada University/OU=Teknik.
Elektro.UGM/CN=KPLI-Jogja/emailAddress=jogja-linux@yahoogroups.com
Wed Sep 29 07:05:19 2004 : Info: --> issuer = /C=ID/ST=D.I.Yogyakarta/L=Yogyakarta/O=Gadjah Mada University/OU=Teknik.
Elektro.UGM/CN=KPLI-Jogja/emailAddress=jogja-linux@yahoogroups.com
Wed Sep 29 07:05:19 2004 : Info: --> verify return:1
Wed Sep 29 07:05:19 2004 : Info: chain-depth=0,
Wed Sep 29 07:05:19 2004 : Info: error=0
Wed Sep 29 07:05:19 2004 : Info: --> User-Name = nightlogin
Wed Sep 29 07:05:19 2004 : Info: --> BUF-Name = nightlogin
Wed Sep 29 07:05:19 2004 : Info: --> subject = /C=ID/ST=D.I.Yogyakarta/L=Yogyakarta/O=Gadjah Mada University/OU=Teknik.
Elektro.UGM/CN=nightlogin/emailAddress=nightlogin@gmail.com
Wed Sep 29 07:05:19 2004 : Info: --> issuer = /C=ID/ST=D.I.Yogyakarta/L=Yogyakarta/O=Gadjah Mada University/OU=Teknik.
Elektro.UGM/CN=KPLI-Jogja/emailAddress=jogja-linux@yahoogroups.com
Wed Sep 29 07:05:19 2004 : Info: --> verify return:1
Wed Sep 29 07:05:19 2004 : Info: TLS_accept: SSLv3 read client certificate A
Wed Sep 29 07:05:19 2004 : Debug: rlm_eap_tls: <<< TLS 1.0 Handshake [length 0086], ClientKeyExchange
Wed Sep 29 07:05:19 2004 : Info: TLS_accept: SSLv3 read client key exchange A
Wed Sep 29 07:05:19 2004 : Debug: rlm_eap_tls: <<< TLS 1.0 Handshake [length 0086], CertificateVerify
Wed Sep 29 07:05:19 2004 : Info: TLS_accept: SSLv3 read certificate verify A
Wed Sep 29 07:05:19 2004 : Debug: rlm_eap_tls: <<< TLS 1.0 ChangeCipherSpec [length 0001]
Wed Sep 29 07:05:19 2004 : Debug: rlm_eap_tls: <<< TLS 1.0 Handshake [length 0010], Finished
Wed Sep 29 07:05:19 2004 : Info: TLS_accept: SSLv3 read finished A
Wed Sep 29 07:05:19 2004 : Debug: rlm_eap_tls: >>> TLS 1.0 ChangeCipherSpec [length 0001]
Wed Sep 29 07:05:19 2004 : Info: TLS_accept: SSLv3 write change cipher spec A
Wed Sep 29 07:05:19 2004 : Debug: rlm_eap_tls: >>> TLS 1.0 Handshake [length 0010], Finished
Wed Sep 29 07:05:19 2004 : Info: TLS_accept: SSLv3 write finished A
Wed Sep 29 07:05:19 2004 : Info: TLS_accept: SSLv3 flush data
Wed Sep 29 07:05:19 2004 : Info: (other): SSL negotiation finished successfully
Shell
Shell No. 2

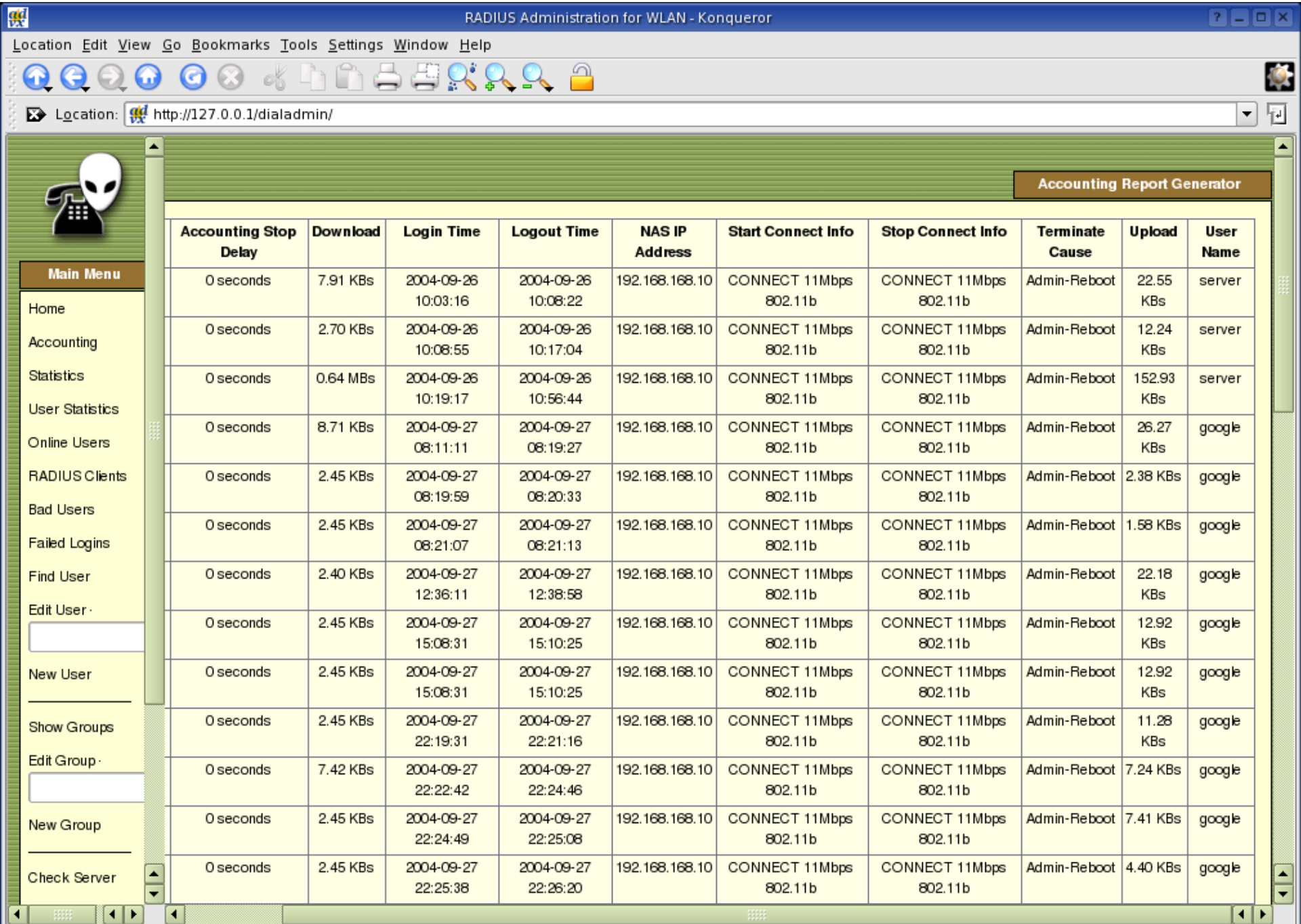

root@lognight.te.ugm.ac.id: /usr/local/radius/etc/raddb - Shell No. 2 - Konsole
Session Edit View Bookmarks Settings Help
Wed Sep 29 07:08:45 2004 : Debug: rlm_eap: processing type tls
Wed Sep 29 07:08:45 2004 : Debug: rlm_eap_tls: Authenticate
Wed Sep 29 07:08:45 2004 : Debug: rlm_eap_tls: processing TLS
Wed Sep 29 07:08:45 2004 : Info: rlm_eap_tls: Received EAP-TLS ACK message
Wed Sep 29 07:08:45 2004 : Debug: rlm_eap_tls: ack handshake is finished
Wed Sep 29 07:08:45 2004 : Debug: eaptls_verify returned 3
Wed Sep 29 07:08:45 2004 : Debug: eaptls_process returned 3
Wed Sep 29 07:08:45 2004 : Debug: rlm_eap: Freeing handler
Wed Sep 29 07:08:45 2004 : Debug: modsingle[authenticate]: returned from eap (rlm_eap) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall[authenticate]: module "eap" returns ok for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall: group authenticate returns ok for request 21
Wed Sep 29 07:08:45 2004 : Debug: Processing the post-auth section of radiusd.conf
Wed Sep 29 07:08:45 2004 : Debug: modcall: entering group post-auth for request 21
Wed Sep 29 07:08:45 2004 : Debug: modsingle[post-auth]: calling sql (rlm_sql) for request 21
Wed Sep 29 07:08:45 2004 : Debug: rlm_sql (sql): Processing sql_postauth
Wed Sep 29 07:08:45 2004 : Debug: radius_xlat: 'nightlogin'
Wed Sep 29 07:08:45 2004 : Debug: rlm_sql (sql): sql_set_user escaped user --> 'nightlogin'
Wed Sep 29 07:08:45 2004 : Debug: radius_xlat: 'INSERT into radpostauth (id, user, pass, reply, date) values ('', 'nig
htlogin', 'Chap-Password', 'Access-Accept', NOW())'
Wed Sep 29 07:08:45 2004 : Debug: radius_xlat: '/usr/local/radius/var/log/radius/sqltrace.sql'
Wed Sep 29 07:08:45 2004 : Debug: rlm_sql (sql) in sql_postauth: query is INSERT into radpostauth (id, user, pass, repl
y, date) values ('', 'nightlogin', 'Chap-Password', 'Access-Accept', NOW())
Wed Sep 29 07:08:45 2004 : Debug: rlm_sql (sql): Reserving sql socket id: 1
Wed Sep 29 07:08:45 2004 : Debug: rlm_sql_mysql: query: INSERT into radpostauth (id, user, pass, reply, date) values (
'', 'nightlogin', 'Chap-Password', 'Access-Accept', NOW())
Wed Sep 29 07:08:45 2004 : Debug: rlm_sql (sql): Released sql socket id: 1
Wed Sep 29 07:08:45 2004 : Debug: modsingle[post-auth]: returned from sql (rlm_sql) for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall[post-auth]: module "sql" returns ok for request 21
Wed Sep 29 07:08:45 2004 : Debug: modcall: group post-auth returns ok for request 21
Sending Access-Accept of id 45 to 172.20.2.59:1024
        MS-MPPE-Recv-Key = 0xa08a4ecb71e05760a6362a2ac812334cf6f06ad3c841a5f4460c9c53c02fd902
        MS-MPPE-Send-Key = 0xf84488b4b1416b9ac6a671c2eededd1e62dba3cd374be5f0f465c200fdf6ce0b
        EAP-Message = 0x03130004
        Message-Authenticator = 0x00000000000000000000000000000000
        User-Name = "nightlogin"
Shell
Shell No. 2

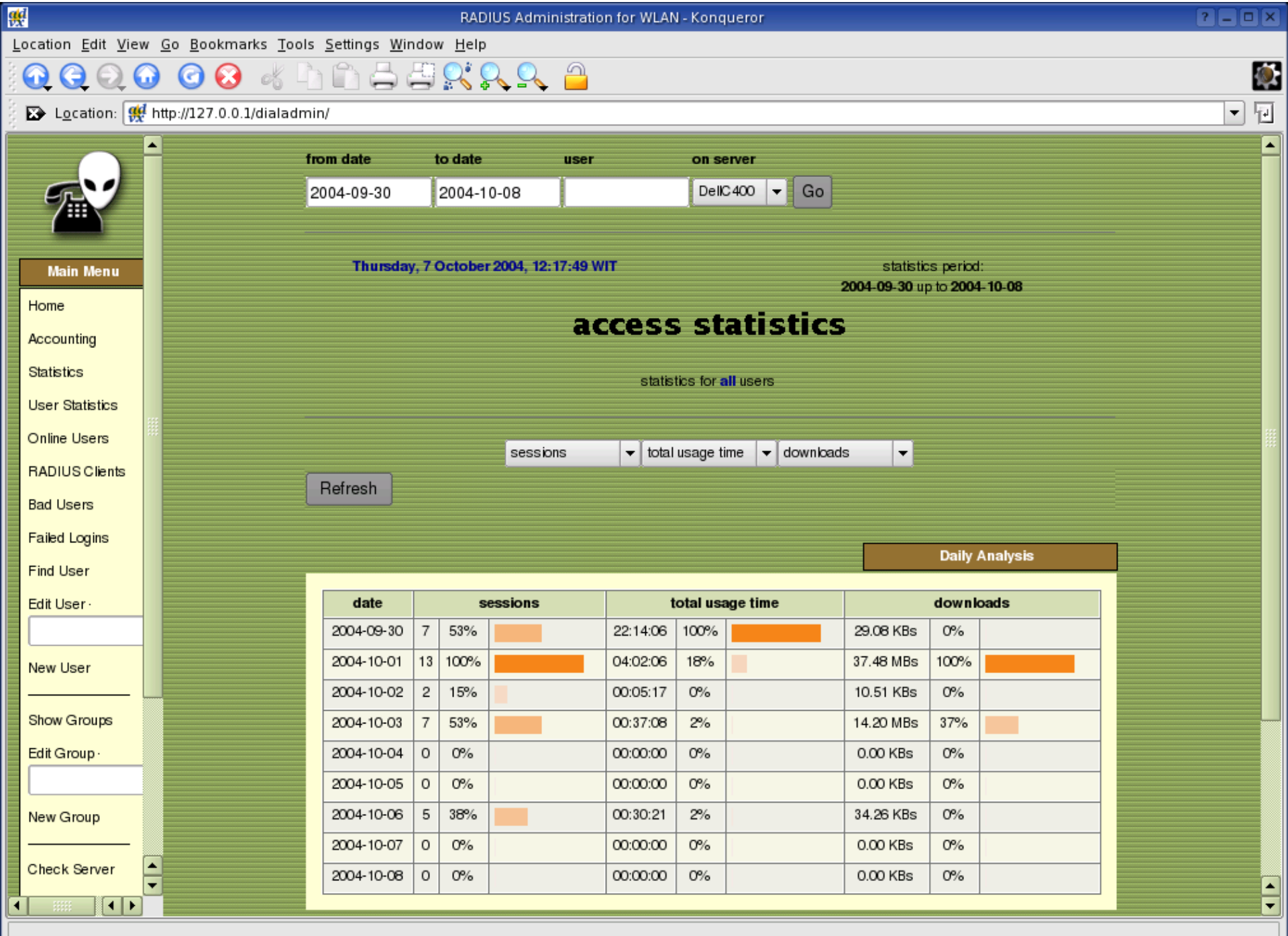
Jika terdapat Error/Failed

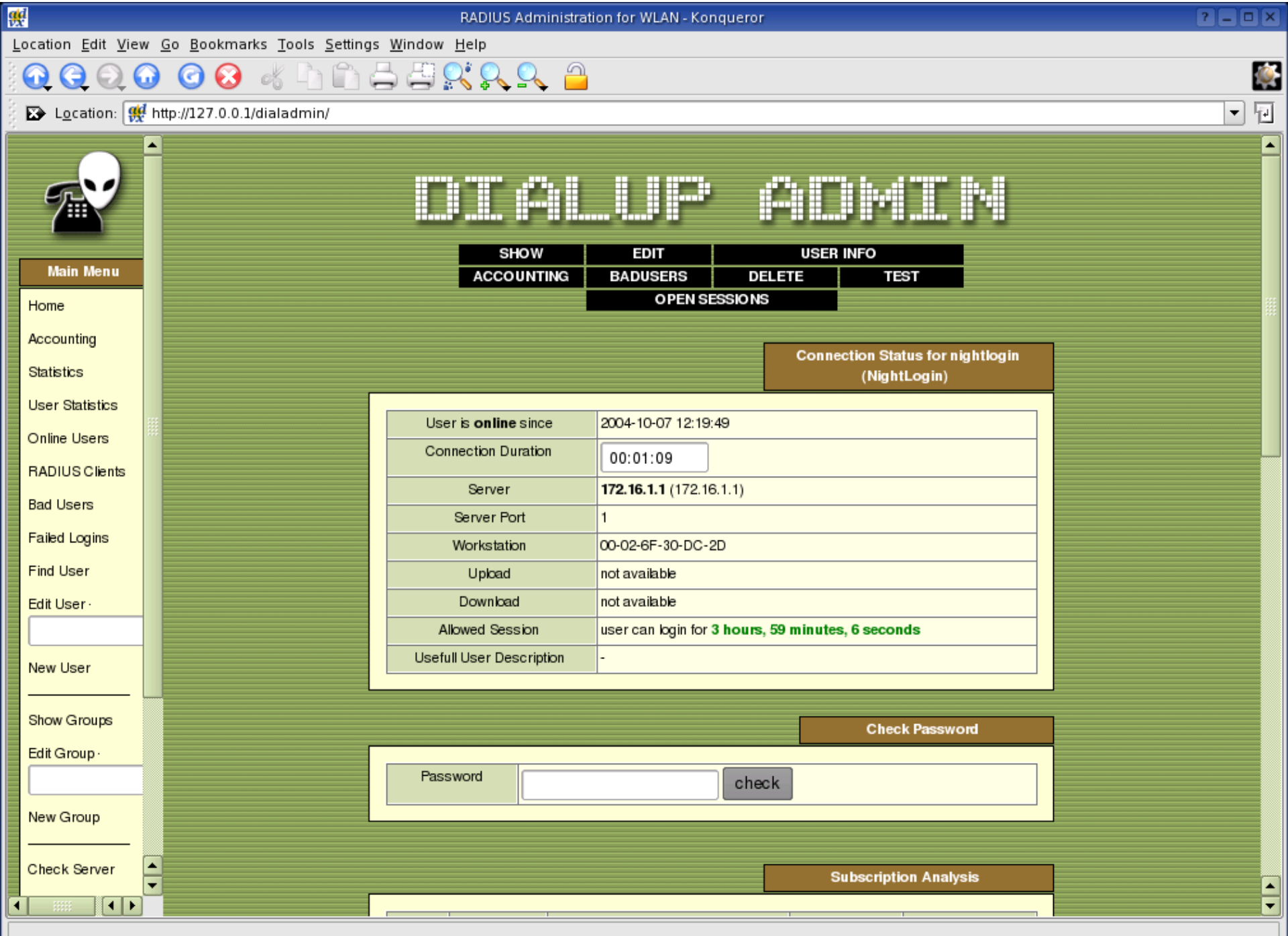


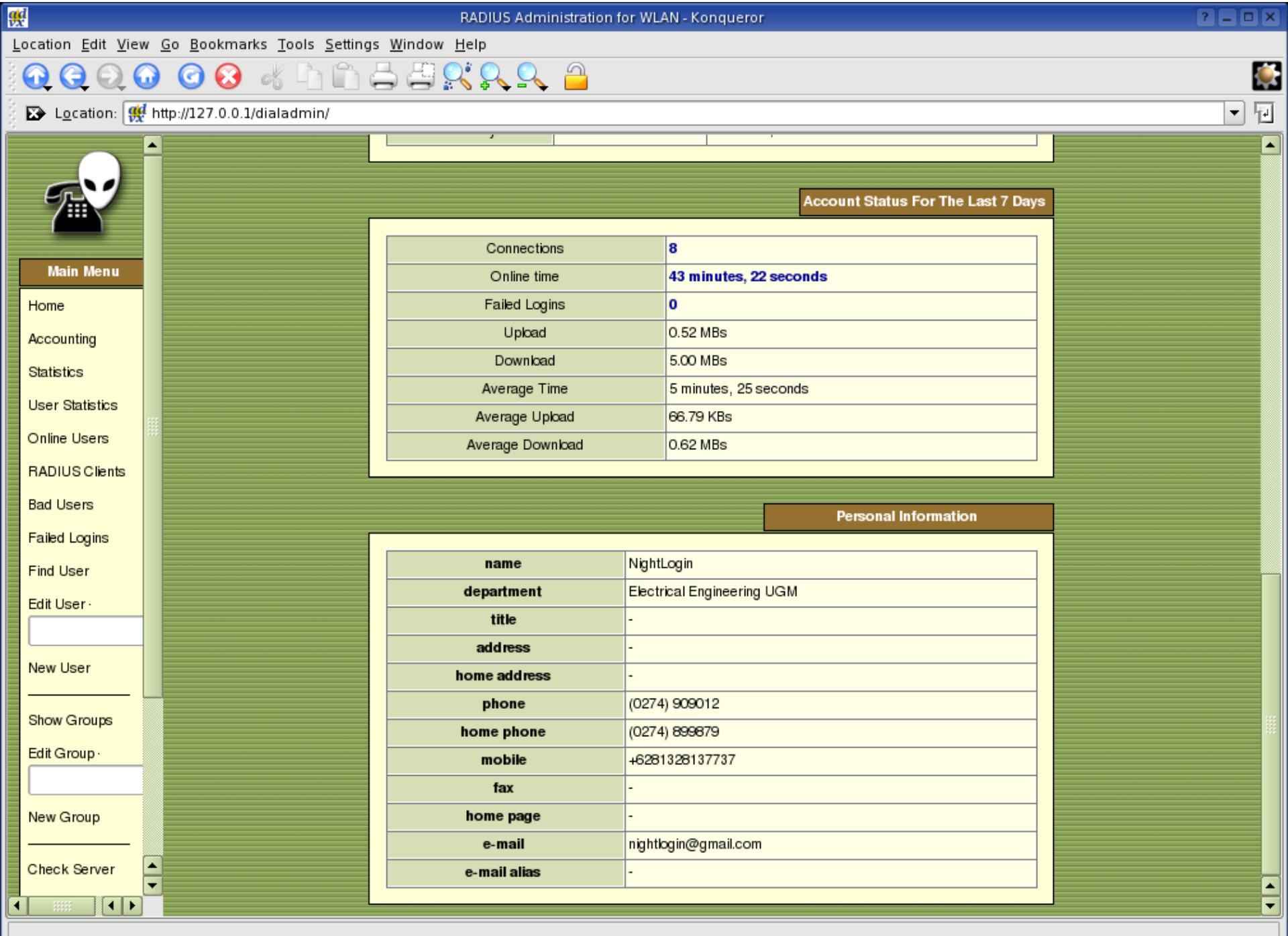
Jika terdapat Error/Failed

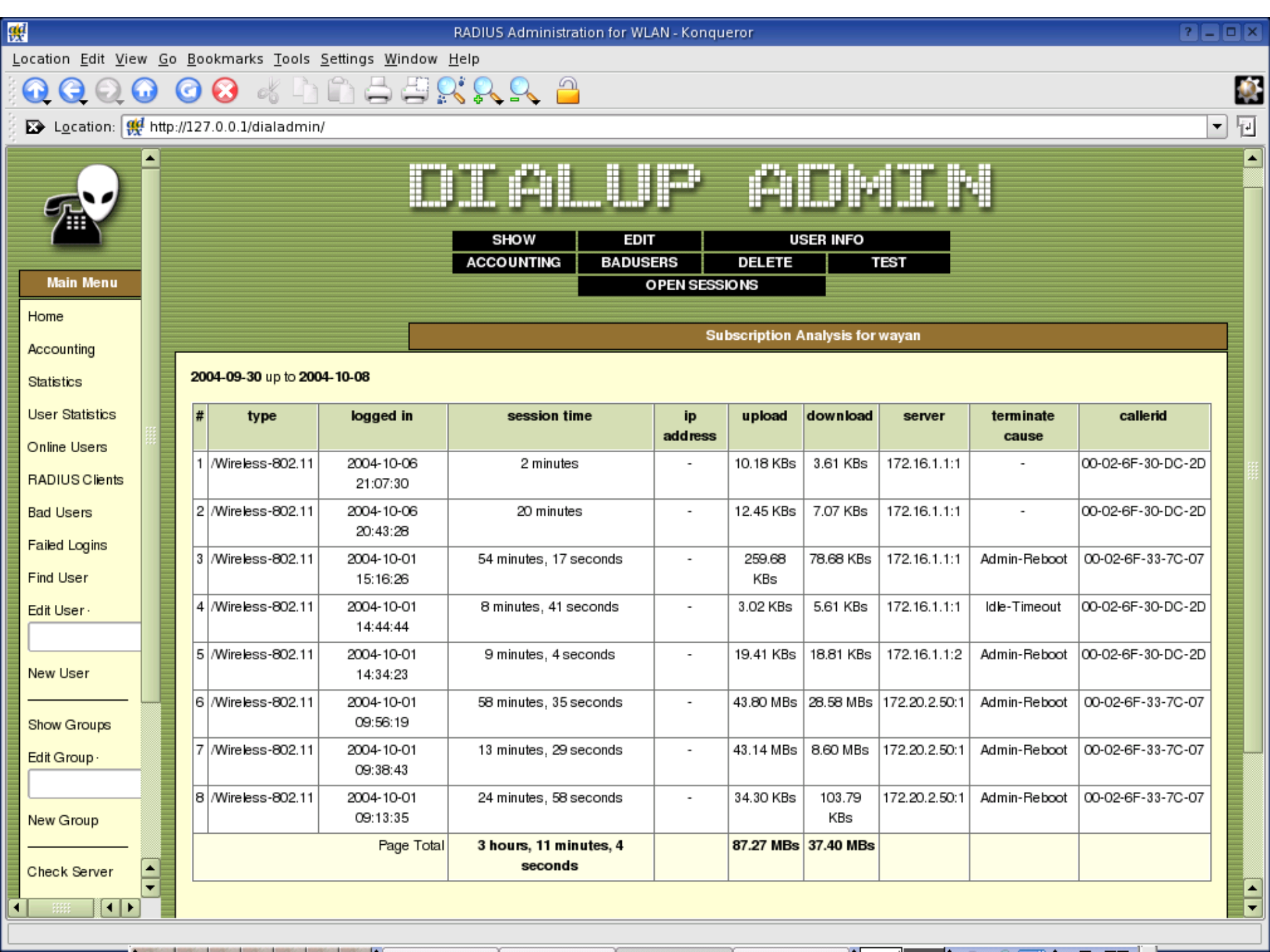



RADIUS Administration for WLAN - Konqueror
Location Edit View Go Bookmarks Tools Settings Window Help
Location: http://127.0.0.1/dialadmin/
Main Menu
Home
Accounting
Statistics
User Statistics
Online Users
RADIUS Clients
Bad Users
Failed Logins
Find User
Edit User
New User
Show Groups
Edit Group
New Group
Check Server
Accounting Report Generator
Accounting Stop Delay | Download | Login Time | Logout Time | NAS IP Address | Start Connect Info | Stop Connect Info | Terminate Cause | Upload | User Name
0 seconds | 7.91 KBs | 2004-09-26 10:03:16 | 2004-09-26 10:08:22 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 22.55 KBs | server
0 seconds | 2.70 KBs | 2004-09-26 10:08:55 | 2004-09-26 10:17:04 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 12.24 KBs | server
0 seconds | 0.64 MBs | 2004-09-26 10:19:17 | 2004-09-26 10:56:44 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 152.93 KBs | server
0 seconds | 8.71 KBs | 2004-09-27 08:11:11 | 2004-09-27 08:19:27 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 26.27 KBs | google
0 seconds | 2.45 KBs | 2004-09-27 08:19:59 | 2004-09-27 08:20:33 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 2.38 KBs | google
0 seconds | 2.45 KBs | 2004-09-27 08:21:07 | 2004-09-27 08:21:13 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 1.58 KBs | google
0 seconds | 2.40 KBs | 2004-09-27 12:36:11 | 2004-09-27 12:38:58 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 22.18 KBs | google
0 seconds | 2.45 KBs | 2004-09-27 15:08:31 | 2004-09-27 15:10:25 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 12.92 KBs | google
0 seconds | 2.45 KBs | 2004-09-27 15:08:31 | 2004-09-27 15:10:25 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 12.92 KBs | google
0 seconds | 2.45 KBs | 2004-09-27 22:19:31 | 2004-09-27 22:21:16 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 11.28 KBs | google
0 seconds | 7.42 KBs | 2004-09-27 22:22:42 | 2004-09-27 22:24:46 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 7.24 KBs | google
0 seconds | 2.45 KBs | 2004-09-27 22:24:49 | 2004-09-27 22:25:08 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 7.41 KBs | google
0 seconds | 2.45 KBs | 2004-09-27 22:25:38 | 2004-09-27 22:26:20 | 192.168.168.10 | CONNECT 11Mbps 802.11b | CONNECT 11Mbps 802.11b | Admin-Reboot | 4.40 KBs | google


RADIUS Administration for WLAN - Konqueror
Location Edit View Go Bookmarks Tools Settings Window Help
Location: http://127.0.0.1/dialadmin/
from date
to date
user
on server
2004-09-30
2004-10-08
DellC400
Go
Main Menu
Home
Accounting
Statistics
User Statistics
Online Users
RADIUS Clients
Bad Users
Failed Logins
Find User
Edit User
New User
Show Groups
Edit Group
New Group
Check Server
Thursday, 7 October 2004, 12:17:49 WIT
statistics period:
2004-09-30 up to 2004-10-08
access statistics
statistics for all users
sessions
total usage time
downloads
Refresh
Daily Analysis
date
sessions
total usage time
downloads
2004-09-30 7 53% 22:14:06 100% 29.08 KBs 0%
2004-10-01 13 100% 04:02:06 18% 37.48 MBs 100%
2004-10-02 2 15% 00:05:17 0% 10.51 KBs 0%
2004-10-03 7 53% 00:37:08 2% 14.20 MBs 37%
2004-10-04 0 0% 00:00:00 0% 0.00 KBs 0%
2004-10-05 0 0% 00:00:00 0% 0.00 KBs 0%
2004-10-06 5 38% 00:30:21 2% 34.26 KBs 0%
2004-10-07 0 0% 00:00:00 0% 0.00 KBs 0%
2004-10-08 0 0% 00:00:00 0% 0.00 KBs 0%


RADIUS Administration for WLAN - Konqueror
Location Edit View Go Bookmarks Tools Settings Window Help
Location: http://127.0.0.1/dialadmin/
DIALUP ADMIN
SHOW
EDIT
USER INFO
ACCOUNTING
BADUSERS
DELETE
TEST
OPEN SESSIONS
Main Menu
Home
Accounting
Statistics
User Statistics
Online Users
RADIUS Clients
Bad Users
Failed Logins
Find User
Edit User
New User
Show Groups
Edit Group
New Group
Check Server
Connection Status for nightlogin (NightLogin)
User is online since
2004-10-07 12:19:49
Connection Duration
00:01:09
Server
172.16.1.1 (172.16.1.1)
Server Port
1
Workstation
00-02-6F-30-DC-2D
Upload
not available
Download
not available
Allowed Session
user can login for 3 hours, 59 minutes, 6 seconds
Usefull User Description
-
Check Password
Password
check
Subscription Analysis


RADIUS Administration for WLAN - Konqueror
Location Edit View Go Bookmarks Tools Settings Window Help
Location: http://127.0.0.1/dialadmin/
Main Menu
Home
Accounting
Statistics
User Statistics
Online Users
RADIUS Clients
Bad Users
Failed Logins
Find User
Edit User ·
New User
Show Groups
Edit Group ·
New Group
Check Server
Account Status For The Last 7 Days
Connections 8
Online time 43 minutes, 22 seconds
Failed Logins 0
Upload 0.52 MBs
Download 5.00 MBs
Average Time 5 minutes, 25 seconds
Average Upload 66.79 KBs
Average Download 0.62 MBs
Personal Information
name NightLogin
department Electrical Engineering UGM
title -
address -
home address -
phone (0274) 909012
home phone (0274) 899879
mobile +6281328137737
fax -
home page -
e-mail nightlogin@gmail.com
e-mail alias -


RADIUS Administration for WLAN - Konqueror
Location Edit View Go Bookmarks Tools Settings Window Help
Location: http://127.0.0.1/dialadmin/
DIALUP ADMIN
SHOW
EDIT
USER INFO
ACCOUNTING
BADUSERS
DELETE
TEST
OPEN SESSIONS
Main Menu
Home
Accounting
Statistics
User Statistics
Online Users
RADIUS Clients
Bad Users
Failed Logins
Find User
Edit User
New User
Show Groups
Edit Group
New Group
Check Server
Subscription Analysis for wayan
2004-09-30 up to 2004-10-08
| type | logged in | session time | ip address | upload | download | server | terminate cause | callerid
1 | /Wireless-802.11 | 2004-10-06 21:07:30 | 2 minutes | - | 10.18 KBs | 3.61 KBs | 172.16.1.1:1 | - | 00-02-6F-30-DC-2D
2 | /Wireless-802.11 | 2004-10-06 20:43:28 | 20 minutes | - | 12.45 KBs | 7.07 KBs | 172.16.1.1:1 | - | 00-02-6F-30-DC-2D
3 | /Wireless-802.11 | 2004-10-01 15:16:26 | 54 minutes, 17 seconds | - | 259.68 KBs | 78.68 KBs | 172.16.1.1:1 | Admin-Reboot | 00-02-6F-33-7C-07
4 | /Wireless-802.11 | 2004-10-01 14:44:44 | 8 minutes, 41 seconds | - | 3.02 KBs | 5.61 KBs | 172.16.1.1:1 | Idle-Timeout | 00-02-6F-30-DC-2D
5 | /Wireless-802.11 | 2004-10-01 14:34:23 | 9 minutes, 4 seconds | - | 19.41 KBs | 18.81 KBs | 172.16.1.1:2 | Admin-Reboot | 00-02-6F-30-DC-2D
6 | /Wireless-802.11 | 2004-10-01 09:56:19 | 58 minutes, 35 seconds | - | 43.80 MBs | 28.58 MBs | 172.20.2.50:1 | Admin-Reboot | 00-02-6F-33-7C-07
7 | /Wireless-802.11 | 2004-10-01 09:38:43 | 13 minutes, 29 seconds | - | 43.14 MBs | 8.60 MBs | 172.20.2.50:1 | Admin-Reboot | 00-02-6F-33-7C-07
8 | /Wireless-802.11 | 2004-10-01 09:13:35 | 24 minutes, 58 seconds | - | 34.30 KBs | 103.79 KBs | 172.20.2.50:1 | Admin-Reboot | 00-02-6F-33-7C-07
Page Total | 3 hours, 11 minutes, 4 seconds | 87.27 MBs | 37.40 MBs

Implementasi 802.1x EAP-TLS dan PEAP MSCHAPv2

by
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Okt 2004
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