

**apcadmin@APCRadius:**~sudo freeradius -X | tee /tmp/radiusd.log

FreeRADIUS Version 3.0.20

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Starting - reading configuration files ...

including dictionary file /usr/share/freeradius/dictionary

including dictionary file /usr/share/freeradius/dictionary.dhcp

including dictionary file /usr/share/freeradius/dictionary.vqp

including dictionary file /etc/freeradius/3.0/dictionary

including configuration file /etc/freeradius/3.0/radiusd.conf

including configuration file /etc/freeradius/3.0/proxy.conf

including configuration file /etc/freeradius/3.0/clients.conf

including files in directory /etc/freeradius/3.0/mods-enabled/

including configuration file /etc/freeradius/3.0/mods-enabled/dhcp

including configuration file /etc/freeradius/3.0/mods-enabled/always

including configuration file /etc/freeradius/3.0/mods-enabled/unpack

including configuration file /etc/freeradius/3.0/mods-enabled/pap

including configuration file /etc/freeradius/3.0/mods-enabled/ntlm\_auth

including configuration file /etc/freeradius/3.0/mods-enabled/sradutmp

including configuration file /etc/freeradius/3.0/mods-enabled/linelog

including configuration file /etc/freeradius/3.0/mods-enabled/echo

including configuration file /etc/freeradius/3.0/mods-enabled/eap

including configuration file /etc/freeradius/3.0/mods-enabled/detail.log

including configuration file /etc/freeradius/3.0/mods-enabled/digest

including configuration file /etc/freeradius/3.0/mods-enabled/passwd

including configuration file /etc/freeradius/3.0/mods-enabled/mschap

including configuration file /etc/freeradius/3.0/mods-enabled/unix

including configuration file /etc/freeradius/3.0/mods-enabled/preprocess

including configuration file /etc/freeradius/3.0/mods-enabled/soh

including configuration file /etc/freeradius/3.0/mods-enabled/radutmp

including configuration file /etc/freeradius/3.0/mods-enabled/dynamic\_clients

including configuration file /etc/freeradius/3.0/mods-enabled/expiration

including configuration file /etc/freeradius/3.0/mods-enabled/expr

including configuration file /etc/freeradius/3.0/mods-enabled/attr\_filter

including configuration file /etc/freeradius/3.0/mods-enabled/exec

including configuration file /etc/freeradius/3.0/mods-enabled/logintime

including configuration file /etc/freeradius/3.0/mods-enabled/chap

including configuration file /etc/freeradius/3.0/mods-enabled/realm

including configuration file /etc/freeradius/3.0/mods-enabled/replicate

including configuration file /etc/freeradius/3.0/mods-enabled/files

including configuration file /etc/freeradius/3.0/mods-enabled/utf8

including configuration file /etc/freeradius/3.0/mods-enabled/detail

```
including configuration file /etc/freeradius/3.0/mods-enabled/oauth2
including configuration file /etc/freeradius/3.0/mods-enabled/cache_eap
including files in directory /etc/freeradius/3.0/policy.d/
including configuration file /etc/freeradius/3.0/policy.d/dhcp
including configuration file /etc/freeradius/3.0/policy.d/accounting
including configuration file /etc/freeradius/3.0/policy.d/moonshot-targeted-ids
including configuration file /etc/freeradius/3.0/policy.d/control
including configuration file /etc/freeradius/3.0/policy.d/eap
including configuration file /etc/freeradius/3.0/policy.d/operator-name
including configuration file /etc/freeradius/3.0/policy.d/filter
including configuration file /etc/freeradius/3.0/policy.d/canonicalization
including configuration file /etc/freeradius/3.0/policy.d/cui
including configuration file /etc/freeradius/3.0/policy.d/abfab-tr
including configuration file /etc/freeradius/3.0/policy.d/debug
including configuration file /etc/freeradius/3.0/policy.d/rfc7542
including configuration file /etc/freeradius/3.0/policy.d/oauth2
including files in directory /etc/freeradius/3.0/sites-enabled/
including configuration file /etc/freeradius/3.0/sites-enabled/default
including configuration file /etc/freeradius/3.0/sites-enabled/inner-tunnel
main {
    security {
        user = "freerad"
        group = "freerad"
        allow_core_dumps = no
    }
    name = "freeradius"
    prefix = "/usr"
    localstatedir = "/var"
    logdir = "/var/log/freeradius"
    run_dir = "/var/run/freeradius"
}
main {
    name = "freeradius"
    prefix = "/usr"
    localstatedir = "/var"
    sbindir = "/usr/sbin"
    logdir = "/var/log/freeradius"
    run_dir = "/var/run/freeradius"
    libdir = "/usr/lib/freeradius"
    radacctdir = "/var/log/freeradius/radacct"
    hostname_lookups = no
    max_request_time = 30
    cleanup_delay = 5
    max_requests = 16384
    pidfile = "/var/run/freeradius/freeradius.pid"
    checkrad = "/usr/sbin/checkrad"
    debug_level = 0
}
```

```
    proxy_requests = yes
log {
    stripped_names = no
    auth = no
    auth_badpass = no
    auth_goodpass = no
    colourise = yes
    msg_denied = "You are already logged in - access denied"
}
resources {
}
security {
    max_attributes = 200
    reject_delay = 1.000000
    status_server = yes
}
}
radiusd: ##### Loading Realms and Home Servers #####
proxy server {
    retry_delay = 5
    retry_count = 3
    default_fallback = no
    dead_time = 120
    wake_all_if_all_dead = no
}
home_server localhost {
    ipaddr = 127.0.0.1
    port = 1812
    type = "auth"
    secret = <<< secret >>>
    response_window = 20.000000
    response_timeouts = 1
    max_outstanding = 65536
    zombie_period = 40
    status_check = "status-server"
    ping_interval = 30
    check_interval = 30
    check_timeout = 4
    num_answers_to_alive = 3
    revive_interval = 120
limit {
    max_connections = 16
    max_requests = 0
    lifetime = 0
    idle_timeout = 0
}
coa {
```

```
    irt = 2
    mrt = 16
    mrc = 5
    mrd = 30
}
}
home_server_pool my_auth_failover {
    type = fail-over
    home_server = localhost
}
realm example.com {
    auth_pool = my_auth_failover
}
realm LOCAL {
}
realm student.apc.edu.au {
}
realm apc.edu.au {
}
radiusd: ##### Loading Clients #####
client localhost {
    ipaddr = 127.0.0.1
    require_message_authenticator = no
    secret = <<< secret >>>
    nas_type = "other"
    proto = "*"
    limit {
        max_connections = 16
        lifetime = 0
        idle_timeout = 30
    }
}
client localhost_ipv6 {
    ipv6addr = ::1
    require_message_authenticator = no
    secret = <<< secret >>>
    limit {
        max_connections = 16
        lifetime = 0
        idle_timeout = 30
    }
}
Debugger not attached
systemd watchdog is disabled
# Creating Auth-Type = mschap
# Creating Auth-Type = digest
# Creating Auth-Type = eap
```

```
# Creating Auth-Type = PAP
# Creating Auth-Type = CHAP
# Creating Auth-Type = MS-CHAP
# Creating Auth-Type = oauth2
radiusd: ##### Instantiating modules #####
modules {
  # Loaded module rlm_dhcp
  # Loading module "dhcp" from file /etc/freeradius/3.0/mods-enabled/dhcp
  # Loaded module rlm_always
  # Loading module "reject" from file /etc/freeradius/3.0/mods-enabled/always
  always reject {
    rcode = "reject"
    simulcount = 0
    mpp = no
  }
  # Loading module "fail" from file /etc/freeradius/3.0/mods-enabled/always
  always fail {
    rcode = "fail"
    simulcount = 0
    mpp = no
  }
  # Loading module "ok" from file /etc/freeradius/3.0/mods-enabled/always
  always ok {
    rcode = "ok"
    simulcount = 0
    mpp = no
  }
  # Loading module "handled" from file /etc/freeradius/3.0/mods-enabled/
always
  always handled {
    rcode = "handled"
    simulcount = 0
    mpp = no
  }
  # Loading module "invalid" from file /etc/freeradius/3.0/mods-enabled/always
  always invalid {
    rcode = "invalid"
    simulcount = 0
    mpp = no
  }
  # Loading module "userlock" from file /etc/freeradius/3.0/mods-enabled/
always
  always userlock {
    rcode = "userlock"
    simulcount = 0
    mpp = no
  }
}
```

```
# Loading module "notfound" from file /etc/freeradius/3.0/mods-enabled/  
always  
always notfound {  
    rcode = "notfound"  
    simulcount = 0  
    mpp = no  
}  
# Loading module "noop" from file /etc/freeradius/3.0/mods-enabled/always  
always noop {  
    rcode = "noop"  
    simulcount = 0  
    mpp = no  
}  
# Loading module "updated" from file /etc/freeradius/3.0/mods-enabled/  
always  
always updated {  
    rcode = "updated"  
    simulcount = 0  
    mpp = no  
}  
# Loaded module rlm_unpack  
# Loading module "unpack" from file /etc/freeradius/3.0/mods-enabled/  
unpack  
# Loaded module rlm_pap  
# Loading module "pap" from file /etc/freeradius/3.0/mods-enabled/pap  
pap {  
    normalise = yes  
}  
# Loaded module rlm_exec  
# Loading module "ntlm_auth" from file /etc/freeradius/3.0/mods-enabled/  
ntlm_auth  
exec ntlm_auth {  
    wait = yes  
    program = "/path/to/ntlm_auth --request-nt-key --domain=MYDOMAIN --  
username=%{mschap:User-Name} --password=%{User-Password}"  
    shell_escape = yes  
}  
# Loaded module rlm_radutmp  
# Loading module "sradutmp" from file /etc/freeradius/3.0/mods-enabled/  
sradutmp  
radutmp sradutmp {  
    filename = "/var/log/freeradius/sradutmp"  
    username = "%{User-Name}"  
    case_sensitive = yes  
    check_with_nas = yes  
    permissions = 420  
    caller_id = no
```

```

}
# Loaded module rlm_linelog
# Loading module "linelog" from file /etc/freeradius/3.0/mods-enabled/linelog
linelog {
    filename = "/var/log/freeradius/linelog"
    escape_filenames = no
    syslog_severity = "info"
    permissions = 384
    format = "This is a log message for %{User-Name}"
    reference = "messages.%{%reply:Packet-Type}:-default}"
}
# Loading module "log_accounting" from file /etc/freeradius/3.0/mods-
enabled/linelog
linelog log_accounting {
    filename = "/var/log/freeradius/linelog-accounting"
    escape_filenames = no
    syslog_severity = "info"
    permissions = 384
    format = ""
    reference = "Accounting-Request.%{%Acct-Status-Type}:-unknown}"
}
# Loading module "echo" from file /etc/freeradius/3.0/mods-enabled/echo
exec echo {
    wait = yes
    program = "/bin/echo %{User-Name}"
    input_pairs = "request"
    output_pairs = "reply"
    shell_escape = yes
}
# Loaded module rlm_eap
# Loading module "eap" from file /etc/freeradius/3.0/mods-enabled/eap
eap {
    default_eap_type = "md5"
    timer_expire = 60
    ignore_unknown_eap_types = no
    cisco_accounting_username_bug = no
    max_sessions = 16384
}
# Loaded module rlm_detail
# Loading module "auth_log" from file /etc/freeradius/3.0/mods-enabled/
detail.log
detail auth_log {
    filename = "/var/log/freeradius/radacct/%{%Packet-Src-IP-Address}:-%
{Packet-Src-IPv6-Address}}/auth-detail-%Y%m%d"
    header = "%t"
    permissions = 384
    locking = no
}

```

```

    escape_filenames = no
    log_packet_header = no
}
# Loading module "reply_log" from file /etc/freeradius/3.0/mods-enabled/
detail.log
detail reply_log {
    filename = "/var/log/freeradius/radacct/%{%{Packet-Src-IP-Address}}:-%
{Packet-Src-IPv6-Address}}/reply-detail-%Y%m%d"
    header = "%t"
    permissions = 384
    locking = no
    escape_filenames = no
    log_packet_header = no
}
# Loading module "pre_proxy_log" from file /etc/freeradius/3.0/mods-enabled/
detail.log
detail pre_proxy_log {
    filename = "/var/log/freeradius/radacct/%{%{Packet-Src-IP-Address}}:-%
{Packet-Src-IPv6-Address}}/pre-proxy-detail-%Y%m%d"
    header = "%t"
    permissions = 384
    locking = no
    escape_filenames = no
    log_packet_header = no
}
# Loading module "post_proxy_log" from file /etc/freeradius/3.0/mods-
enabled/detail.log
detail post_proxy_log {
    filename = "/var/log/freeradius/radacct/%{%{Packet-Src-IP-Address}}:-%
{Packet-Src-IPv6-Address}}/post-proxy-detail-%Y%m%d"
    header = "%t"
    permissions = 384
    locking = no
    escape_filenames = no
    log_packet_header = no
}
# Loaded module rlm_digest
# Loading module "digest" from file /etc/freeradius/3.0/mods-enabled/digest
# Loaded module rlm_passwd
# Loading module "etc_passwd" from file /etc/freeradius/3.0/mods-enabled/
passwd
passwd etc_passwd {
    filename = "/etc/passwd"
    format = "*User-Name:Crypt-Password:"
    delimiter = ":"
    ignore_nislike = no
    ignore_empty = yes
}

```



```

    allow_multiple_keys = no
    hash_size = 100
}
# Loaded module rlm_mschap
# Loading module "mschap" from file /etc/freeradius/3.0/mods-enabled/
mschap
mschap {
    use_mppe = yes
    require_encryption = no
    require_strong = no
    with_ntdomain_hack = yes
    passchange {
    }
    allow_retry = yes
    winbind_retry_with_normalised_username = no
}
# Loaded module rlm_unix
# Loading module "unix" from file /etc/freeradius/3.0/mods-enabled/unix
unix {
    radwtmp = "/var/log/freeradius/radwtmp"
}
Creating attribute Unix-Group
# Loaded module rlm_preprocess
# Loading module "preprocess" from file /etc/freeradius/3.0/mods-enabled/
preprocess
preprocess {
    huntgroups = "/etc/freeradius/3.0/mods-config/preprocess/huntgroups"
    hints = "/etc/freeradius/3.0/mods-config/preprocess/hints"
    with_ascend_hack = no
    ascend_channels_per_line = 23
    with_ntdomain_hack = no
    with_specialix_jetstream_hack = no
    with_cisco_vsa_hack = no
    with_alvarion_vsa_hack = no
}
# Loaded module rlm_soh
# Loading module "soh" from file /etc/freeradius/3.0/mods-enabled/soh
soh {
    dhcp = yes
}
# Loading module "radutmp" from file /etc/freeradius/3.0/mods-enabled/
radutmp
radutmp {
    filename = "/var/log/freeradius/radutmp"
    username = "%{User-Name}"
    case_sensitive = yes
    check_with_nas = yes
}

```

```

permissions = 384
caller_id = yes
}
# Loaded module rlm_dynamic_clients
# Loading module "dynamic_clients" from file /etc/freeradius/3.0/mods-
enabled/dynamic_clients
# Loaded module rlm_expiration
# Loading module "expiration" from file /etc/freeradius/3.0/mods-enabled/
expiration
# Loaded module rlm_expr
# Loading module "expr" from file /etc/freeradius/3.0/mods-enabled/expr
expr {
    safe_characters =
"@abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ01234567
89.-_: /äéöüàâæçèèëîïðœùûüäÿĂÉÖÜßÀÂÆÇÈÉÊËÏÔŒÙÛÜÿ"
}
# Loaded module rlm_attr_filter
# Loading module "attr_filter.post-proxy" from file /etc/freeradius/3.0/mods-
enabled/attr_filter
attr_filter attr_filter.post-proxy {
    filename = "/etc/freeradius/3.0/mods-config/attr_filter/post-proxy"
    key = "%{Realm}"
    relaxed = no
}
# Loading module "attr_filter.pre-proxy" from file /etc/freeradius/3.0/mods-
enabled/attr_filter
attr_filter attr_filter.pre-proxy {
    filename = "/etc/freeradius/3.0/mods-config/attr_filter/pre-proxy"
    key = "%{Realm}"
    relaxed = no
}
# Loading module "attr_filter.access_reject" from file /etc/freeradius/3.0/
mods-enabled/attr_filter
attr_filter attr_filter.access_reject {
    filename = "/etc/freeradius/3.0/mods-config/attr_filter/access_reject"
    key = "%{User-Name}"
    relaxed = no
}
# Loading module "attr_filter.access_challenge" from file /etc/freeradius/3.0/
mods-enabled/attr_filter
attr_filter attr_filter.access_challenge {
    filename = "/etc/freeradius/3.0/mods-config/attr_filter/access_challenge"
    key = "%{User-Name}"
    relaxed = no
}
# Loading module "attr_filter.accounting_response" from file /etc/freeradius/
3.0/mods-enabled/attr_filter

```

```

attr_filter attr_filter.accounting_response {
    filename = "/etc/freeradius/3.0/mods-config/attr_filter/
accounting_response"
    key = "%{User-Name}"
    relaxed = no
}
# Loading module "exec" from file /etc/freeradius/3.0/mods-enabled/exec
exec {
    wait = no
    input_pairs = "request"
    shell_escape = yes
    timeout = 10
}
# Loaded module rlm_logintime
# Loading module "logintime" from file /etc/freeradius/3.0/mods-enabled/
logintime
logintime {
    minimum_timeout = 60
}
# Loaded module rlm_chap
# Loading module "chap" from file /etc/freeradius/3.0/mods-enabled/chap
# Loaded module rlm_realm
# Loading module "IPASS" from file /etc/freeradius/3.0/mods-enabled/realm
realm IPASS {
    format = "prefix"
    delimiter = "/"
    ignore_default = no
    ignore_null = no
}
# Loading module "suffix" from file /etc/freeradius/3.0/mods-enabled/realm
realm suffix {
    format = "suffix"
    delimiter = "@"
    ignore_default = no
    ignore_null = no
}
# Loading module "bangpath" from file /etc/freeradius/3.0/mods-enabled/
realm
realm bangpath {
    format = "prefix"
    delimiter = "!"
    ignore_default = no
    ignore_null = no
}
# Loading module "realmpercent" from file /etc/freeradius/3.0/mods-enabled/
realm
realm realmpercent {

```

```
    format = "suffix"
    delimiter = "%"
    ignore_default = no
    ignore_null = no
}
# Loading module "ntdomain" from file /etc/freeradius/3.0/mods-enabled/
realm
realm ntdomain {
    format = "prefix"
    delimiter = "\\"
    ignore_default = no
    ignore_null = no
}
# Loaded module rlm_replicate
# Loading module "replicate" from file /etc/freeradius/3.0/mods-enabled/
replicate
# Loaded module rlm_files
# Loading module "files" from file /etc/freeradius/3.0/mods-enabled/files
files {
    filename = "/etc/freeradius/3.0/mods-config/files/authorize"
    acctusersfile = "/etc/freeradius/3.0/mods-config/files/accounting"
    preproxy_usersfile = "/etc/freeradius/3.0/mods-config/files/pre-proxy"
}
# Loaded module rlm_utf8
# Loading module "utf8" from file /etc/freeradius/3.0/mods-enabled/utf8
# Loading module "detail" from file /etc/freeradius/3.0/mods-enabled/detail
detail {
    filename = "/var/log/freeradius/radacct/%{%Packet-Source-IP-Address}:-%
{Packet-Source-IPv6-Address}}/detail-%Y%m%d"
    header = "%t"
    permissions = 384
    locking = no
    escape_filenames = no
    log_packet_header = no
}
# Loaded module rlm_perl
# Loading module "oauth2_perl" from file /etc/freeradius/3.0/mods-enabled/
oauth2
perl oauth2_perl {
    filename = "/opt/freeradius-oauth2-perl/main.pm"
    func_authorize = "authorize"
    func_authenticate = "authenticate"
    func_post_auth = "post_auth"
    func_accounting = "accounting"
    func_preacct = "preacct"
    func_checks simul = "checks simul"
    func_detach = "detach"
```

```

func_xlat = "xlat"
func_pre_proxy = "pre_proxy"
func_post_proxy = "post_proxy"
func_recv_coa = "recv_coa"
func_send_coa = "send_coa"
}
# Loaded module rlm_cache
# Loading module "oauth2_cache" from file /etc/freeradius/3.0/mods-enabled/
oauth2
cache oauth2_cache {
    driver = "rlm_cache_rbtrees"
    key = "%{User-Name}"
    ttl = 864000
    max_entries = 0
    epoch = 0
    add_stats = no
}
# Loading module "cache_eap" from file /etc/freeradius/3.0/mods-enabled/
cache_eap
cache cache_eap {
    driver = "rlm_cache_rbtrees"
    key = "%{%{control:State}:-%{%{reply:State}:-%{State}}}"
    ttl = 15
    max_entries = 0
    epoch = 0
    add_stats = no
}
}
instantiate {
}
# Instantiating module "reject" from file /etc/freeradius/3.0/mods-enabled/
always
# Instantiating module "fail" from file /etc/freeradius/3.0/mods-enabled/always
# Instantiating module "ok" from file /etc/freeradius/3.0/mods-enabled/always
# Instantiating module "handled" from file /etc/freeradius/3.0/mods-enabled/
always
# Instantiating module "invalid" from file /etc/freeradius/3.0/mods-enabled/
always
# Instantiating module "userlock" from file /etc/freeradius/3.0/mods-enabled/
always
# Instantiating module "notfound" from file /etc/freeradius/3.0/mods-enabled/
always
# Instantiating module "noop" from file /etc/freeradius/3.0/mods-enabled/
always
# Instantiating module "updated" from file /etc/freeradius/3.0/mods-enabled/
always
# Instantiating module "pap" from file /etc/freeradius/3.0/mods-enabled/pap
# Instantiating module "linelog" from file /etc/freeradius/3.0/mods-enabled/

```

linelog

```
# Instantiating module "log_accounting" from file /etc/freeradius/3.0/mods-enabled/linelog
```

```
# Instantiating module "eap" from file /etc/freeradius/3.0/mods-enabled/eap
```

```
# Linked to sub-module rlm_eap_md5
```

```
# Linked to sub-module rlm_eap_leap
```

```
# Linked to sub-module rlm_eap_gtc
```

```
gtc {
```

```
    challenge = "Password: "
```

```
    auth_type = "PAP"
```

```
}
```

```
# Linked to sub-module rlm_eap_tls
```

```
tls {
```

```
    tls = "tls-common"
```

```
}
```

```
tls-config tls-common {
```

```
    verify_depth = 0
```

```
    ca_path = "/etc/freeradius/3.0/certs"
```

```
    pem_file_type = yes
```

```
    private_key_file = "/etc/ssl/private/ssl-cert-snakeoil.key"
```

```
    certificate_file = "/etc/ssl/certs/ssl-cert-snakeoil.pem"
```

```
    ca_file = "/etc/ssl/certs/ca-certificates.crt"
```

```
    private_key_password = <<< secret >>>
```

```
    dh_file = "/etc/freeradius/3.0/certs/dh"
```

```
    fragment_size = 1024
```

```
    include_length = yes
```

```
    auto_chain = yes
```

```
    check_crl = no
```

```
    check_all_crl = no
```

```
    cipher_list = "DEFAULT"
```

```
    cipher_server_preference = no
```

```
    ecdh_curve = "prime256v1"
```

```
    disable_tlsv1 = yes
```

```
    disable_tlsv1_1 = yes
```

```
    tls_max_version = "1.2"
```

```
    tls_min_version = "1.2"
```

```
cache {
```

```
    enable = no
```

```
    lifetime = 24
```

```
    max_entries = 255
```

```
}
```

```
verify {
```

```
    skip_if_ocsp_ok = no
```

```
}
```

```
ocsp {
```

```
    enable = no
```

```
    override_cert_url = yes
```

```
url = "http://127.0.0.1/ocsp/"
use_nonce = yes
timeout = 0
softfail = no
}
}
```

Please use `tls_min_version` and `tls_max_version` instead of `disable_tlsv1`

Please use `tls_min_version` and `tls_max_version` instead of `disable_tlsv1_2`

```
# Linked to sub-module rlm_eap_ttls
```

```
ttls {
    tls = "tls-common"
    default_eap_type = "md5"
    copy_request_to_tunnel = no
    use_tunneled_reply = no
    virtual_server = "inner-tunnel"
    include_length = yes
    require_client_cert = no
}
```

tls: Using cached TLS configuration from previous invocation

```
# Linked to sub-module rlm_eap_peap
```

```
peap {
    tls = "tls-common"
    default_eap_type = "mschapv2"
    copy_request_to_tunnel = no
    use_tunneled_reply = no
    proxy_tunneled_request_as_eap = yes
    virtual_server = "inner-tunnel"
    soh = no
    require_client_cert = no
}
```

tls: Using cached TLS configuration from previous invocation

```
# Linked to sub-module rlm_eap_mschapv2
```

```
mschapv2 {
    with_ntdomain_hack = no
    send_error = no
}
```

```
# Instantiating module "auth_log" from file /etc/freeradius/3.0/mods-enabled/
detail.log
```

rlm\_detail (auth\_log): 'User-Password' suppressed, will not appear in detail output

```
# Instantiating module "reply_log" from file /etc/freeradius/3.0/mods-enabled/
detail.log
```

```
# Instantiating module "pre_proxy_log" from file /etc/freeradius/3.0/mods-
enabled/detail.log
```

```
# Instantiating module "post_proxy_log" from file /etc/freeradius/3.0/mods-
enabled/detail.log
```

```
# Instantiating module "etc_passwd" from file /etc/freeradius/3.0/mods-
```

```
enabled/passwd
rlm_passwd: nfields: 3 keyfield 0(User-Name) listable: no
# Instantiating module "mschap" from file /etc/freeradius/3.0/mods-enabled/
mschap
rlm_mschap (mschap): using internal authentication
# Instantiating module "preprocess" from file /etc/freeradius/3.0/mods-
enabled/preprocess
reading pairlist file /etc/freeradius/3.0/mods-config/preprocess/huntgroups
reading pairlist file /etc/freeradius/3.0/mods-config/preprocess/hints
# Instantiating module "expiration" from file /etc/freeradius/3.0/mods-enabled/
expiration
# Instantiating module "attr_filter.post-proxy" from file /etc/freeradius/3.0/
mods-enabled/attr_filter
reading pairlist file /etc/freeradius/3.0/mods-config/attr_filter/post-proxy
# Instantiating module "attr_filter.pre-proxy" from file /etc/freeradius/3.0/
mods-enabled/attr_filter
reading pairlist file /etc/freeradius/3.0/mods-config/attr_filter/pre-proxy
# Instantiating module "attr_filter.access_reject" from file /etc/freeradius/3.0/
mods-enabled/attr_filter
reading pairlist file /etc/freeradius/3.0/mods-config/attr_filter/access_reject
# Instantiating module "attr_filter.access_challenge" from file /etc/freeradius/
3.0/mods-enabled/attr_filter
reading pairlist file /etc/freeradius/3.0/mods-config/attr_filter/access_challenge
# Instantiating module "attr_filter.accounting_response" from file /etc/
freeradius/3.0/mods-enabled/attr_filter
reading pairlist file /etc/freeradius/3.0/mods-config/attr_filter/
accounting_response
# Instantiating module "logintime" from file /etc/freeradius/3.0/mods-enabled/
logintime
# Instantiating module "IPASS" from file /etc/freeradius/3.0/mods-enabled/
realm
# Instantiating module "suffix" from file /etc/freeradius/3.0/mods-enabled/
realm
# Instantiating module "bangpath" from file /etc/freeradius/3.0/mods-enabled/
realm
# Instantiating module "realmpercent" from file /etc/freeradius/3.0/mods-
enabled/realm
# Instantiating module "ntdomain" from file /etc/freeradius/3.0/mods-enabled/
realm
# Instantiating module "files" from file /etc/freeradius/3.0/mods-enabled/files
reading pairlist file /etc/freeradius/3.0/mods-config/files/authorize
reading pairlist file /etc/freeradius/3.0/mods-config/files/accounting
reading pairlist file /etc/freeradius/3.0/mods-config/files/pre-proxy
# Instantiating module "detail" from file /etc/freeradius/3.0/mods-enabled/
detail
# Instantiating module "oauth2_perl" from file /etc/freeradius/3.0/mods-
enabled/oauth2
```



```

    config {
        ttl = 60
    }
rlm_perl: oauth2 global
    # Instantiating module "oauth2_cache" from file /etc/freeradius/3.0/mods-
enabled/oauth2
rlm_cache (oauth2_cache): Driver rlm_cache_rbtree (module
rlm_cache_rbtree) loaded and linked
    # Instantiating module "cache_eap" from file /etc/freeradius/3.0/mods-
enabled/cache_eap
rlm_cache (cache_eap): Driver rlm_cache_rbtree (module rlm_cache_rbtree)
loaded and linked
} # modules
radiusd: ##### Loading Virtual Servers #####
server { # from file /etc/freeradius/3.0/radiusd.conf
} # server
server default { # from file /etc/freeradius/3.0/sites-enabled/default
    # Loading authenticate {...}
    # Loading authorize {...}
Ignoring "sql" (see raddb/mods-available/README.rst)
Ignoring "ldap" (see raddb/mods-available/README.rst)
    # Loading preacct {...}
    # Loading accounting {...}
    # Loading post-proxy {...}
    # Loading post-auth {...}
} # server default
server inner-tunnel { # from file /etc/freeradius/3.0/sites-enabled/inner-tunnel
    # Loading authenticate {...}
    # Loading authorize {...}
    # Loading session {...}
    # Loading post-proxy {...}
    # Loading post-auth {...}
    # Skipping contents of 'if' as it is always 'false' -- /etc/freeradius/3.0/sites-
enabled/inner-tunnel:339
} # server inner-tunnel
radiusd: ##### Opening IP addresses and Ports #####
listen {
    type = "auth"
    ipaddr = *
    port = 0
    limit {
        max_connections = 16
        lifetime = 0
        idle_timeout = 30
    }
}
listen {

```

```

    type = "acct"
    ipaddr = *
    port = 0
  limit {
    max_connections = 16
    lifetime = 0
    idle_timeout = 30
  }
}
listen {
  type = "auth"
  ipv6addr = ::
  port = 0
  limit {
    max_connections = 16
    lifetime = 0
    idle_timeout = 30
  }
}
listen {
  type = "acct"
  ipv6addr = ::
  port = 0
  limit {
    max_connections = 16
    lifetime = 0
    idle_timeout = 30
  }
}
listen {
  type = "auth"
  ipaddr = 127.0.0.1
  port = 18120
}

```

Listening on auth address \* port 1812 bound to server default

Listening on acct address \* port 1813 bound to server default

Listening on auth address :: port 1812 bound to server default

Listening on acct address :: port 1813 bound to server default

Listening on auth address 127.0.0.1 port 18120 bound to server inner-tunnel

Listening on proxy address \* port 39325

Listening on proxy address :: port 50766

Ready to process requests

(0) Received Access-Request Id 207 from 127.0.0.1:34818 to 127.0.0.1:1812  
length 98

(0) User-Name = "username@student.apc.edu.au"

(0) User-Password = "password"

(0) NAS-IP-Address = 10.1.0.39

```

(0) NAS-Port = 0
(0) Message-Authenticator = 0x143f663f5e1ad95c987a9ed14ca7ea34
(0) # Executing section authorize from file /etc/freeradius/3.0/sites-enabled/
default
(0) authorize {
(0)   policy filter_username {
(0)     if (&User-Name) {
(0)       if (&User-Name) -> TRUE
(0)       if (&User-Name) {
(0)         if (&User-Name =~ / /) {
(0)           if (&User-Name =~ / /) -> FALSE
(0)           if (&User-Name =~ /@[^@]*@/ ) {
(0)             if (&User-Name =~ /@[^@]*@/ ) -> FALSE
(0)             if (&User-Name =~ /\.\/.\/ ) {
(0)               if (&User-Name =~ /\.\/.\/ ) -> FALSE
(0)               if ((&User-Name =~ /@/) && (&User-Name !~ /@(.+)\.(\.+)$/)) {
(0)                 if ((&User-Name =~ /@/) && (&User-Name !~ /@(.+)\.(\.+)$/)) -> FALSE
(0)                 if (&User-Name =~ /\.$/ ) {
(0)                   if (&User-Name =~ /\.$/ ) -> FALSE
(0)                   if (&User-Name =~ /@\./) {
(0)                     if (&User-Name =~ /@\./) -> FALSE
(0)                   } # if (&User-Name) = notfound
(0)                 } # policy filter_username = notfound
(0)               [preprocess] = ok
(0)               [chap] = noop
(0)               [mschap] = noop
(0)               [digest] = noop
(0)             suffix: Checking for suffix after "@"
(0)             suffix: Looking up realm "student.apc.edu.au" for User-Name =
"username@student.apc.edu.au"
(0)             suffix: Found realm "student.apc.edu.au"
(0)             suffix: Adding Stripped-User-Name = "username"
(0)             suffix: Adding Realm = "student.apc.edu.au"
(0)             suffix: Authentication realm is LOCAL
(0)           [suffix] = ok
(0)         eap: No EAP-Message, not doing EAP
(0)         [eap] = noop
(0)         [files] = noop
(0)       policy oauth2.authorize {
(0)         if (&Realm && &User-Password && "%{config:realm[%
{Realm}].oauth2.discovery}") {
(0)           EXPAND realm[student.apc.edu.au].oauth2.discovery
(0)             --> realm[student.apc.edu.au].oauth2.discovery
(0)           EXPAND %{config:realm[%{Realm}].oauth2.discovery}
(0)             --> https://login.microsoftonline.com/9288f2f6-4a89-4487-8231-
f1a68d00bfa8/v2.0
(0)         if (&Realm && &User-Password && "%{config:realm[%

```

```
{Realm}].oauth2.discovery}") -> TRUE
(0) if (&Realm && &User-Password && "%{config:realm[%
{Realm}].oauth2.discovery}") {
(0) oauth2_perl: $RAD_REQUEST{'User-Name'} = &request:User-Name ->
'username@student.apc.edu.au'
(0) oauth2_perl: $RAD_REQUEST{'User-Password'} = &request:User-
Password -> 'password'
(0) oauth2_perl: $RAD_REQUEST{'NAS-IP-Address'} = &request:NAS-IP-
Address -> '10.1.0.39'
(0) oauth2_perl: $RAD_REQUEST{'NAS-Port'} = &request:NAS-Port -> '0'
(0) oauth2_perl: $RAD_REQUEST{'Event-Timestamp'} = &request:Event-
Timestamp -> 'Aug 22 2023 04:53:44 UTC'
(0) oauth2_perl: $RAD_REQUEST{'Message-Authenticator'} =
&request:Message-Authenticator -> '0x143f663f5e1ad95c987a9ed14ca7ea34'
(0) oauth2_perl: $RAD_REQUEST{'Stripped-User-Name'} =
&request:Stripped-User-Name -> 'username'
(0) oauth2_perl: $RAD_REQUEST{'Realm'} = &request:Realm ->
'student.apc.edu.au'
rlm_perl: oauth2 authorize
(0) oauth2_perl: EXPAND realm[student.apc.edu.au].oauth2.discovery
(0) oauth2_perl: --> realm[student.apc.edu.au].oauth2.discovery
(0) oauth2_perl: EXPAND %
{config:realm[student.apc.edu.au].oauth2.discovery}
(0) oauth2_perl: --> https://login.microsoftonline.com/
9288f2f6-4a89-4487-8231-f1a68d00bfa8/v2.0
(0) oauth2_perl: EXPAND https://login.microsoftonline.com/
9288f2f6-4a89-4487-8231-f1a68d00bfa8/v2.0
(0) oauth2_perl: --> https://login.microsoftonline.com/
9288f2f6-4a89-4487-8231-f1a68d00bfa8/v2.0
(0) oauth2_perl: EXPAND realm[student.apc.edu.au].oauth2.client_id
(0) oauth2_perl: --> realm[student.apc.edu.au].oauth2.client_id
(0) oauth2_perl: EXPAND %{config:realm[student.apc.edu.au].oauth2.client_id}
(0) oauth2_perl: --> 41dc9476-7506-4b23-bbfb-0178f278a40d
(0) oauth2_perl: EXPAND realm[student.apc.edu.au].oauth2.client_secret
(0) oauth2_perl: --> realm[student.apc.edu.au].oauth2.client_secret
(0) oauth2_perl: EXPAND %
{config:realm[student.apc.edu.au].oauth2.client_secret}
(0) oauth2_perl: --> clientsecretcode
rlm_perl: oauth2 worker (student.apc.edu.au): supervisor started (tid=1)
rlm_perl: oauth2 worker (student.apc.edu.au): fetching discovery document
rlm_perl: oauth2 worker (student.apc.edu.au): started (tid=2)
rlm_perl: oauth2 worker (student.apc.edu.au): sync
rlm_perl: oauth2 worker (student.apc.edu.au): sync users
rlm_perl: oauth2 worker (student.apc.edu.au): users page
rlm_perl: oauth2 worker (student.apc.edu.au): fetching token
rlm_perl: oauth2 worker (student.apc.edu.au): users page
rlm_perl: oauth2 worker (student.apc.edu.au): users page
```













```
rlm_perl: oauth2 worker (student.apc.edu.au): groups page
rlm_perl: oauth2 worker (student.apc.edu.au): groups page
rlm_perl: oauth2 worker (student.apc.edu.au): groups page
rlm_perl: oauth2 worker (student.apc.edu.au): apply
(0) oauth2_perl: &request:Event-Timestamp = $RAD_REQUEST{'Event-
Timestamp'} -> 'Aug 22 2023 04:53:44 UTC'
(0) oauth2_perl: &request:NAS-Port = $RAD_REQUEST{'NAS-Port'} -> '0'
(0) oauth2_perl: &request:User-Password = $RAD_REQUEST{'User-Password'}
-> 'password'
(0) oauth2_perl: &request:Stripped-User-Name = $RAD_REQUEST{'Stripped-
User-Name'} -> 'username'
(0) oauth2_perl: &request:Realm = $RAD_REQUEST{'Realm'} ->
'student.apc.edu.au'
(0) oauth2_perl: &request:NAS-IP-Address = $RAD_REQUEST{'NAS-IP-
Address'} -> '10.1.0.39'
(0) oauth2_perl: &request:User-Name = $RAD_REQUEST{'User-Name'} ->
'username@student.apc.edu.au'
(0) oauth2_perl: &request:Message-Authenticator =
$RAD_REQUEST{'Message-Authenticator'} ->
'0x143f663f5e1ad95c987a9ed14ca7ea34'
(0) [oauth2_perl] = notfound
(0) if (updated && "%{config:realm[%{Realm}].oauth2.cache_password}"
=~ /^(yes)?$/i) {
(0) if (updated && "%{config:realm[%{Realm}].oauth2.cache_password}"
=~ /^(yes)?$/i) -> FALSE
(0) } # if (&Realm && &User-Password && "%{config:realm[%
{Realm}].oauth2.discovery}") = notfound
(0) ... skipping else: Preceding "if" was taken
(0) } # policy oauth2.authorize = notfound
(0) [expiration] = noop
(0) [logintime] = noop
(0) pap: WARNING: No "known good" password found for the user. Not setting
Auth-Type
(0) pap: WARNING: Authentication will fail unless a "known good" password is
available
(0) [pap] = noop
(0) } # authorize = ok
(0) ERROR: No Auth-Type found: rejecting the user via Post-Auth-Type = Reject
(0) Failed to authenticate the user
(0) Using Post-Auth-Type Reject
(0) # Executing group from file /etc/freeradius/3.0/sites-enabled/default
(0) Post-Auth-Type REJECT {
(0) attr_filter.access_reject: EXPAND %{User-Name}
(0) attr_filter.access_reject: --> username@student.apc.edu.au
(0) attr_filter.access_reject: Matched entry DEFAULT at line 11
(0) [attr_filter.access_reject] = updated
(0) [eap] = noop
```

```

(0) policy remove_reply_message_if_eap {
(0)   if (&reply:EAP-Message && &reply:Reply-Message) {
(0)   if (&reply:EAP-Message && &reply:Reply-Message) -> FALSE
(0)   else {
(0)     [noop] = noop
(0)   } # else = noop
(0) } # policy remove_reply_message_if_eap = noop
(0) } # Post-Auth-Type REJECT = updated
(0) Delaying response for 1.000000 seconds
(0) (0) Discarding duplicate request from client localhost port 34818 - ID: 207
due to delayed response
Waking up in 0.9 seconds.
(0) (0) Discarding duplicate request from client localhost port 34818 - ID: 207
due to delayed response
Waking up in 0.9 seconds.
rlm_perl: oauth2 worker (student.apc.edu.au): syncing in 58 seconds
(0) Sending delayed response
(0) Sent Access-Reject Id 207 from 127.0.0.1:1812 to 127.0.0.1:34818 length 20
Waking up in 3.9 seconds.
(1) Received Access-Request Id 27 from 127.0.0.1:42542 to 127.0.0.1:1812
length 98
(1) User-Name = "username@student.apc.edu.au"
(1) User-Password = "password"
(1) NAS-IP-Address = 10.1.0.39
(1) NAS-Port = 0
(1) Message-Authenticator = 0x301c03e7734d0cf00d74da6379289159
(1) # Executing section authorize from file /etc/freeradius/3.0/sites-enabled/
default
(1) authorize {
(1)   policy filter_username {
(1)     if (&User-Name) {
(1)     if (&User-Name) -> TRUE
(1)     if (&User-Name) {
(1)       if (&User-Name =~ / /) {
(1)       if (&User-Name =~ / /) -> FALSE
(1)       if (&User-Name =~ /[^\@]*@/) {
(1)       if (&User-Name =~ /[^\@]*@/) -> FALSE
(1)       if (&User-Name =~ /\.\/) {
(1)       if (&User-Name =~ /\.\/) -> FALSE
(1)       if ((&User-Name =~ /@/) && (&User-Name !~ /@(.+)\.(.+)$/)) {
(1)       if ((&User-Name =~ /@/) && (&User-Name !~ /@(.+)\.(.+)$/)) -> FALSE
(1)       if (&User-Name =~ /\.$/ ) {
(1)       if (&User-Name =~ /\.$/ ) -> FALSE
(1)       if (&User-Name =~ /@\./) {
(1)       if (&User-Name =~ /@\./) -> FALSE
(1)     } # if (&User-Name) = notfound
(1)   } # policy filter_username = notfound

```

```
(1) [preprocess] = ok
(1) [chap] = noop
(1) [mschap] = noop
(1) [digest] = noop
(1) suffix: Checking for suffix after "@"
(1) suffix: Looking up realm "student.apc.edu.au" for User-Name =
"username@student.apc.edu.au"
(1) suffix: Found realm "student.apc.edu.au"
(1) suffix: Adding Stripped-User-Name = "username"
(1) suffix: Adding Realm = "student.apc.edu.au"
(1) suffix: Authentication realm is LOCAL
(1) [suffix] = ok
(1) eap: No EAP-Message, not doing EAP
(1) [eap] = noop
(1) [files] = noop
(1) policy oauth2.authorize {
(1)   if (&Realm && &User-Password && "%{config:realm[%
{Realm}].oauth2.discovery}") {
(1)     EXPAND realm[student.apc.edu.au].oauth2.discovery
(1)     --> realm[student.apc.edu.au].oauth2.discovery
(1)     EXPAND %{config:realm[%{Realm}].oauth2.discovery}
(1)     --> https://login.microsoftonline.com/9288f2f6-4a89-4487-8231-
f1a68d00bfa8/v2.0
(1)     if (&Realm && &User-Password && "%{config:realm[%
{Realm}].oauth2.discovery}") -> TRUE
(1)     if (&Realm && &User-Password && "%{config:realm[%
{Realm}].oauth2.discovery}") {
(1) oauth2_perl: $RAD_REQUEST{'User-Name'} = &request:User-Name ->
'username@student.apc.edu.au'
(1) oauth2_perl: $RAD_REQUEST{'User-Password'} = &request:User-
Password -> 'password'
(1) oauth2_perl: $RAD_REQUEST{'NAS-IP-Address'} = &request:NAS-IP-
Address -> '10.1.0.39'
(1) oauth2_perl: $RAD_REQUEST{'NAS-Port'} = &request:NAS-Port -> '0'
(1) oauth2_perl: $RAD_REQUEST{'Event-Timestamp'} = &request:Event-
Timestamp -> 'Aug 22 2023 04:54:45 UTC'
(1) oauth2_perl: $RAD_REQUEST{'Message-Authenticator'} =
&request:Message-Authenticator ->
'0x301c03e7734d0cf00d74da6379289159'
(1) oauth2_perl: $RAD_REQUEST{'Stripped-User-Name'} =
&request:Stripped-User-Name -> 'username'
(1) oauth2_perl: $RAD_REQUEST{'Realm'} = &request:Realm ->
'student.apc.edu.au'
rlm_perl: oauth2 authorize
(1) oauth2_perl: &request:Event-Timestamp = $RAD_REQUEST{'Event-
Timestamp'} -> 'Aug 22 2023 04:54:45 UTC'
(1) oauth2_perl: &request:NAS-Port = $RAD_REQUEST{'NAS-Port'} -> '0'
```

```

(1) oauth2_perl: &request:User-Password = $RAD_REQUEST{'User-Password'}
-> 'password'
(1) oauth2_perl: &request:Stripped-User-Name = $RAD_REQUEST{'Stripped-
User-Name'} -> 'username'
(1) oauth2_perl: &request:Realm = $RAD_REQUEST{'Realm'} ->
'student.apc.edu.au'
(1) oauth2_perl: &request:NAS-IP-Address = $RAD_REQUEST{'NAS-IP-
Address'} -> '10.1.0.39'
(1) oauth2_perl: &request:User-Name = $RAD_REQUEST{'User-Name'} ->
'username@student.apc.edu.au'
(1) oauth2_perl: &request:Message-Authenticator =
$RAD_REQUEST{'Message-Authenticator'} ->
'0x301c03e7734d0cf00d74da6379289159'
(1) [oauth2_perl] = notfound
(1) if (updated && "%{config:realm[%{Realm}].oauth2.cache_password}"
=~ /^^(yes)?$/i) {
(1) if (updated && "%{config:realm[%{Realm}].oauth2.cache_password}"
=~ /^^(yes)?$/i) -> FALSE
(1) } # if (&Realm && &User-Password && "%{config:realm[%
{Realm}].oauth2.discovery}") = notfound
(1) ... skipping else: Preceding "if" was taken
(1) } # policy oauth2.authorize = notfound
(1) [expiration] = noop
(1) [logintime] = noop
(1) pap: WARNING: No "known good" password found for the user. Not setting
Auth-Type
(1) pap: WARNING: Authentication will fail unless a "known good" password is
available
(1) [pap] = noop
(1) } # authorize = ok
(1) ERROR: No Auth-Type found: rejecting the user via Post-Auth-Type = Reject
(1) Failed to authenticate the user
(1) Using Post-Auth-Type Reject
(1) # Executing group from file /etc/freeradius/3.0/sites-enabled/default
(1) Post-Auth-Type REJECT {
(1) attr_filter.access_reject: EXPAND %{User-Name}
(1) attr_filter.access_reject: --> username@student.apc.edu.au
(1) attr_filter.access_reject: Matched entry DEFAULT at line 11
(1) [attr_filter.access_reject] = updated
(1) [eap] = noop
(1) policy remove_reply_message_if_eap {
(1) if (&reply:EAP-Message && &reply:Reply-Message) {
(1) if (&reply:EAP-Message && &reply:Reply-Message) -> FALSE
(1) else {
(1) [noop] = noop
(1) } # else = noop
(1) } # policy remove_reply_message_if_eap = noop

```

(1) } # Post-Auth-Type REJECT = updated  
(1) Delaying response for 1.000000 seconds  
Waking up in 0.3 seconds.  
Waking up in 0.6 seconds.  
(1) Sending delayed response  
(1) Sent Access-Reject Id 27 from 127.0.0.1:1812 to 127.0.0.1:42542 length 20  
Waking up in 0.3 seconds.  
(0) Cleaning up request packet ID 207 with timestamp +9  
Waking up in 3.6 seconds.  
(1) Cleaning up request packet ID 27 with timestamp +70  
Ready to process requests