

# RADIUS

ARMUNS/CIT-UNS

<armuns@uns.ac.rs>

# Osnovni pojmovi RADIUS protokola

- **Remote Authentication Dial In User Service**
- Protokol za autentifikaciju, autorizaciju i akaunting
- Komunikacija između NAS i AAA servera
- RADIUS – RFC 2865, RFC 2866
- RadSec (RADIUS over TCP and TLS) – RFC 6614

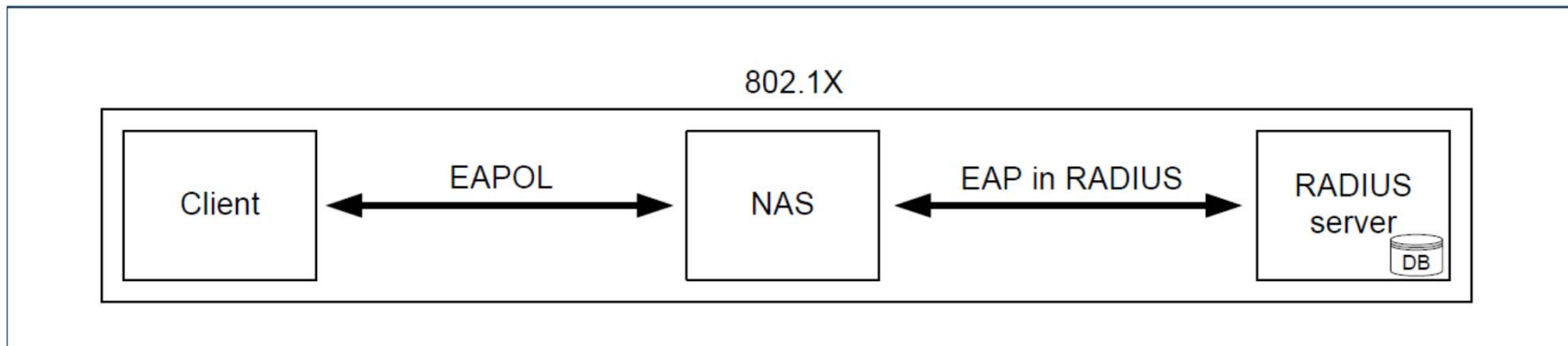
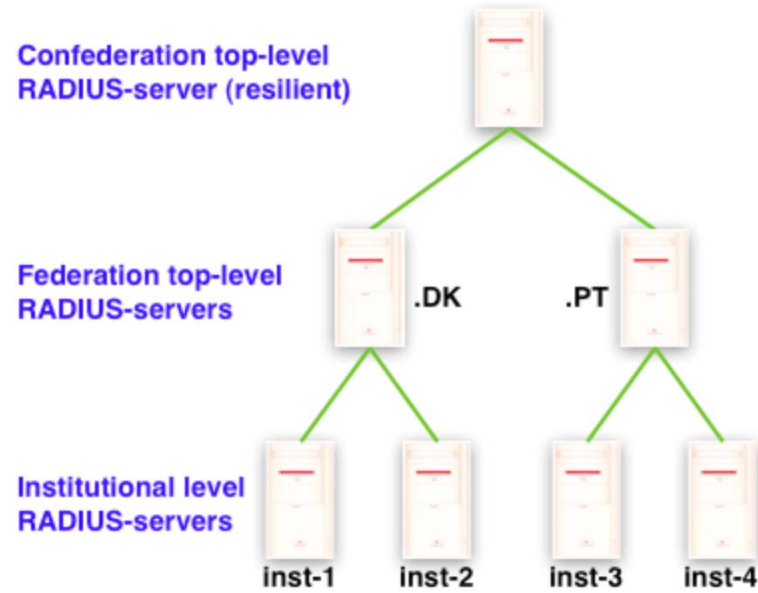
# FreeRADIUS

- Najpolupalrniji Open Source RADIUS server
- Najrasprostranjeniji RADIUS server na svetu
- Poslednja stabilna verzija 3.0.10
- <http://freeradius.org/>

# Instalacija FreeRADIUS-a

- Preporučuje se instalacija 3.x.x verzije FreeRADIUS-a
- Build and install  
<http://wiki.freeradius.org/building/Build>
- yum - Yellowdog Updater Modified  
yum install freeradius

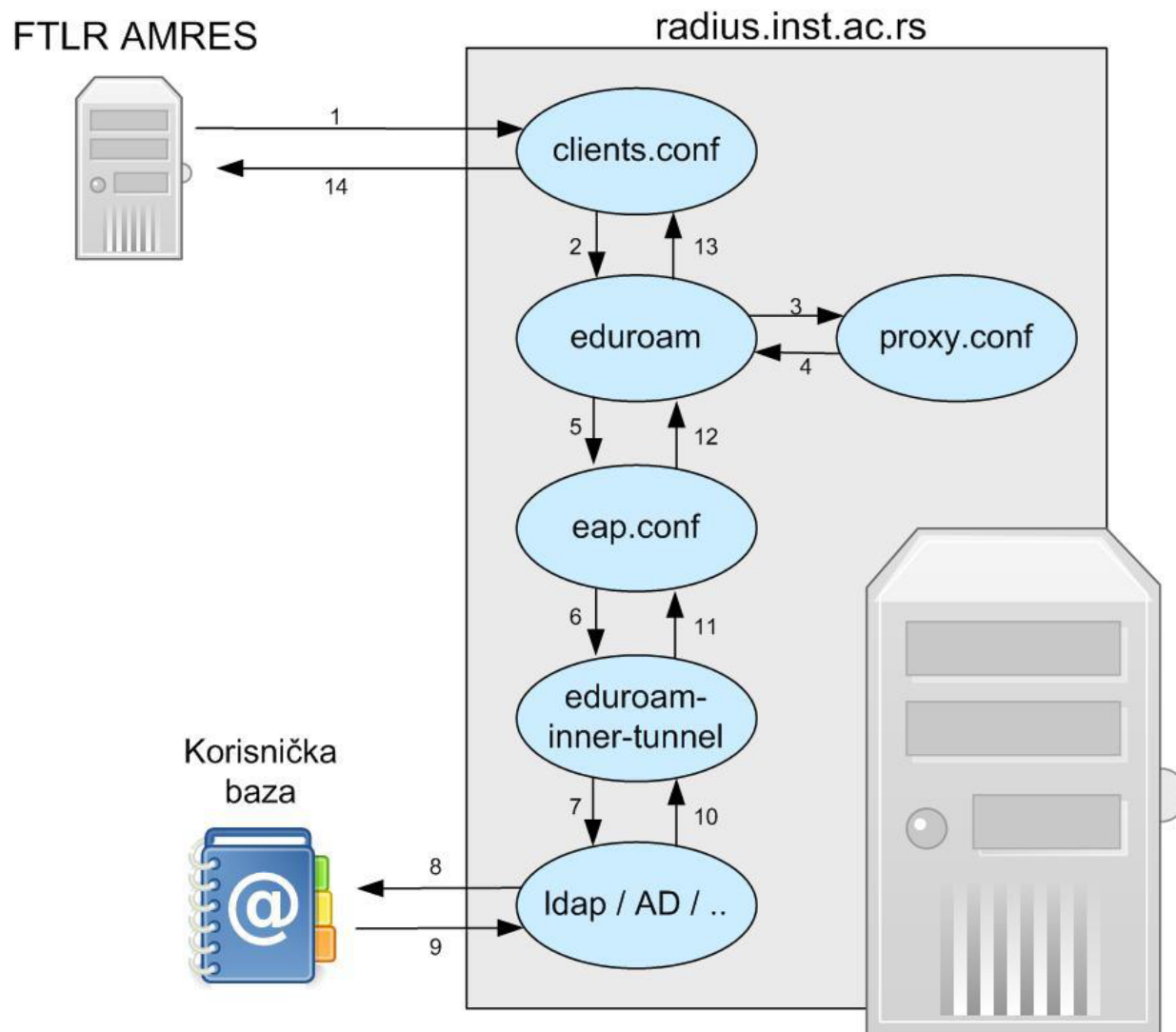
# eduroam



# eduroam

- **Davalac servisa** (Service Provider - SP) organizator nacionalnog eduroamservisa–AMRES
- **Davalac identiteta** (Identity Provider - IdP) matična institucija, obezbeđuje korisničke kredencijale i vrši autentifikaciju svojih korisnika
- **Davalac resursa** (Resource Provider - RP) obezbeđuje resurse za pristup Internetu (bežične ili žičane) i vrši kontrolu pristupa

# eduroam - IdP



# eduroam - IdP

- radiusd.conf
- clients.conf
- default / eduroam
- inner-tunnel / eduroam-inner-tunnel
- eap.conf
- proxy.conf



# eduroam - IdP

- EAP-TLS
- EAP-TTLS
- EAP-PEAP

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

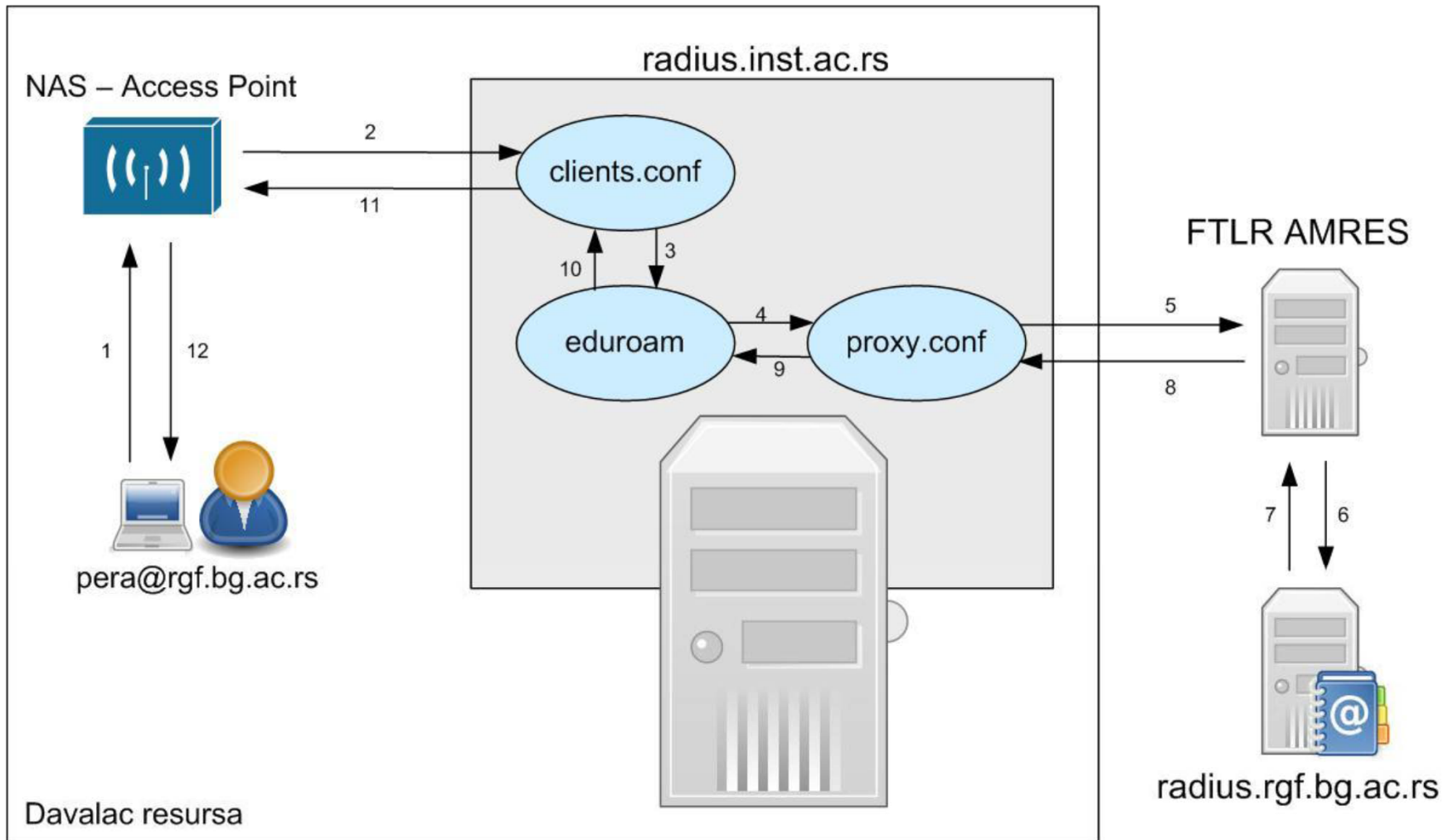
    tls {
        certdir = ${confdir}/certs
        cadir = ${confdir}/certs/eduroam-CA/
        private_key_password = someverylongandsecurepassword
        private_key_file = ${certdir}/cert-srv.key
        certificate_file = ${certdir}/cert-srv.pem
        CA_file = ${cadir}/cacert.pem
        dh_file = ${certdir}/dh
        random_file = /dev/urandom
        fragment_size = 1024
        include_length = yes
        check_crl = no
        cipher_list = "DEFAULT"
    }

    ttls {
        default_eap_type = mschapv2
        copy_request_to_tunnel = yes
        use_tunneled_reply = yes
        virtual_server = "eduroam-inner-tunnel"
    }

    peap {
        default_eap_type = mschapv2
        copy_request_to_tunnel = yes
        use_tunneled_reply = yes
        virtual_server = "eduroam-inner-tunnel"
    }

    mschapv2 {
    }
}
}
```

# eduroam - RP



# eduroam - RP

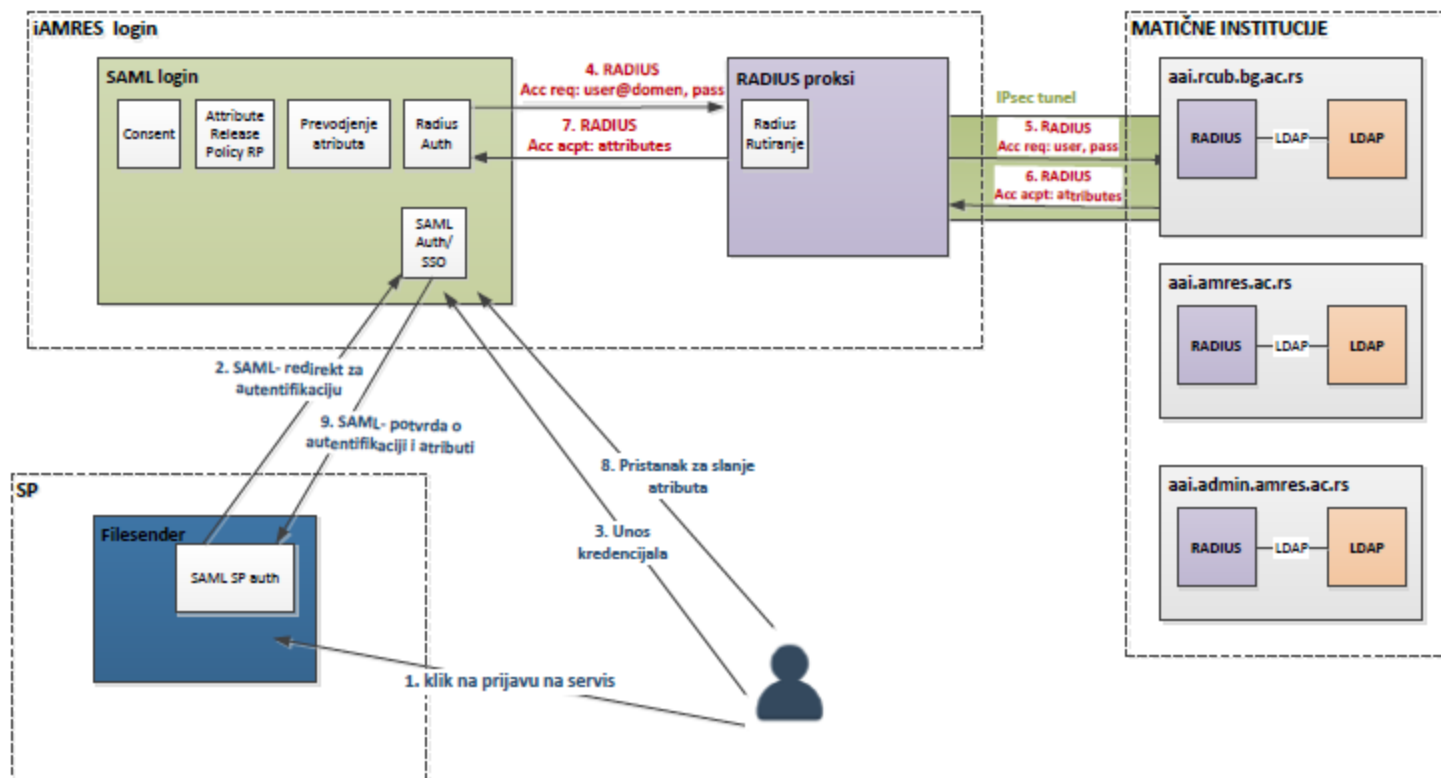
- radiusd.conf
- clients.conf
- default / eduroam
- proxy.conf

- <https://www.eduroam.org/downloads/docs/GN2-08-230-DJ5.1.5.3-eduroamCookbook.pdf>

# iAMRES

- Federacija identiteta
- Davalac identiteta
- Davalac servisa

# iAMRES



- <https://www.amres.ac.rs/institucije/iamres-federacija-identiteta>