LDAP - osnove

- LDAP (*engl. Lightweight Directory Access Protocol*) →mrežni standard
- Direktorij – baza podataka

  (četiri skupine)
- povijesni razvoj:

  X.500, DAP, LDAP

LDAP - osnove

- Tim Howes, Steve Kille i Wengyik Yeong – tvorci LDAP protokola

Organizacija LDAP -a

- Podaci na LDAP poslužitelju organizirani su u hijerarhijsko-relacijskom formatu
  - LDAP se zasniva na četiri modela:

informacijski model
model imenovanja
model funkcionalnosti
sigurnosni model

Informacijski model

- razred
- atributi
- sintaksa atributa
- zapisi
- shema

Model imenovanja

- organizacija i referenciranje podataka
- informacijsko stablo direktorija

Model funkcionalnosti

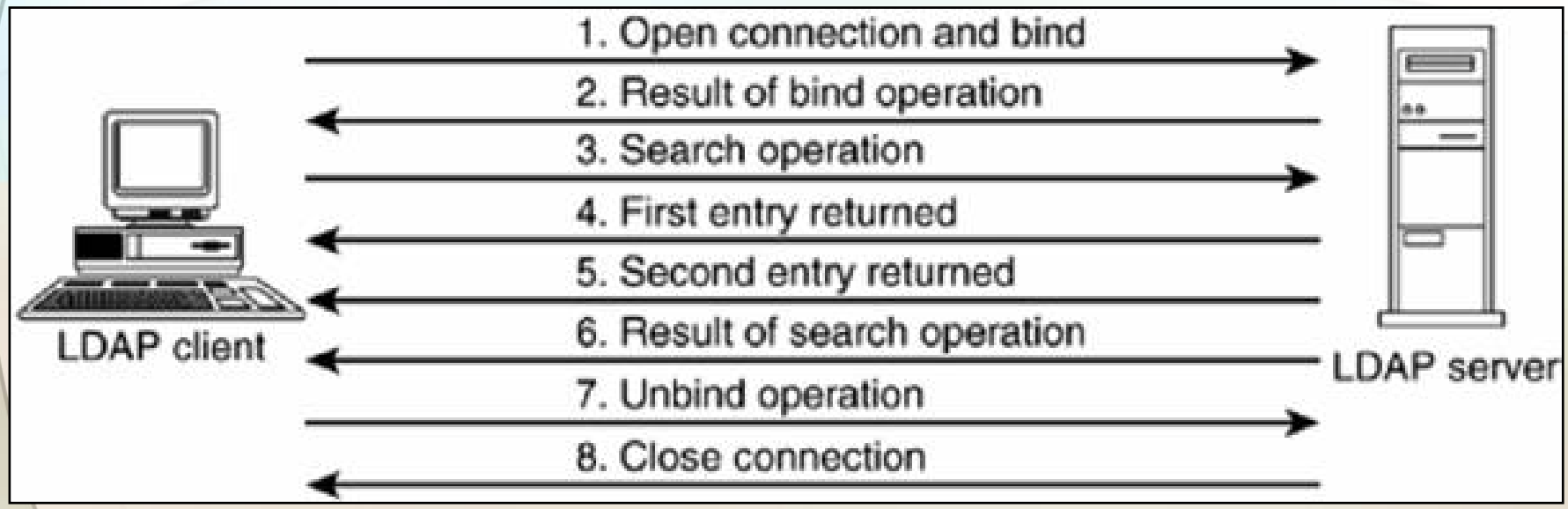
- autentikacija
  Open, Bind, Unbind
- pretraživanje
  Search, Compare
- izmjena
  Add, Modify, Modify RDN, Delete

Sigurnosni model

- siguran pristup podacima
- SASL (*Simple Authentication and Security Layer*) mehanizama

LDAP komunikacija

- komunikacija u 8 koraka:



LDAP IMPLEMENTACIJE

OpenLDAP

Apple Open Directory

Novell eDirectory

IBM Tivoli Directory Server

Microsoft Active Directory

Apache Directory Server

Fedora Directory Server

Oracle Internet Directory

SIDVault (Simple Integration Database)

OpenLDAP

- besplatna, *opensource* implementacija LDAP-a
- OpenLDAP projekt je započeo razvijati 1998. Kurt Zeileng

OpenLDAP

- OpenLDAP softver uključuje:

samostalni LDAP server (slapd)

samostalni LDAP replikacijski server (slurpd)

set razvojnih alata (ldap)

razni drugi alati

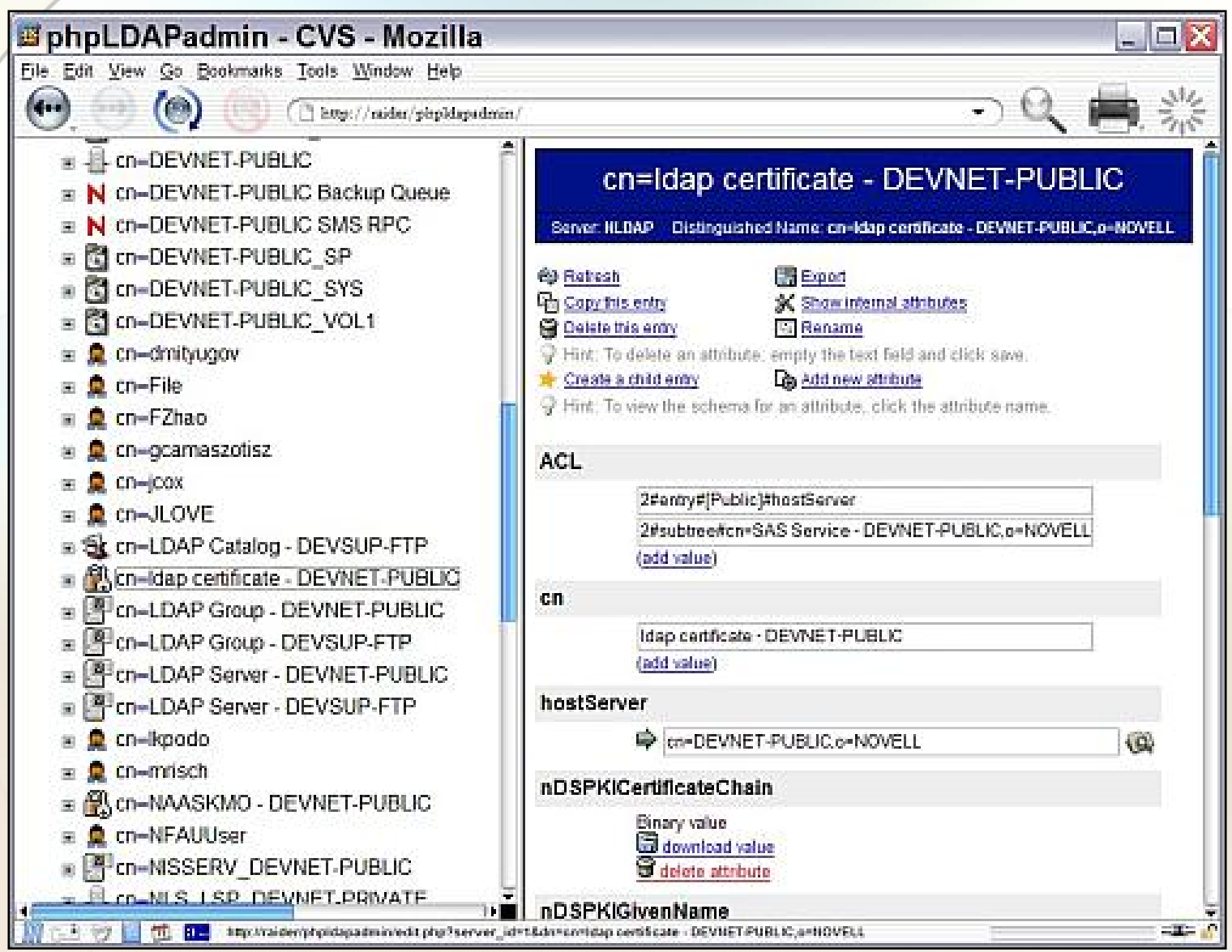
Glavne verzije OpenLDAP-a

- OpenLDAPv1 – "*pročišćavanje*"
- OpenLDAPv2.0 – *LDAPv3, IPv6*
- OpenLDAPv2.1 – *SASL podrška*
- OpenLDAPv2.2 – *LDAP sync engine*
- OpenLDAPv2.3 – *Password Policy*

Novell eDirectory

- prije poznat kao Novell Directory Service
- koristi se u više od 80% *Fortune 1000* kompanija
- objektno-orijentirana baza podataka

Novell eDirectory



Microsoft Active Directory

- Prvi prikaz bio je 1996. sa Windowsima 2000
- centralna
  baza podataka
- veličina instalacije varira (10^2 – 10^6 objekata)

Struktura Microsoft Active Directory-ja

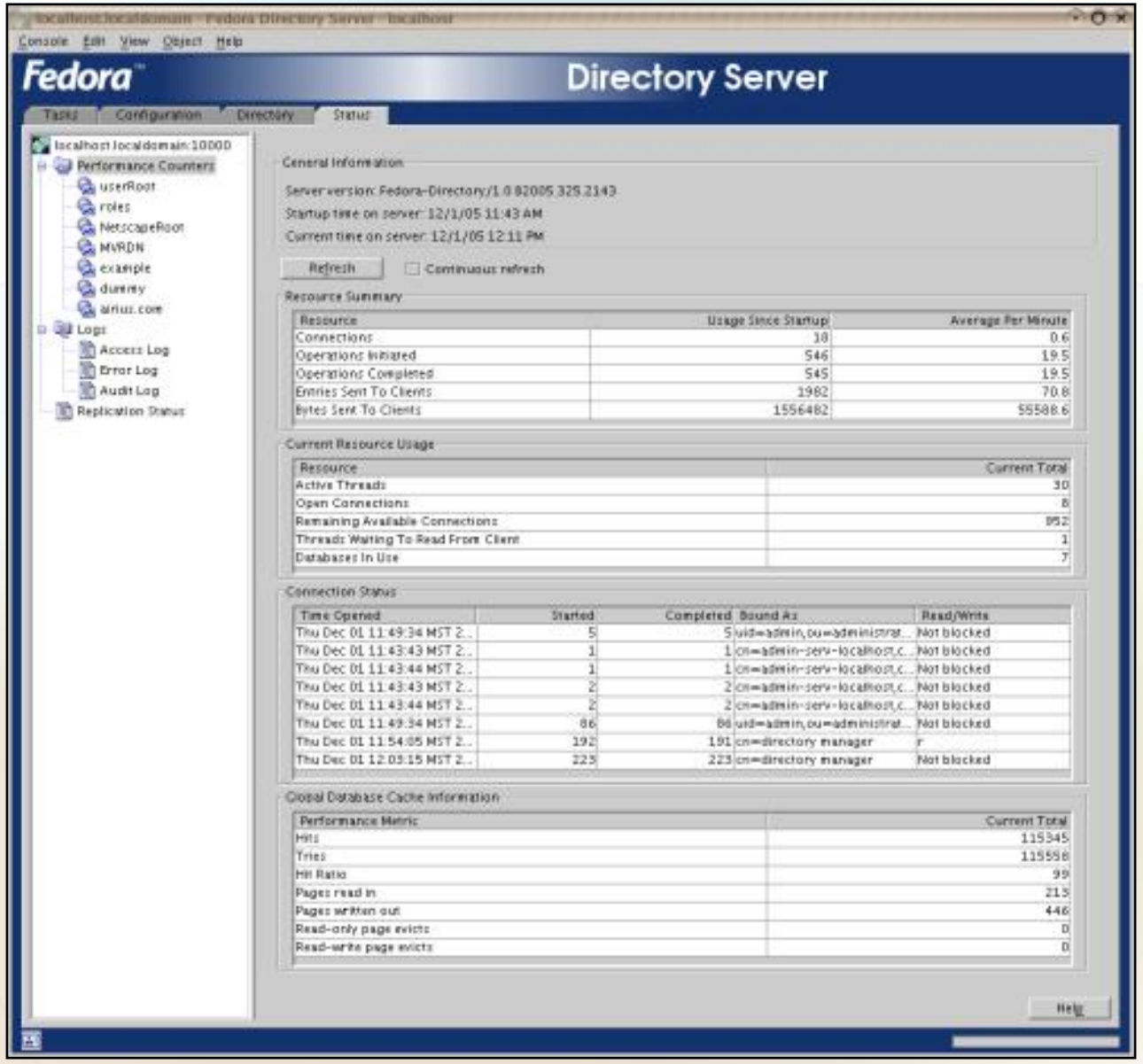
- objekti
- stabla, šume, domene
- povjerenje (trust):

  one way,two way, trusting domain, trusted domain, transitive trust, intransitive trust, explicit trust, cross-link trust

Fedora Directory Server

- LDAP server razvijen od strane Red Hat-a
- bivši *slapd* projekt Sveučilišta Michigan
- Netscape Communications Corp. preuzima
- Red Hat – 1.lipanj 2005. →opensource
- multi-master ability

Fedora Directory Server



Oracle Internet Directory

- integracija sa Oracle bazama podataka
- više-platformska struktura
- integracija certifikata o postojećim javnim ključevima
- suživot sa ostalim LDAP implementacijama

SIDVault (Simple Integration Database)

- trenutno najbrži, potpuni LDAP server na tržištu (tvrde u kompaniji)
- Podupire sve relevantne RFC protokole: LDAPv2, LDAPv3, HTTP, ILS
- lagana integracija sa sadašnjim LDAP sistemima
- Podržava *Microsoft NetMeeting Client* i *Microsoft Portrait*

SIDVault (Simple Integration Database)

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