



OpenDS

A multi-purpose LDAP directory service

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OpenDS

<http://www.opensds.org>

- Open source project launched in July 2006
- Under the CDDL license
- Sponsored by Sun, built by Java and LDAP experts
- Code available at <https://opensds.dev.java.net>

Goals

- Meet today's and tomorrow's requirements
 - Hundreds of Millions of entries
 - Entries with more data
 - Data more transient
 - Increased performances
- A comprehensive Directory Service

OpenDS 1.0

- Released on July 2008
- Install in 6 clicks and less than 3 minutes
- Fully compliant with LDAPv3
+ many extensions
- Multi-Master Replication (up to 4 masters)
- Can be embedded in Java applications
- Support through Sun OpenDS SE 1.0

OpenDS 1.2

- Released on Feb 6th, 2009
- Available with OpenSolaris 2009.06
- New Features:
 - SVR4/IPS Package, SMF & RBAC support
 - Control-Panel
 - SASL encryption
 - Access Control based on Security level

OpenDS 2.0

- Will be released next week
- New features:
 - Locale specific matching rules
 - Recurring and scheduled tasks
 - Assured Replication (up to 8 Masters)
 - Layered security with SASL and TLS
- Support through Sun OpenDS SE 2.0

What do you expect from LDAP ?

- Features Complete
- Security
- Performances
- Reliability and Availability

Features Complete

- Fully support LDAPv3 + many standard and experimental extensions
- Online Monitoring, Management Tasks, online and offline
- Multi-Master Replication
- Graphical Control-Panel + Tools
- Extensible through plugins

Security

- LDAPS or TLS over LDAP
- TLS with Pluggable Security Modules: JCEKS and Bouncy Castle
- SASL: Digest-MD5, Kerberos... + Encryption
- Access Controls and Privileges
- Password specific policies

Performances

- Scales up to hundreds of Millions of entries
- Our daily tests : 10 000 000 entries
- Throughput:
 - Reads from 2000 to 100 000 ops/sec
 - Writes from 1000 to 17 000 mods/sec
- Response time < 1 ms average

Some numbers

	Throughput	Resource Utilization	Response Time
Import	10 000		
Read	30 000	CPU Bound	0.2ms
Write	10 000	I/O + Locking	0.6ms
Mixed (90/10%)	24 430	CPU at 80%	1.2ms

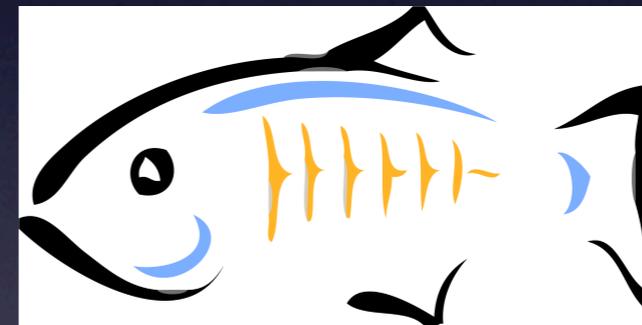
OpenDS trunk (1.3.0-bld) with latest Java 6, Running on x4600 128GB, Solaris 10u6 + ZFS, replicated, loaded with 10M entries, Average Size 0.5K.

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Reliability & Availability

- Java Platform
- Sun Quality: tests for compliance, attacks, stress, features, long duration
- Availability through Multi-Master Replication
- But truly, only Customers can testify reliability: CDOVar, TANDBERG, SYMEOS

Who ?



But Also...

- Some individuals have:
 - Deployed OpenDS as Linux naming server
 - Integrated OpenDS with SAMBA
 - Used OpenDS as Kerberos user store
 - Used OpenDS with LifeRay, Adempiere, SugarCRM, Crowd, DB2, Apache WS and Tomcat, ...

OpenDS Unique Advantages

- 100% Java
 - Platform independent
 - Can be embedded
- Easy to Install, Manage, Use
- Availability with Multi-Master Replication
- Unmatched performances
- Growth capacity

Summary

- OpenDS is an LDAPv3 Directory Service
 - Easy to use and manage
 - Protects your data
 - Scales to Millions of entries
- It can be used in many different ways :
invent your own !
- Check <http://www.opensds.org/>

Join the Project

- Register on Java.net
- Go to OpenDS project
<<https://opends.dev.java.net>>
- Click on Join/Login
- The “User” role gives access to mailing lists and issue tracker





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