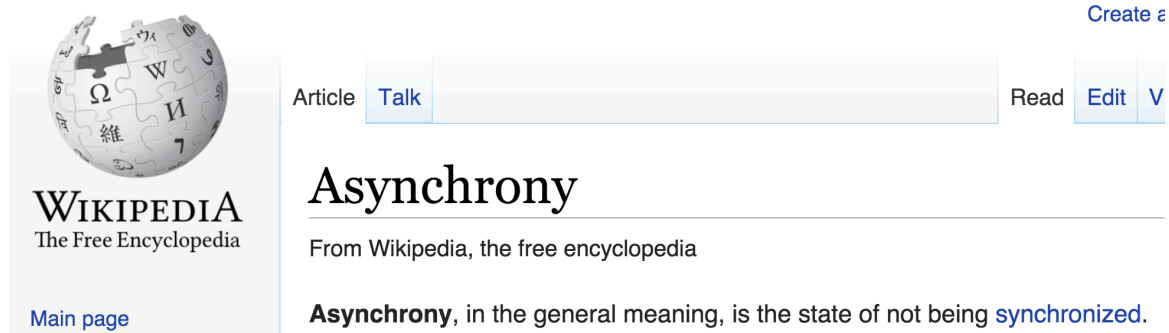# ASYNC LDAP PROGRAMMING IS FULL OF PROMISES!

Ludovic Poitou
Matthew Swift

What is Asynchronous

Create a

Article | **Talk**   Read | **Edit** | V

Asynchrony

From Wikipedia, the free encyclopedia

Asynchrony, in the general meaning, is the state of not being synchronized.

WIKIPEDIA
The Free Encyclopedia

Main page

- In Programming, Sync = Call, wait for result, process result.
- Async: Non blocking, return immediately, callback on result.

Why Using Asynchronous ?

- Blocking = Waiting

- Use threads and parallelize

  - Too many threads implies context switching

- All our machines now have many CPUs. Let's keep them busy.

Promises

- Instead of specifying a callback, return a Promise

- Benefits:

  - Cleaner method signatures

  - Uniform return/error semantic

  - Easy composition

  - Easy sequential/parallel join

  - Always async

  - Exception like error bubbling

Java LDAP Programming

- JNDI
  - Old and Strange Abstractions
  - But part of Java by default
  - Only synchronous APIs
  - To parallelize work, use Executors
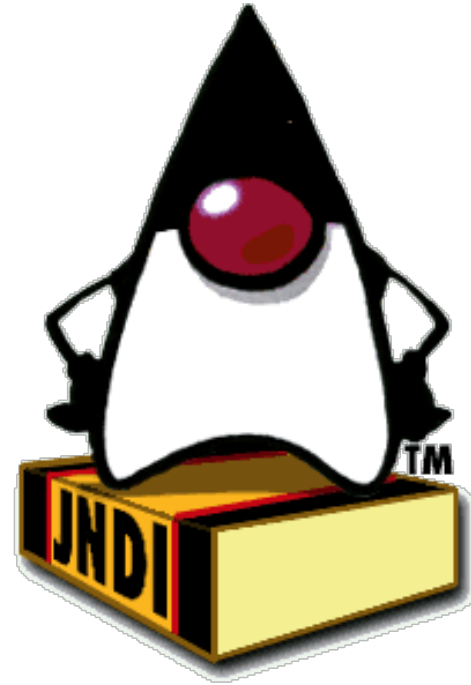
OpenDJ LDAP SDK

- Pure Java library
- Provides classes and methods for all LDAPv3 operations
- Support for LDIF reading / writing, Schema…
- Support for LDAP Controls and Extended Operations from many servers
- Easy-to-use connection management, connection pooling, load balancing
- Performance tools and examples
- Both Synchronous and Asynchronous methods based on Promises

Live Performing…

Sorry no violin ;)

Thanks

Forgerock.com

ForgeRock

ForgeRockIdentity

ForgeRock

ForgeRock

blog.forgerock.com