**LDAP**

I will focus on why using LDAP, not what is LDAP.

The use model is similar like how people use library cards or phonebooks. When you have a task that requires “write/update once, read/query many times”, you might consider using LDAP. LDAP is designed to provide extremely fast read/query performance for a large scale of dataset. Typically you want to store only a small piece of information for each entry. The add/delete/update performance is relatively slower compared with read/query because the assumption is that you don’t do “update” that often.

Imagine you have a website that has a million registered users with thousands of page requests per second. Without LDAP, every time users click a page, even for static page viewing, you will probably need to interact with your database to validate the user ID and its digital signature for this login session. Obviously, the query to your database for user-validation will become your bottleneck. By using LDAP, you can easily offload the user validation and gain significant performance improvement. Essentially, in this example, LDAP is another optimization layer outside your database to enhance performance, not replacing any database functions.

LDAP is not just for user validation, any task that has the following properties might be a good use case for LDAP:

1. You need to locate ONE piece of data many times and you want it fast
2. You don’t care about the logic and relations between different data
3. You don’t update, add, or delete the data very often
4. The size of each data entry is small
5. You don’t mind having all these small pieces of data at a centralized place

**Advantages**

* LDAP main usage is to provider faster retrieval of data . It acts as a central repository for storing user details that can be accessed by various application at same time .
* The data that is read various time but we rarely update the data then LDAP is better option as it is faster to read in it because of its structure but updating(add/updatee or delete) is bit tedious job in case of LDAP
* Security provided by LDAP : LDAP can work with SSL & TLS and thus can be used for sensitive information .
* LDAP also can work with number of database providing greater flexibility to choose database best suited for our environment
* Can be a better option for synchronising information between master and its replicase
* LDAP apart from supporting the data recovery capability .Also , allows us to export data into LDIF file that can be read by various software available in the market