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LISA is the Large Installation System Administration Conference, co-sponsored by the computing professional organizations USENIX and others called LOPSA, SNIA, SAGE ...

MY name is **Solomon Ayanaw Habut**, student in Network and System administration at Oslo University Collage. I have attended LISA'10 conference from Nov. 7-12, 2010 which was going on SAN JOSE, CALIFORNIA. In this paper I will going explain about the benefit that I got from the conference trip

In this conference there were around 60 supportive system administration technologies and information are broadcasted. Most of them are focused on:

1. haw to secure and monitor systems
2. haw to manage huge network areas
3. haw to minimize costs of resources by using cloud computing technology
4. haw to teach system administrators
5. haw to used databases for system administration
6. haw using Perl for system administration (Perl6 is announced)

At the conference I attended two programs called using *Perl6 for administration* and *using database* for system administration. So I will going to say something about these two things.

Perl6 for Perl Users and Sysadmins

By Tobias Oetiker,
OETIKER+PARTNER AG, LISA 2010

In this conference the new version called Perl6 has announced, it is completely object oriented, it has very big difference with the old versions. In addition to that Perl6 did big syntactical modification. In my view Perl6 seems a new programming technology because it is completely changed from the Perl5 version, I have used Perl5 before. If you have a string variable say $string, you can get its objects like $string.size, $string.color.blue, $string.ucase … Because '.' Is used for calling objects in Perl6, which was used as string concatenation from the previous versions, now Perl6 uses '~' for string concatenation. Perl6 uses 'say' for standard outputs which was 'print' on previous versions, the sign for array is always @ unless it is a reference, same for hash (%) variables also, means no need to use $ singe for specific array data. Perl6 has lots of change on regular expressions. It also shifts from ? : to ?? !! for if logic decisions, an XML Parser, Shuffling Algorithm, Fibonacci are included on this version.

After Perl changed to Object Oriented form, there are lots of things simplified. But for me it seems studying a new programming language; there is no continuation from Perl5 to Perl6. I asked the presenter about the stability of Perl6, and he replied to me that at this time Perl6 is under developing, so there are still number of things adding on it. He also added that because we are changing it to object oriented form, it will have lots of change compared to the Perl5

Databases: What Administrators Need to Know

John Sellens, jsellens@syonex.com,

USENIX LISA 24, 2010, November 7, 2010

The main objective of this presentation was to aware system administrators about databases. He described that most administrators either didn't know about database or forgot to use it, which is not good trained. Starting from this idea he explained basic things about databases.

He announced where administrators has to use database, the available databases in Linux environment called BerkeleyDB, MySQL, and PostgreSQL, and standard SQL syntax to create, delete, update, select and aggregate operations.

He explained why we should use database in the following ways:

- Functionality – a database provides lots that you needn't implement programmatically
- Locking, access controls, constraints, query tools
- ACID compliance and reliable storage and updates
- Ease of use – existing libraries and interfaces
- Abstraction – separation of function
- Scalability – we know how to scale a database, and don't have to deal with that problem in each application
- Sharing / integration with other applications – a defined interface for sharing data

He also explained when database should have to be used as follows:

- if we have lots of similar data that we can categorize/describe
- if we want to query and manipulate it en masse
  - e.g. keep history and summarize or graph it
- Multiple concurrent users doing updates and queries
- if we need scalability or redundancy
- Want to make the data available to other uses/applications

As a conclusion I need to say that attending this conference for administrators is very necessary to shape their administration approach and to get knowledge on making system administration in scientific way.

After I attended the conference I got the following ideas:

- haw and where system administration is going
- use scripting and databases is strongly advisable for system administration
- And research areas that I can do for the future.