NIELIT Gorakhpur

Course name: A level

SUBJECT: DATABASE TECHNOLOGIES

Topic: Database Selection

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Free & Open source database Solutions

Data related technicalities are burden to human mind and they bear it every day. The level of technicality may differ and depend on the type of data, but the mess that it creates in the brain and day to day activities, highly demands a prompt solution.

Irrespective of a small business, a home-trade or a part of any medium level or more prominent organizations, proper management and maintenance of data records seem essential, keeping in mind every possible emergency in future. All such situations are best served by using advanced **database management software** solutions that are available for the professionals as well as the new users. If you are supported by a good quality database management solution, at least half of your tensions will be relieved and it will add more percentage to your efficiency for sure.

Since the inception of the databases, these have been proprietary tools provided by Oracle, IBM, Microsoft, and a number of other vendors supplied at a high cost. But in the recent years open source databases have steadily grown in maturity and importance.

Open source database softwares are simple database engines like the commercial ones. Open source database softwares have been now reached feature parity with proprietary softwares with cost savings. Not only cost saving, it is much easier to find out how to tweak an open source database to achieve better scaling or, what the limitations are, and how to work around them i.e. the public or the users are allowed to write and release their source code in the desired manner. All these information's are usually not available for proprietary databases where messaging around capabilities is tightly controlled by the vendor again on cost basis. Demands for free and open-source database management software solutions are immensely rising in the market. The competition prevailing in today's market environment is making every tool to try best regarding their features to attract more and number of users keeping in mind their price and usage. These software tools have shown an excellent cost-saving approach and are now immensely preferred by their users due to the practical solutions they impart.

Availability of competent Manpower for Open Source databases

Now open-source databases are adopted by more and more companies even for large-scale enterprise projects, there has been a significant rise in the availability of skilled DBAs, with extensive knowledge of these platforms to be able to assist with mission-critical deployments. These professional DBAs have extensive knowledge of these platforms, and they are wellenough capable of handling the responsibilities of all types of deployments.

Some Popular Open Source Database Solutions

Relational DBMS: MySQL, MariaDB, SQLite, Curbrid, PostgreSQL, FireBirdSQL, Drizzle, WebScaleSQL, Apache Derby etc.

NoSQL DBMS: MongoDB, Neo4j, OrientDB, CouchDB, Apache Cassandra, Redis, HBase, Titan etc.

Assignment

1. Why Open Source databases are gain popularity now a days?

2. List some Open source RDBMS and NoSQL databases.