Evaluation the database system

About the relation database the evaluate criteria can define in four parts.

* Attribute semantics

Whenever an attribute is grouped into a relational pattern, we suppose an attribute which belongs to a relation must have a connection in the real word. Semantics of a relation need clearly explain. Design a relation pattern need to explain easily, clearly and intuitionistic. If a relation pattern corresponds to a relation entity, the semantics is clear. Otherwise, one relation pattern corresponds to many relation entities, the semantics is not clear. In conclusion, the semantics can explain easily the relation pattern design and the database system is successful.

* Reduce redundant information in tuples.

Bigger target is making the storage space minimizes occupied by the basic relationship. The method of grouping attributes into a relational pattern has a major impact on storage space. The basic relationship model is designed to have no insertion, deletion, and modification exceptions in the relationship. If there is an exception, be annotated to ensure that the program that updates the database can operate correctly.

* Reduce NULL values in tuples.

Basic above, if many attributes do not apply to all relation to the tuples, there will be many NULL in the tuples. In this way the storage space will be waste. So if the NULL is inescapable then should make sure they are suitable for special situations, not for most tuples in relationships.

* The possibility of generating a parasitic tuple is not allowed.

The relationship model should be designed so that they can link equivalence conditions on the attributes of the most (primary code, outer code) pair, and this connection guarantees that no spurious element ancestors will be generated.

There are three people involved in the database design so the evaluation all responsible for them. But change the work of every people. Each person do not evaluation the work which complete by himself.

In conclusion, the result we expect first is it can not only comprehensively and accurately evaluate the performance of the database system, but also can not fall into the slump of database performance factors. Second is the database performance evaluation system should provide a general direction for performance problem analysis and resolution.