

Oracle: The Hidden Dominator of All-Time Database Manager

INTRODUCTION

Oracle Corporation is a computer technology corporation. This company focuses on developing and marketing computer hardware systems and enterprise products. Oracle also builds tools for database development and systems of middle-tier software, enterprise resource planning software (ERP), customer relationship management software (CRM) and supply chain management software (SCM). Although it is the biggest database management software company in the world, Oracle Corporation seemed not like to be exposed to the public since it founded in 1977, compared to Microsoft, Google, IBM and Apple. According to 2012 Forbes USA rich list, Larry Ellison, the co-founder of Oracle, climbed up to 3rd position with 41 billion assets in total, just following Bill Gates and Warren Buffett. Therefore, what exactly has Oracle do?

ORACLE DATABASE

An Oracle database system comprises at least one instance of the application, along with data storage. An instance, which is identified persistently by an instantiation number, comprises a set of operating-system processes and memory-structures that interact with the storage.

Users of Oracle databases refer to the server-side memory-structure as the SGA (System Global Area). The SGA typically holds cache information such as data-buffers, SQL commands, and user information. In addition to storage, the database consists of online redo logs, which hold transactional history. Processes can in turn archive the online redo logs into archive logs, which provide the basis for data recovery and for the physical-standby forms of data replication using Oracle Data Guard.

The Oracle Database can store and execute stored procedures and functions within itself. PL/SQL (Oracle Corporation's proprietary procedural extension to SQL), or the object-oriented language Java can invoke such code objects and/or provide the programming structures for writing them.

OPEN SOURCE KILLER?

Oracle is holding back test cases in the latest release of MySQL. It's a move that has all the markings of the company's continued efforts to further close up the open source software and alienate the MySQL developer community. The issue is raised by a recent discovery that the latest MySQL release has bug fixes but without a single one having any test cases associated with it. That creates all sorts of problems for developers who have no assurance that the problem is actually fixed.

As we know, MySQL is the popular database used by developers throughout the world. Now it is clear that Oracle gained control of the software distribution when it acquired Sun Microsystems in 2010. It is clear that Oracle is trying to make it as difficult as possible to use MySQL. The result is a wave of unsettlement in the developer community about what Oracle considers open and what it sees as closed. This move is causing problems for developers in all manners of ways.

It also appears that Oracle pulled the revision history for MySQL. The revision history group changes to the millions of lines of source code into what are known as change sets. A change set shows the changes for a particular feature. It shows who made the bug fix, when and why. By removing the revision history, Oracle will keep developers guessing about what is fixed and what is not. Moreover, it appears that Oracle is making its revision tests and histories closed source.

SECURITY ISSUES

Hackers have exploited a gaping identity flaw that allows them to easily crack Oracle databases. The flaw allows anyone to do a brute force attack and access the data. A researcher presented the findings of the proof of concept attack at a security conference today in Argentina. The flaw allows anyone with access to a user name and name to exploit Oracle's authentication protocol and it comes down to an information leak that comes in the initial authentication handshake.

