The End of Database Licensing?

Infrastructure Strategies
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As the competition for open source or the generally low end of the enterprise database market heats up, it is the support (e.g., technical, implementation, ISV) that will decide how soon adoption takes place and who will win. MySQL Network is an innovative support offering that threatens traditional commercial software licensing models.

With organizations continuing to more closely match database workload and operational requirements to price/performance, more scrutiny is being placed on subenterprise editions of commercial database software and open-source database options. However, that scrutiny is often more about finding some type of comfort level than it is about feature function; it is about mitigating risk, both real and perceived. When buying decisions are being made, strength in numbers instead of quality of the vendor/client experience typically rules the day.

Commercial vendors continue to dangle low-cost editions (typically with the word "express" in the name) to lure new users to their database platforms. Oracle's Standard Edition One, Sybase ASE Express Edition, DB2 Express, and the soon-to-be-released SQL Server 2005 Express Edition are all fighting it out at the low end for new customers. These commercial editions carry price tags ranging from free (e.g., Sybase, Microsoft) to 85% below the list price of their enterprise edition brethren. The catch, however, is that these "express" editions are limited in scalability by licensing terms that restrict usage beyond thresholds for things such as CPUs (typically no more than two), memory (typically 2GB), the amount of data that can be managed, or the number of concurrent users. Therefore, for users, the risk is about the possibility of exceeding these obligatory limits. For many enterprise users, that risk is enough to make them choose the higher-priced standard or enterprise editions. The reality is that for many shops, the thought of having to impose strong asset and configuration management processes is more painful than paying more for software than is required. Or perhaps more accurately stated, paying more for software with more functionality than is required. The reality is that these subenterprise editions were created to expand the commercial vendor's brand to new users that would normally be excluded from using the standard or enterprise editions of the commercial vendor's database.

The open source database market has its own unique challenges. Risk, in all its forms, is a major stumbling block to adoption. Clearly, price (versus cost, as in TCO) is not a determining factor, since there can be no differentiation on this point. As for competing with the big boys (e.g., Oracle, Microsoft), free software alone is not enough in most cases to get users in the door. Enterprise users want the comfort of being in the herd, so to speak. While users often know they do not need an enterprise-edition commercial database, no one ever lost a job by selecting one. This is why open source databases have been slow to be adopted within enterprises. Users want and need more support — support not only of the technical/bug fix variety, but also from well-known application or management ISVs. They want the comfort of understanding a vendor's business model, how it makes money, and how the future direction of the product is influenced. Users are drawn by the power of the open development model and its ability to respond to even minor bugs quickly, yet they fear the rate of change within that very model. They worry about security flaws as if that were a new concern, and they worry about being sued for using software that is freely distributed under licenses that, at worst, ask users to extend the same rights to others to which the software is forwarded. In other words, they see risk at every turn.

> *META Trend: By 2007, open-source databases will be an accepted standard for low-end workloads within the enterprise, as licensing and support fears diminish. By 2009, open-source databases will dominate the deeply embedded market. This increasingly robust open-source competition will drive significantly lower commercial database license pricing.*

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Currently, we estimate that only 15% of corporate data resides within a relational database of some type. That defines the huge growth opportunity for the RDBMS market — yet growth is not confined to current corporate users. Open source software and low-cost/free commercial software is expanding (and will continue to expand) the overall relational database market. As startups or government agencies continue to implement systems built out of necessity to use free software, and become more comfortable with their capabilities, it may be likely that they will someday require the enterprise edition software, or it may be more likely that they will find innovative ways to continue to use the lower cost software. In addition, the average RDBMS workload can be capably run on servers with four or fewer processors. Indeed, 70% of database workloads currently meet this criterion. Of course, the feature-set capabilities of open source, and even the subenterprise databases, will expand over time as well, thereby reducing the need to move to the more expensive enterprise editions.

In the end, risk can be mitigated through superior support. Indeed, strong implementation, problem resolution, and performance-tuning support can attract both application vendors and end users to the platform in greater numbers — addressing the issue of adoption risk previously mentioned. Open source database players must differentiate themselves through support services, since support revenue is the backbone of most open source software business plans. Through 2010, we expect to see a continuing shift in emphasis away from software licensing fees and toward support fees. Already the greatest source of income for giants such as Oracle, support fees have the advantage of being a dependable annuity to software firms, and as the product matures, provide vendors with significant margins well above that of software licensing fees. For open source vendors, increased focus on support not only addresses the number-one fear among potential users, but it also provides them with a defining service that enables them to differentiate themselves from competitors.

MySQL has captured much of the mind share in an increasingly crowded open source database market. Its dual-license business model paved the way for others to follow the path of creating a viable business using an open source software approach. MySQL had the distinction of owning and developing all the code for MySQL, a model that has proven to be more palatable to enterprise customers making their first foray into the open source database arena. Since then, Computer Associates has joined the market by open sourcing its Ingres r3 database. Currently, not only is there a player that owns the code and can provide support in the traditional vendor/client model, but it is also a large, well-known vendor with existing ties to many Global 2000 companies.

MySQL Network, a new offering from MySQL, attempts to address all the major support fears that users have expressed. It also illustrates a shift toward support services and away from licensing fees. It will force other players to upgrade their standard support offerings as well. What makes MySQL Network innovative is the extent of the support services it offers at a relatively low price per server (see Figure 1). MySQL Network extends the traditional notion of technical support services beyond bug/fix support to include consultative services, such as schema review, performance tuning, and even custom builds of the MySQL database engine. This offering is particularly interesting because it includes the commercial (or GPL) licensed version of the product as part of the support package. This eliminates the risk implied (for some companies) of using the open source GPL license (see Delta 3068).

Users should study the details of the MySQL Network offering to understand all the different services included at the various support levels offered.

Bottom Line

MySQL Network is an offering that should both increase the velocity of MySQL within the enterprise market and mark the "beginning of the end" for software licensing fees as a separately charged line item.

Business Impact: Software as a service is evolving to impact the entire licensing and pricing model for enterprise software. Over time, this shift will lower software per-unit costs, improve customer support, and enable lower total cost of ownership.

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Figure 1 — Comparing MySQL Network Costs

MySQL Network includes many more services than typical software support offerings. Included in the cost is a set of technical advisors and certified configurations tested within a software stack. It also includes the commercially licensed version of MySQL, and consulting services for help with schema review, performance tuning, and even code reviews of server-side, user-defined functions.

Edition	Servers	CPUs/Server	License	Maintenance	Total 1 yr
Oracle SE	4	2	$120,000	$26,400	**$146,400**
Oracle SE	4	4	$240,000	$52,800	**$292,800**
MySQL Network Platinum	4	2	* $0	$19,980	**$19,980**
MySQL Network Platinum	4	4	* $0	$19,980	**$19,980**
Ingres r3 Premium	4	2	** $0	$15,960	**$15,960**
Ingres r3 Premium	4	4	** $0	$31,920	**$31,920**

*   MySQL Network comes with a choice of the GPL license or MySQL's commercial license.

**   Ingres r3 only offers a free open source license.

Source: META Group

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