CLOUD SERVICES | MySQL as a Service

Managed DBaaS – The nirvana of database management

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IT organizations are turning to cloud computing to continue achieving their goals and objectives, and to provide more effectively sourced and consumed IT services for their business users and customers alike.

The total global public cloud market will be $178B in 2018, up from $146B in 2017, and will continue to grow at a 22% compound annual growth rate (CAGR). Public cloud platforms, the fastest growing segment, will generate $44 billion in 2018, according to Forrester's Predictions 2018: Cloud Computing Accelerates Enterprise Transformation Everywhere. Forrester's predictions reflect the growing dominance of cloud application and development platforms and their role in revolutionizing new business models across enterprises today.

For many organizations, digital transformation is about improving the customer experience while also increasing business efficiencies and reducing costs. New applications and features like Slack, Trello, chat, etc., are being integrated to facilitate communication and collaboration and with them comes more data that needs to be protected, stored and managed. In order for this to be seamless to the end user, a lot of orchestration is needed.

Data has become the new business currency and as it becomes more valuable and critical, businesses want to deploy new databases more quickly and securely while avoiding the costs associated with big infrastructure projects.

As cloud solutions and web applications grow, they are also becoming more complex, adding sophisticated e-commerce engines and cutting-edge technologies such as artificial intelligence and virtual reality. These application trends support today's need for making faster, more informed decisions and place heightened importance on the ever-increasing need for efficient and effective data management with an emphasis on performance.

In addition, CIOs and IT managers are spending a good portion of their days managing these databases and applications and are trying to figure out how to reduce the functional activities related to database management.

All of this has led to a market transition where the database-as-a-service (DBaaS) has become an integral part of the overall infrastructure that supports application scale and end-user experience. Most small and medium enterprise IT departments do not have dedicated database administrators or the specific database expertise to successfully manage their data in a way that ensures application reliability and optimal performance. And, even those who do might prefer their time spent elsewhere. Since in-app databases are often inefficient and fail to scale, subscribing to a managed database service is one of the easier decisions companies have to make. When adding new web applications that use data, the focus needs to be on optimizing the software stack as it relates to the overall ecosystem. Utilizing an always-on database service that automatically manages application data successfully removes the complexity associated with managing one or more databases.

In support of this growing need, many companies are building out their own DBaaS or are leaning on companies that offer the necessary building blocks to replicate proven DBaaS technologies. In either scenario, they are enabling their customers to operate that application and their database in the same geographical location and often in the same physical data center. This results in a better end user experience from an optimized application platform.

Database-as-a-Service (DBaaS) provides the opportunity for these IT managers to get out of the business of managing databases. There are many benefits to taking a managed DBaaS approach to database management including reliability of data, secure backup and recovery, increased application and data performance and efficiency, and resource optimization.

With managed DBaaS, organizations can experience 100% uptime and around the clock, global support; including the ability to automatically and proactively predict issues and address them.

This allows CIOs and IT managers to keep up with the increased data without the need for a designated database administrator. It also allows them to redirect internal resources to growing their business and increase employee productivity – a key element of the IT agenda.

When it comes to selecting a managed DBaaS solution, there are three important things to consider:

Cost: It is important to evaluate the total cost of ownership (TCO) for database management. Licensing, standing up servers, and migrating data can be very costly from a resource perspective. A managed DBaaS can facilitate these processes with a few clicks and provide organizations with the ability to scale up or down as needed. This enables increased flexibility and agility. In addition, DBaaS essentially replaces the role of a database administrator (DBA) with a service, which frees up time and resources that can be applied to things like application performance tuning and future deployment strategies, or repurposed into additional development resources.

Performance: Not all DBaaS solutions are created equal. For example, you could have MySQL on the same server that is hosting the database, but this doesn't scale. You don't want these to use the same resources because if an application is taken offline, customers won't have access. A managed DBaaS is highly available so if one data center fails, the data can easily be can move to another allowing for global, 24/7 access. Isolating the database and application in two different instances enables improved uptime and security. And by having them separate but in close proximity, it doesn't introduce tremendous latency and protects the organization so that if an application goes down their database doesn't.

Ease of Use: Instead of taking days or weeks to set up, a managed DBaaS enables organizations to rapidly deploy and provision their infrastructure within minutes. In addition, as organizations look towards a hybrid infrastructure – having some data in public/private clouds and more proprietary data on-premises – a managed DBaaS makes it easy to move between the two.

As organizations look to reduce time to money and time to development, the key to success is being able to do more with less. By offering managed application services, providers can play a key role in driving a consolidated, high performing and cost-efficient infrastructure for their customers.

Managed DBaaS is becoming the nirvana of database management. Utilizing an always-on database service that automatically manages application data removes complexity and allows organizations to focus on their business rather than worrying about the security and performance of their applications.

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