

## The danger of cloud computing lock in

Cloud conversations are rife today; from the boardroom to IT departments the debate about moving some of your business process to the cloud is raging. Whilst moving to the cloud can offer many advantages, it also raises many questions including issues such as data sovereignty, security and risk management. There is also one big concern that most IT departments are familiar with in any type of selective sourcing arrangement, which is the dreaded lock-in situation.

Selecting a Cloud platform that is built on proprietary formats means that businesses can face a lock-in situation which will make it much more difficult for them if they change service provider at some point in the future; either because they want to bring the processes back into their premises or they want to select another service provider.

We have seen a lot of news and solid adoption for the big public cloud providers as well as local local players and many of the stories surrounding cloud computing have not necessarily been focused on the security of a cloud, rather the availability of it; whether that be short term due to network or system outages, or long term viability due to a provider going out of business or substantially changing its terms of service.

Whether your cloud provider changes their terms of service or has interruptions to service that cause you to search for alternatives, many customers are asking themselves some important questions:

- Will my Cloud Provider change its terms of service, what can I do about it?
- If I don't have control over cloud costs, does this diminish its value?
- How easily can I move my data to a different provider?
- How do I know which country the data is stored and who has access to it?
- What do I do if the only copy of my data is in the cloud : how do I download it all and start all over with a new Provider?
- If my Cloud Provider changes to a limited data service, how do I select which data remains protected and which data may be purged due to the size limit?

One of the major business benefits for cloud services is the transition from under-utilised computing resources with unpredictable capital expenditure costs and performance, to a model of fixed performance and operational expenditure costs. It is the 'pay only for what you need' formula that makes it an attractive way to manage and control IT costs.

Lock-in has been getting increased attention as cloud service providers acquire customers at a rapid pace. In a November 2009 report entitled Cloud Security Risk Assessment, the European Network and Information Security Agency (ENISA) highlighted lock-in as one of the biggest risks involved with cloud computing. "There is currently little on offer in the way of tools, procedures or standard data formats or services interfaces that could guarantee data and service portability," said the report. This can make it difficult for the customer to migrate from one provider to another or migrate data back to an in-house environment".

The good news is there is now a new specification available that establishes the path for removing the potential for lock-in. It's called **CDMI** (Cloud Data Management Interface) and it was developed by the SNIA (Storage Networking Industry Association).

CDMI is the first industry-developed open standard for cloud computing. CDMI includes the ability to manage service levels that data receives when it is stored in the cloud as well as a common interoperable data exchange format for securely moving data and its associated data requirements from cloud to cloud.

Customers should now start demanding their cloud providers demonstrate their roadmap for implementing this important SNIA initiative because anytime a standard such as this is utilised, the real winner is the end user. The SNIA has been actively driving standards for nearly a decade, developing and promoting standards that benefit the entire data storage community.

For more information on SNIA's Cloud Storage activities, visit <http://www.snia.org/cloud> or get involved in the conversation at [twitter.com/SNIACloud](https://twitter.com/SNIACloud) or <http://groups.google.com/group/snia-cloud>

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