The Cloud API is Pseudo-Consolidation of Infrastructure

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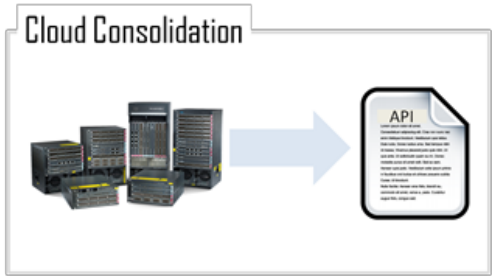
It's about operational efficiency and consistency, emulated in the cloud by an API to create the appearance of a converged platform



In most cases, the use of the term "consolidation" implies the aggregation (and subsequently elimination) of like devices. Application delivery consolidation, for example, is used to describe a process of scaling up infrastructure that often occurs during upgrade cycles. Many little boxes are exchanged for a few larger ones as a means to simplify the architecture and reduce the overall costs (hard and soft) associated with delivering applications. Consolidation.

But cloud has opened (or should have opened) our eyes to a type of consolidation in which like ***services*** are aggregated; a consolidation strategy in which we layer a thin veneer over a set of adjacent functionalities in order to provide a scalable and ultimately operationally consistent experience: an API. A cloud API consolidates infrastructure from an operational perspective. It is the bringing together of adjacent functionalities into a single "entity." Through a single API, many infrastructure functions and services can be controlled – provisioning, monitoring, security, and load balancing (one part of application delivery) are all available through the same API. Certainly the organization of an API's documentation segments services into similar containers of functionality, but if you've looked at a cloud API you'll note that it's all the same API; only the organization of the documentation makes it appear otherwise.

This service-oriented approach allows for many of the same benefits as consolidation, without actually physically consolidating the infrastructure. Operational consistency is one of the biggest benefits.

OPERATIONAL CONSISTENCY

The ability to consistently manage and monitor infrastructure through the same interface – whether API or GUI or script – is an important factor in data center efficiency. One of the reasons enterprises demand overarching data center-level monitoring and management systems like HP OpenView and CA and IBM Tivoli is consistency and an aggregated view of the entire data center.

It is no different in the consumer world, where the consistency of the same interface greatly enhances the ability of the consumer to take advantage of underlying services. Convenience, too, plays a role here, as a single device (or API) is ultimately more manageable than the requirement to use several devices to accomplish the same thing. Back in the day I carried a Blackberry, a mobile phone, and a PDA – each had a specific function and there was very little overlap between the two. Today, a single "smart"phone provides the functions of all three – and then some. The consistency of a single interface, a single foundation, is paramount to the success of such consumer devices. It is the platform, whether consumers realize it or not, that enables their highly integrated and operationally consistent experience.

The same is true in the cloud, and ultimately in the data center. Cloud (pseudo) consolidates infrastructure the only way it can – through an API that ultimately becomes the platform analogous to an iPhone or Android-based device.

Cloud does not eliminate infrastructure, it merely abstracts it into a consolidated API such that the costs to manage it are greatly reduced due to the multi-tenant nature of the platform. Infrastructure is still managed, it's just managed through an API that simplifies and unifies the processes to provide a more consistent approach that is beneficial to the organization in terms of hard (hardware, software) and soft (time, administration) costs.

The cloud and its requisite API provide the consolidation of infrastructure necessary to achieve greater cost savings and higher levels of consistency, both of which are necessary to scale operations in a way that makes IT able to meet the growing demand on its limited resources.

- BFF: Complexity and Operational Risk
- The Pythagorean Theorem of Operational Risk
- At the Intersection of Cloud and Control…
- Cloud Computing and the Truth About SLAs
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- What is a Strategic Point of Control Anyway?
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