Cloud service brokerage – The lynchpin in cloud management platforms
As cloud computing continues to become the "new normal," multi-cloud has emerged as a best practice, as enterprises want to consume the best-of-breed technologies from cloud providers to build internet-scale services and data platforms rapidly.

Unlike traditional data center and warehouse infrastructure, where customers were happy to follow a managed services model, today’s businesses want unrestricted access to API-enabled cloud services. Traditional IT operations tools designed by MSPs are no longer sufficient to maintain the modern cloud services. This is challenging for MSPs as the rate of cloud provider’s service innovation is much faster, leading to a gap in services adoption and their management.

In the private cloud space, enterprise focus is mostly on IaaS with deployment, management and monitoring capabilities being enhanced continuously. However, sparing a few vendors, PaaS in private cloud is still in its nascent stage with limited options and adoption.

The growing number of public cloud service providers and a lack of standards to manage IaaS, PaaS and SaaS services, especially through a single system of record, is fueling the concern on governance. The life cycle management of these different services is not consistent across cloud providers as they are being brought to action using the provider’s secret recipe to deploy, manage and monitor these services. All of this is making way for unified consoles that can not only provide integration, aggregation, and customization of cloud services in a self-service environment, but also keep pace with the rapidly evolving services from cloud service providers.

Enterprise cloud adoption strategies

Most businesses today operate with a combination of Private and Public Clouds, i.e., a multi-cloud model, and are leveraging different strategies for cloud adoption keeping agility and cost optimization of IT procurement and management as the cornerstones. As a natural progression, some of the enterprises have moved or are in the process of moving from physical or virtual infrastructure to a private cloud model, while others have directly jumped onto the public cloud for faster time-to-market and to benefit from the on-demand nature of public cloud without having to make significant CAPEX investments.

While the myth around public cloud security has started to diminish, regulatory bodies are yet to give a complete go-ahead, limiting adoption of public cloud by enterprises under their domain and forcing them to innovate in the private cloud environment. We have seen a few customers who are successfully driving innovations on a private cloud. However, many continue to leverage it like traditional infrastructure.

We are now seeing a unique opportunity for enterprise IT to once again become the spear of innovation and trusted partners of businesses by redefining the way companies manage their hybrid IT environments.

By 2020, 90 percent of organisations will adopt hybrid infrastructure management capabilities.\(^1\)

Thus, it becomes critical to assess the role of Cloud Service Broker and integrate it into the overall IT strategy. Enterprise IT can not only define and achieve the milestones of successful cloud utilization, but also progressively achieve the desired outcomes and business results in enterprise digital transformation journey.
With many enterprises taking a multi-cloud approach, a new set of challenges is emerging, which needs to be managed quickly and efficiently for successful cloud-led transformation. Enterprise IT is realizing that businesses want cloud services in self-service, subscription-based models, instead of the traditional request-based model. This creates an additional burden of managing subscriptions with the different cloud providers that may lead to a further rise of shadow IT. This is creating a quick-to-seize opportunity for the enterprise IT to take on the role of a service integrator and start providing Cloud Brokerage service to businesses and once more, become a trusted partner as well as a catalyst for enterprise growth and success. This would require enterprise IT to deliver Cloud Brokerage service with a diverse set of capabilities while leveraging the existing investments in ITSM tool sets.

**Multi-tenancy & access management**

Enterprise IT should provide a single gateway for enterprise users, developers and administrators to access multi-cloud services in a subscription-based model providing end-to-end subscriber, identity and access management capabilities to enable individual business units to consume the services relevant to them within administrator-defined quotas.

**Application-centric operations**

Marking a shift from Server/Service to Application Life Cycle Management, IT needs to focus on building an application-centric perspective to envision, design, orchestrate, manage and operate applications as-a-whole, instead of individual services constituting the application.

**Service management & optimization**

Enterprise IT should be able to manage the SLAs of cloud services keeping pace with advancements in the public cloud space, especially PaaS and SaaS. This includes a service catalogue for the end-users to pick and choose services and the ability for the operational aspects of the same to be managed from the same end-point.

**Integrated chargeback & financial management**

With the rising adoption of cloud, the procurement model has changed from CAPEX to OPEX across enterprises. Enterprise IT needs to answer the growing need for budget control and consumption tracking to find opportunities for cost optimization, for metering the usage of cloud consumption resulting in recovery and license & asset management in the hybrid environment.

By 2020, 90 percent of organisations will adopt hybrid infrastructure management capabilities.¹
Operational intelligence

The pervasive nature of analytics coupled with a shift from discrete monitoring to an integrated full stack monitoring must be leveraged by enterprise IT to extract meaningful insights into the application performance. The more real-time these insights, the better would be the optimization of resource utilization. AI/ML-led predictive and preventive maintenance are becoming the new trend.

Policy-driven governance & compliance

Enterprise IT needs to tame the challenge of enforcing enterprise security policies in a multi-cloud environment created by consumption of disparate cloud services and the diversity to deploy, manage and monitor these services. As the scope of security widens from LAN to WAN, on-premise data security to the safety of data in public cloud, the simplest way forward is to deliver a secure and governed hybrid cloud.

To conclude, we see the rising need of a Unified Cloud Brokerage Governance Console - a services hub - to facilitate consumption of an increasing diversity of cloud services from best-of-breed technology providers. All this, while centrally managing the provisioning, compliance, security, metering, chargeback and monitoring of such services.

Principal Consultant in Cloud and Data Platform practice, within Analytics. He has over nine years of work experience in cloud native data platforms and solutions with subject matter expertise on Amazon Web Services offerings. He has extensive hands-on experience in virtualization, public cloud services and setting up end-to-end consumption ecosystem for enterprises.

Abhijeet Kumar Sinha
Principal Consultant

Senior Member DMTS and Practice Head Cloud & Data Platform Engineering with more than 19 years of experience in Software Products and Platform Engineering of highly available, scalable and secure systems leveraging open source & disruptive technologies such as Cloud, Big Data/Hadoop, Analytics, HPC and Distributed Computing & Storage Systems. Proven track record of Consulting, Solution Architecture and Engineering of Internet Scale Systems and Data Platforms on AWS & Azure across verticals.

Balwant Singh
Senior Member DMTS and Practice Head CDP

About the authors
Wipro Limited
Doddakannelli, Sarjapur Road,
Bangalore-560 035, India
Tel: +91 (80) 2844 0011
Fax: +91 (80) 2844 0256
wipro.com

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship, we have over 160,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information, please write to us at info@wipro.com