For U & Me Overview

OpenStack Private Cloud Adoption:
The Value-added Systems Integrator's Role

The cloud is not a novelty any more and the IT world is more or less familiar with its potential and pitfalls. But the new entrant to the cloud family, OpenStack, has disrupted the whole ecosystem and is making headlines every day.

The open source legacy of the OpenStack building blocks and the availability of a wide variety of OpenStack 'builds' – from the free community distributions to strictly adhered to Service Level Agreement associated versions – have definitely boosted the implementation of cloud based computing infrastructure, especially in the enterprise context.

As a matter of fact, OpenStack is basically providing a set of application programming interfaces (APIs) to orchestrate the infrastructure configured under its disposal-say, compute, network, storage, security, etc – which will help to set up a cloud infrastructure resembling the characteristics of all major and widely known Infrastructure as a Service (IaaS) cloud platforms in a more efficient and economical way.

The word 'cloud' instantly brings up a lot of questions and concerns about its security and availability aspects.

Once those concerns are addressed and the readiness of the cloud based IaaS model technically accomplished, the next logical step is to identify the applications to be boarded on to the cloud and its eventual scalability as business grows or during the computing peak time.

Systems integrators, primarily those who specialise in cloud solutions or have a dedicated delivery model around cloud integration and provide value added systems integration services, are playing a key role in the adoption of the OpenStack based private cloud. This will help enterprises to address many of its infrastructure deficiencies.

Value added cloud integrators should always have an applications based approach rather than an infrastructure-centric approach. A bench of computing infrastructure, orchestrated via OpenStack is mostly an academic exhibit, without a set of cloud style applications deployed on it

and serving the business in an efficient fashion in terms of nullifying many of its earlier associated issues like agility, elasticity, metering, scale, etc.

The cloud integrator can provide a quickly deployable appliance architecture approach to deploy a test and development private cloud for enterprises to fast-track their 'cloud-enablement' of the applications and execute proof-of-concept roll outs to convince its internal stakeholders and also to launch a pilot production environment.

Another major value addition that cloud integrators can bring in is a 'Suite of Tools' as a service, and its easy execution model to analyse and report the security compliance and performance characteristics of the implemented cloud infrastructure in the respective domain context (e.g., PCI compliance of the proposed design to a financial organisation or to an e-retailer).

Even though a private cloud brings in more elasticity and a granular metered view to the internal computing infrastructure usage, it is always finite in terms of its underlying data centre specifications and availability. This may defeat the very purpose of scalability, which enterprises are expecting out of a cloud enabled infrastructure investment.

Value added systems integrators can present a hybrid approach to the private cloud architecture, to rent its spikes to an external infrastructure service entity without hampering the compliance guidelines around which the private cloud is built on. This is a major boost to justifying cloud adoption and its added financial overheads against the end goal of the return on investment (RoI).

But as a bottom line, even though the aforementioned cloud implementation approaches and services are supposed to be the prime components of a value-added cloud integration proposition, the financial model and flexibility it offers to share the risk of a cloud adoption decision (mostly due to the nature of the application ecosystem and tight investment guidelines) of the enterprise, should be considered while choosing the cloud integration partner. **END**

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