A Novel approach of New Hybrid Cloud

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Abstract— Hybrid Cloud offers small business customers the flexibility of a cloud-based solution with the security of a locally housed server. The customer’s data is stored on the New Hybrid Cloud Server, and the New Hybrid Cloud Server is located at the customer’s site, but is managed remotely. A style of computing where massively scalable (and elastic) IT-related capabilities are provided “as a service” to external customers using Internet technologies. Automation of New Hybrid Cloud is essential to identify the defects and to rectify them early before the product is released. The traditional manual way of validation is time consuming as well as consumes man power. Automation of Hybrid Cloud helps in saving resources and also helps in porting New Hybrid Cloud on multiple platforms with varying architecture and features.

Index Terms— Hybrid cloud, remote monitoring, resource utilization, energy consumption.

I. INTRODUCTION

Hybrid Cloud cloud-based hosted applications service that actually runs on a local, on-premises server to protect data. It enables small and medium business (SMB) customers to consolidate various IT applications, which are usually housed on multiple servers, into a single box. In addition to replacing numerous HW devices, this remotely manageable one-stop shop includes fire-wall, backup, an IP PBX, and business related applications (such as retail accounting and taxation) while eliminating the need for on-site IT support.

The end result is an optimized cost savings for SMB customers. The New Hybrid Cloud Management Console offers a new platform solution, enabling users by providing:

- Lower cost solution (single platform vs. multiple)
- Easy to use and manage remotely with a rich and robust UI
- Extra revenue stream with managed services
- Better margin via a differentiated product

II. HOW IT WORK

Managed service providers will act as the mediator between New and small Businesses to provide service to SMBs as Small businesses cannot buy the service directly from New. MSP’s will Offer the solutions to various customers and then register the new hybrid cloud and install’s the hardware on Customer site. Small businesses’ will then sign up for a lease of three year with the Managed service providers. Now users will be able to access the apps as they would from a true off-site cloud, With local storage data providing additional security for healthcare providers and others concerned about their data being exposed in an offsite cloud, and pay according to use pricing.

III. FEATURES

Elements of New Hybrid Cloud

- New Hybrid Cloud Server & Software – The New Hybrid Cloud Server resides on the customer premises, therefore, appliances and customer data are hosted locally.

- New Hybrid Cloud Web Portal - The New Hybrid Cloud Web Portal is an internet accessible asset management site for all of your New Hybrid Cloud Servers. This remotely accessible site allows you to register your servers and manage appliance activation and expiration for each of your customers from any location with an internet connection.

New Hybrid Cloud Server Manager - New Hybrid Cloud Server Manager provides you with the power to manage your New Hybrid Cloud Servers and users remotely.
• Remotely manageable: With an MSP managing the server, the SMB can focus on their business rather than their IT.
• Control of their data: With an on-premise server, small businesses can keep their data on-site and in their control.
• Lower solutions cost: Multiple applications run on the same server.

**IV. NEW HYBRID CLOUD SERVER**

The New Hybrid Cloud Server is equipped with the technical ingredients required to support the New Hybrid Cloud software stack, including New Active Management Technology for remote manageability on a Trusted Platform Module. New Hybrid Cloud Software is a core component that runs on top of a Virtual Machine Monitor (VMM) on the New Hybrid Cloud Server. This software provides an abstraction layer over VMM, making it easy to deploy, configure and manage the New Hybrid Cloud server. Both Linux and Microsoft® Windows guest operating systems are supported within the VMM, to run a variety of end-user applications.

**New Hybrid Cloud Process**

Managed service providers (MSP) signs contract with New for monthly software usage. The MSP establishes own agreement with small business customer with markup over MSP cost for software and hardware. Also the MSP orders New Hybrid Cloud Server from New fulfillment partner. Server is shipped to MSP. MSP places server on site at the customer, and configures the system. System automatically sends secure, encrypted monthly software usage data to New. (Only the server is identified no customer data other than software usage is reported). New provides monthly software usage report to New fulfillment partner. New fulfillment partner bills MSP for hardware and software usage monthly, and provides copy of usage report for each server the MSP has deployed. MSP bills end user based on report from new fulfillment partner.

**Advantages**

• Cloud-like flexibility: Consume IT software on a monthly basis without getting locked in. Cost scales with number of users, offering a predictable, manageable way to pay for software. The customer can grow or reduce monthly software costs as business conditions and the number of users change.

**V. RELATED WORKS**

**Automation**

Automation is use of control systems such as computers to control industrial machinery and processes, reducing the need for human intervention. Automation plays an increasingly important role in the global economy and in daily experience. Engineers strive to combine automated devices with mathematical and organizational tools to create complex systems for a rapidly expanding range of applications and human activities.

**Advantages of automation are**

• Replacing human operators in tasks that involve hard physical or monotonous work.
• Performing tasks that are beyond human capabilities of size, weight, speed, endurance, etc.
• Reduces operation time and work handling time significantly.
• Frees up workers to take on other roles.
• Provides higher level jobs in the development, deployment, maintenance and running of the automated processes [2].

**Cloud Computing**

—Cloud computing is an emerging computing technology that uses the internet and central remote servers which will maintain
data and applications centrally and provides much more efficient computing by centralized storage, memory, processing and bandwidth.

Cloud computing is an internet based emerging technology computing where it allows the business and consumers to use applications without installation at any computer. Consumers will not own the physical infrastructures but they will rent the usage of resources from a third party provider. Most cloud computing infrastructures consist of services delivered through common centers and built on servers. Consumers access cloud-based applications through a web browser or a light-weight desktop or mobile app while the business software and user's data are stored on servers at a remote location.

Cloud computing offers virtual servers which will share software, platforms, devices infrastructures and other resources and the consumers will be paying for these resources on a pay-as-you use basis. All information that a digitized system has to offer is provided as a service in the cloud computing model. Users can access the services without knowing much about how to manage the resources and all which is available in internet cloud. Thus, users can concentrate more on their core business processes rather than spending time and gaining knowledge on resources needed to manage their business processes.

Sharing resources will help increasing the speed of application development as; servers are not left idle unnecessarily, which will have a significant effect on reducing the cost.

Hybrid SaaS: This is simply combining public services with your existing systems to create new applications and business processes.

Public Cloud:

In public cloud service providers makes resources which may be applications and storage which are available to the general public over the internet. Resources will be dynamically provided on a fine-grained, self service basis over the internet through a third party provider.

Community Cloud:

If several organizations will have similar requirements and shares common infrastructure to realize the benefits of cloud computing, then a community cloud can be established. This is a more expensive option as compared to public cloud as the costs are spread over fewer users as compared to a public cloud. However, this option may offer a higher level of privacy, security and/or policy compliance.

Private Clouds:

Private clouds offer’s cloud computing on private networks. It consists of applications or virtual machines in a company's own set of hosts. They provide the benefits of utility computing shared hardware costs, the ability to recover from failure, and the ability to scale up or down depending upon demand.

Hybrid Cloud:

Hybrid Cloud means either two separate clouds joined together (public, private, internal or external) or a combination of virtualized cloud server instances used together with real physical hardware. The most correct definition of the term "Hybrid Cloud" is probably the use of physical hardware and virtualized cloud server instances together to provide a single common service. Two clouds that have been joined together are more correctly called a "combined cloud".

VI. CONCLUSION

The New Hybrid Cloud which offers small business for the customers, the flexibility of a cloud-based solution with the security of a locally housed server. The customer’s data is stored on the New Hybrid Cloud Server, and the New Hybrid Cloud Server is located at the customer’s site, but is managed remotely. A style of computing where massively scalable (and elastic) IT-related capabilities are provided—as a service to external customers using Internet technologies. Automation of New Hybrid Cloud is essential to identify the defects and to rectify them early before the product is released. The traditional manual way of validation is time consuming as well as consumes man power. Automation of Hybrid Cloud helps in saving resources and also helps in porting New
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