



Tuesday, February 9, 2010

## Consider the Cloud for Application Development

Amidst the chaos that surrounds the cloud computing model, there are ways to leverage it for application development

Even as the war on the cloud continues between vendors of many camps, there are a few who have put the cloud-based infrastructure to good use.

The need of the hour is; reducing cost, optimal utilization of assets and the reduction in time to develop applications. These also happen to be the unique-selling-points of cloud-based infrastructure. It redefines the way the applications are built; the greater focus being on creativity and putting the 'pieces' together rather than actually building the application bottoms-up. Using a cloud to host an application saves the company from investing in hardware, its assets can scale up or down as-and-when required and the company becomes more agile.

Chris Lindstrom, Managing Partner & Founder, *Ceptara Corporation* says, "What attracts us to the cloud is the ability to package up the 'virtual objects' in all kinds of different ways that gave us the flexibility to design all kinds of applications." Chris uses Nagarro Inc.'s services, to develop a nation-wide fire-safety web application (TegrisFire) on the cloud along with other consumer-based applications. According to Chris, the benefits include:

1. Architectural benefit: Immediate scaling possible. Physical deployment of infrastructure takes a while whereas virtual can be done within a few minutes.
2. Scale functionality easily. In other words, once you have an architecture, adding new storage capacity or adding a new application server is very easy. There is a script you run and in a few minutes you get increased capacity!
3. Cost effective in the long term. Consume as you go and only pay for what you have used.

Vikas Sehgal, *Nagarro's* CEO, believes, "It is easy to implement. As long as the developer follows the guidelines, the platform takes care of the rest. The company too need not worry about the aspect of scaling. Google (for Google Engine Apps) also provides an advanced database format that they use internally as well which proves how robust the system is." He adds, "On the flip-side, since most applications are developed using virtual properties and API's, the developer has lesser control on the application code. When applications are developed in traditional ways, it is easier to detect and resolve bugs."

### Challenges faced by growing companies:

1. The mid-segment that generally has low budget outlays for infrastructure has a higher need to get applications delivered to its users. These applications have to be built on scalable architectures and it has to be done in a cost-effective way.
2. The second challenge is (when it comes to cloud computing) is to decide on the right choice. There are a number of service providers- Google, Amazon, Microsoft, IBM and many others-- who are packaging the cloud in different ways. It is important to make a design decision on how you are going to consume the cloud resources. Its not about designing the code, but deployment, production and its operations.

### Key considerations if you plan to go on the cloud:

1. Take a provider who has invested in the cloud as much as you have. Google, Amazon and

Microsoft have applications to run too. They too have a stake in the business.

- 2.** Study the API so that in case you need to make a change you could do that yourselves and don't need to go back to the service provider.
- 3.** For mid-size companies the biggest consideration is the IT cost. That is the cost associated with purchasing infrastructure, managing and maintaining it. When it's on the cloud you have the pay-as-you-use model and it can be up-and-running within minutes.

Vikas believes that the cloud brings immense value to the apps developer and must be considered. Following is his advice for those who are still developing applications in the traditional way:

- 1.** Consider the cloud as a very viable option and test it. Ask, why does this have to be on the traditional platform.
- 2.** Think about a cloud strategy. For each application a company wants to build, whether it is to use Microsoft, Google or Amazon, it should be CIO's mandate to have a cloud strategy.
- 3.** Pick a low-hanging fruit (like support applications) and try it on the cloud. If you are building a new application, it's a lot easier to get on the cloud than trying to migrate an existing application.