Dynamic Infrastructures with IBM Service Management

IBM Software Group

Dynamic Infrastructure plays an important part within the framework of the IBM Smarter Planet initiative. We presented this concept at the "Intelligent Dynamic Infrastructures with IBM Tivoli Service Management" event, and introduced the new IBM CloudBurst offering. At this function, Lewis Troke, Service Management Consultant from IBM UK, explained what IBM means by dynamic infrastructure.

Today, companies are facing a host of challenges with respect to how they can effectively manage existing service delivery, and at the same time adapt to changes in business requirements in terms of different technology availability and the need to start developing new services and functions that businesses can use to increase their revenue.

This results in the business facing a number of challenges, which customers need to overcome by means of three fundamental actions. Firstly, they need to reduce their costs in terms of service delivery. Cost reduction is however not just about containing the operational cost and complexity, but involves allowing the organization to deliver productivity gains achieved through such measures as virtualization, optimization, and energy management. The second step is to improve service; standing still it is no longer an option. Customers are looking for ways to continuously improve the quality of the service they deliver to their end users, their customers, as they need to retain their client and help them to generate new revenue streams. The third key area involves managing risk. There are all sorts of issues concerning risk in terms of warranties and security. Although depending on the customers' business, managing risk generally concerns, for example, how to ensure data is secure i.e. is it backed-up so that recovery following a server failure is fast and efficient. Administration of new users is another issue; how to manage users throughout the lifecycle and remain compliant with industry requirements.

There are seven key areas that we believe make up the elements of a dynamic infrastructure. The first of these concerns asset management; maximizing the value of the critical business and IT assets over their lifecycle with industry tailored asset management solutions. These solutions can be very specific to the business and how it is run. The second involves virtualization, providing technologies to the business to allow them to consolidate solutions, reduce costs, improve the use of the assets and provide new services to the business. The third element applies to energy efficiency. Energy challenges are being faced by all our customers today, and having the most efficient use of resources, including the energy consumption of those resources, can provide companies with a differentiator for winning new business as it enables them to stand out from their competitors. The next issue affects business resiliency; maintaining continuous business and IT operations while rapidly adapting and responding to the risks and opportunities presented to our businesses today. Security is the next element concerned. Security is on everybody's mind for many reasons, but by providing end to end security and customized management to the business means that you can then start to focus on those areas important to the business, safe in the knowledge that the data and access to the systems is secure and being managed correctly. The sixth element is that of information infrastructure. We like to think of this as helping businesses to achieve information compliance, to secure their

data and manage that data throughout its retention period, ensuring its availability and fulfilling any security objectives the business might have. All this is held together by service management. Service management provides us with three things: visibility, seeing what the business has and how it is being used; control and understanding, i.e. how to manage that infrastructure and how to use it effectively with the correct processes and tools; and automation, which allows us to start to drive economies of scale and elasticity for the services we deliver, so that they are highly scalable, both upwards to accommodate new services, but also downwards so that services can be scaled back and the resources reused.

He also visualised the advantages a company reaps when it decides to design its infrastructure dynamically.

Companies with a dynamic infrastructure provide themselves with the flexibility and capability to meet new challenges and new opportunities quickly and cost-effectively, as they arise. An example would be if a company wants to quickly run a marketing campaign in order to drive a new product or new revenue. They are able to bring in the infrastructure quickly to ramp up the services to meet expectations, and importantly, to reallocate resources as needed by the business. Companies that have a less dynamic infrastructure might struggle to achieve this or only do so more slowly, which puts them at a competitive disadvantage in the long term.

To reorganize the infrastructure dynamically, a company doesn't need to rebuild the whole infrastructure. Lewis Troke explains what preconditions a company fulfil.

Putting a dynamic infrastructure in place does not mean that you have to rebuild your whole infrastructure. What it means is that you need to take advantage of the infrastructure you have in place today, taking into account what is right about it and how it is being used. However, it also means that you need to recognize what needs to be changed in order to facilitate the business. It means releasing money from part of the infrastructure that is not being used correctly, and investing this back into the business to develop new services and exploit opportunities for generating revenue.

Service Management plays an important part in this new concept. At the end of the conversation he explains, why Service Management stands at the center of every Dynamic Infrastructure.

Service management is the key to any dynamic infrastructure because, as the name implies, dynamic infrastructure is about change; a lot of change and very rapid change. In order to be able to support that change and to be able to manage the associated risk, you need to have very clear and concise processes in place, and you need to have the tools that allow you to automate these services so you can respond efficiently to the changes that arise.

At this point we would like to thank Lewis Troke for his remarks. For more information on this subject, please visit our website.