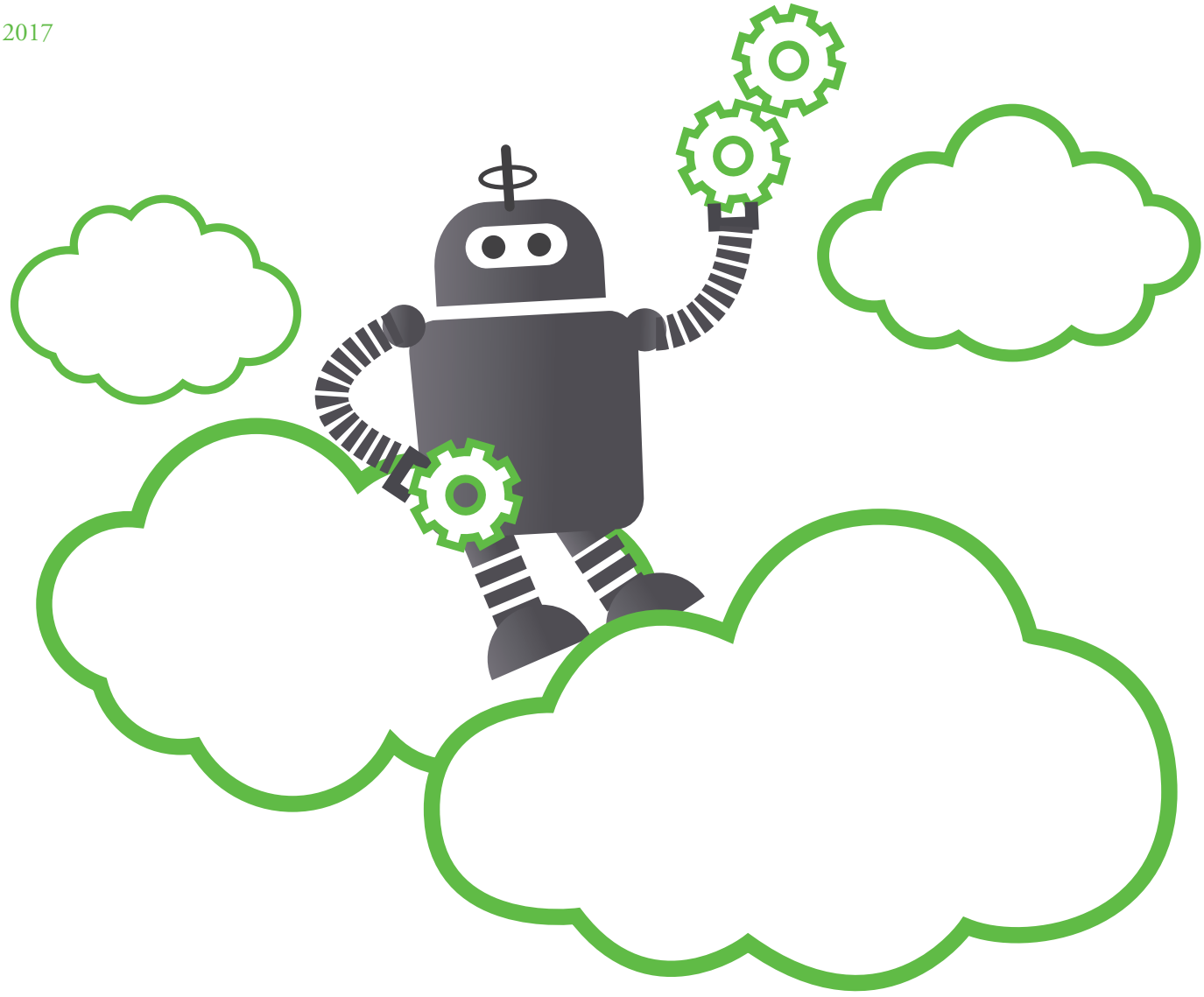
Delivering Effective Service Automation through Cloud Technologies

An ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) White Paper
Prepared for Ivanti

April 2017



EMA™ IT & DATA MANAGEMENT RESEARCH, INDUSTRY ANALYSIS & CONSULTING

Best Practices:
Maximizing Efficiency Through Service Automation

Introduction

Capturing the full business value of cloud is one of today's key challenges for enterprise IT. The most important strategic characteristics of cloud – agility, resiliency and efficiency – can only be fully harnessed if the IT organization possesses the automation, orchestration and integration capabilities required to tie together hardware and software in a manner similar to those used for any other business processes. This is a non-trivial challenge as there are many different clouds, both private and public, available today, each of which is targeted toward a specific set of use cases. Centrally enforcing compliance, security and cost efficiency to enable the organization to take full advantage of today's world of many clouds requires a service management platform that facilitates policy driven provisioning and management of complete services that consist of application and infrastructure components sourced from multiple clouds.

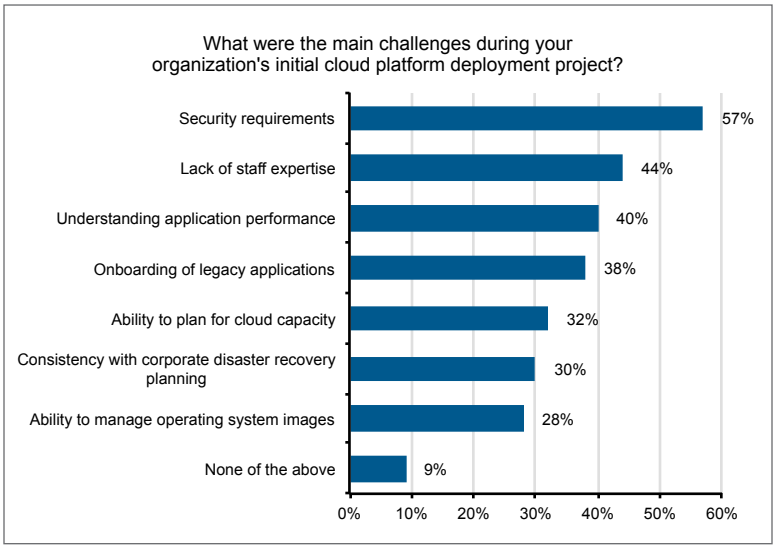


Figure 1 – Typical challenges for leveraging cloud

EMA research shows that organizations typically encounter numerous challenges when leveraging cloud (see Figure 1). In addition to the challenges represented in Figure 1, most enterprises have much work left to do in terms of data center automation, as well as breaking down technology silos. Cloud platforms must integrate with the existing data center infrastructure, including enterprise applications and data sources, in order to facilitate the generation of true business value.

The Business Value of Cloud

The cloud constitutes a paradigm shift within enterprise IT, which requires a cultural shift within the IT department. Enterprise IT today is competing with external offerings at the Infrastructure-as-a-Service (IaaS, e.g. Amazon AWS, Joyent, CSC, GoGrid, Google, IBM SoftLayer), Platform-as-a-Service (PaaS, e.g. Microsoft Azure, IBM BlueMix, OpenShift, CloudFoundry) and Software-as-a-Service (SaaS, e.g. Salesforce, Microsoft Office365, LinkedIn, Concur) levels. Many times, business units are looking to these alternatives because of a broad range of attractive attributes versus traditional datacenter, including greater agility, lower cost, improved security, better compliance, higher elasticity and elevated resilience.

Cloud platforms must integrate with the existing data center infrastructure, including enterprise applications and data sources, in order to facilitate the generation of true business value.

Naturally, organizations end up with hybrid environments, where some applications are placed into public clouds, others may find a home in private cloud environments, still others remain within the traditional data center, and a growing number leverage a mix of cloud and internal resources. Maintaining those environments becomes trickier when the economics behind the initial placement decision change and workloads have to be moved. EMA research has found that application workloads show significant gravity in terms of being tied to their current environment, meaning that it is very difficult to move

those workloads after initial placement. This means that it's essential to chose placements carefully, while also seeking management tools and processes that span multiple operating environments to help to overcome workload gravity and protect flexibility of placement.

Optimizing the use of cloud is too strategically important to get it wrong. Enterprise IT is on the verge of transformation from business cost center into business enabler/driver, where technology is used in a way that is "aware" of its business impact and is aligned as a positive force. Getting there means that business units must be able to request and deploy their own application environments, just as they would by going directly to an outside IaaS or PaaS provider. This provisioning process has to be centrally governed to ensure regulatory compliance, security and performance. The faster and cheaper business units can deploy their own applications, the more easily they can achieve competitive advantages compared to organizations still relying on the old infrastructure-centric paradigm of enterprise IT.

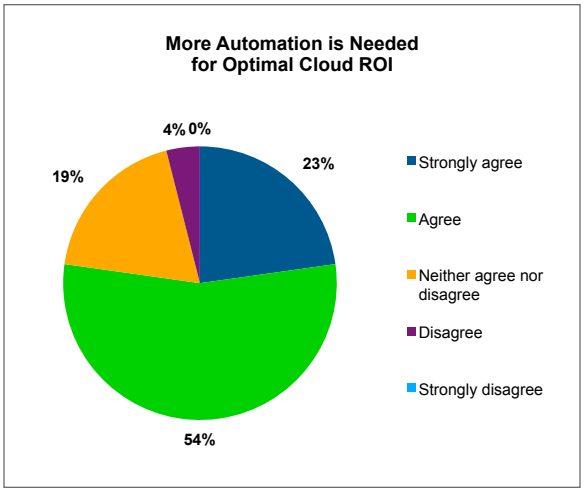


Figure 2 – Importance of Automation for Cloud ROI

The faster and cheaper business units can deploy their own applications, the more easily they can achieve competitive advantages compared to organizations still relying on the old infrastructure-centric paradigm of enterprise IT.

In order to ensure faster and cheaper service delivery, automation is key. EMA research has shown that 77% of organizations are aware of the need to improve data center automation to better realize the benefits of their hybrid cloud deployments (see Figure 2)[1]. Only if business infrastructure management and business process workflows are automated can cost, errors, security and compliance issues be minimized.

Leveraging the Cloud for Service Management Automation

Further, there is another important aspect of cloud that is creating new opportunities. Besides using cloud for IaaS or PaaS, or tapping into SaaS-based business applications, the cloud can be used to host and deliver management technologies, also using a SaaS approach. There are two very important points to consider here.

1. Service and endpoint management solutions can be hosted in the cloud, either wholly or in part. Based on specific needs, it may be desirable to access certain service management components from the cloud while others are maintained on-premise (a.k.a. hybrid cloud). Important here is the ability to make and easily change placement decisions, so that individual features such as help desk, service management, unified endpoint management and service automation can be reached from the public cloud, the data center, or vice versa. Also important is an ability to mix and match licensing models depending on budgeting preferences, varying between full perpetual licensing (capital expense) and periodic subscription licensing (operational expense) on a component-by-component basis. Such approaches parallel the key business value of cloud, where organizations receive the choice of where to place enterprise applications, based on a number of technical and business considerations.
2. Most organizations are already living in a "world of many clouds," leveraging multiple public and private providers and moving back and forth between them. Service management solutions should

[1] EMA Research Report: *Demystifying Cloud*
http://www.enterprisemanagement.com/research/asset.php/2440/Demystifying-Cloud

embrace this fact, enabling IT professionals to deploy, monitor and control business services in a massively heterogeneous environment, consisting of physical, virtual, private cloud and public cloud resources. Public cloud resources in particular offer significant choice in terms of cost, security, compliance and performance.

In short, service management should provide the "glue" to enable businesses to create homogenous Service Automation solutions on a foundation of massively heterogeneous hybrid cloud infrastructure building blocks.

In short, service management should provide the "glue" to enable businesses to create homogenous Service Automation solutions on a foundation of massively heterogeneous hybrid cloud infrastructure building blocks.

EMA Perspective

In the end, management solution providers seek to help IT organizations better leverage existing infrastructure while also accommodating new and disruptive alternatives such as cloud. Those solutions should also be an enabler, rather than a barrier, to organizations seeking to reimagine enterprise IT and transform into an internal cloud provider themselves. Further, management solutions must complement those technologies already in place that are working well, rather than forcing a 'fork lift' approach to replacing the entire stack under the guise of ideal integration and comprehensive capabilities.

Turning enterprise IT into a truly business-aware discipline is key to thriving in today's and tomorrow's economy. By nature, this type of message has to be delivered to and from the top levels of IT management, as there is a significant paradigm shift involved that must carry the endorsement and full support both IT and business leadership. IT service delivery is no longer merely a technical challenge and exercise, but must be tied directly to and driven directly by commonly understood business priorities and objectives. This includes breaking up traditional technology silos that have been barriers to service delivery automation for such a long time. Ivanti stands for this new and radical alignment of IT services with the business, as the company offers solutions that provide management, automation, monitoring and governance capabilities that are central for achieving this goal.

Ivanti stands for this new and radical alignment of IT services with the business, as the company offers solutions that provide management, automation, monitoring and governance capabilities that are central for achieving this goal.

About Ivanti

Ivanti is IT *evolved*. By integrating and automating critical IT tasks, Ivanti helps IT organizations secure the digital workplace. For more than three decades, Ivanti has helped IT professionals address security threats, manage devices and optimize their user experience. From traditional PCs, to mobile devices, virtual machines and the data center, Ivanti helps discover and manage your IT assets wherever they are located, improving IT service delivery and reducing risk. Ivanti also ensures that supply chain and warehouse teams are effectively leveraging the most up-to-date technology to improve productivity throughout their operation. Ivanti is headquartered in Salt Lake City, Utah, and has offices all over the world. For more information, visit www.ivanti.com.

About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help EMA's clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals, and IT vendors at www.enterprisemanagement.com or blogs.enterprisemanagement.com. You can also follow EMA on Twitter, Facebook, or LinkedIn.

Corporate Headquarters:
1995 North 57th Court, Suite 120
Boulder, CO 80301
Phone: +1 303.543.9500
Fax: +1 303.543.7687
www.enterprisemanagement.com

3104.042317