WHAT ARE CMPS? CLOUD MANAGEMENT PLATFORMS EXPLAINED

Cloud management platforms (CMPs) sit at the center of an exploding market. The cloud is changing the way every single business and organization structures their IT and data architectures.

For many companies, the cloud is a balance of positives and negatives. Sure, there's the cost reduction and availability and vendor-managed infrastructures. But lack of proper governance, compliance, and security remain top concerns for organizations considering more cloud solutions.

CMPs attempt to bridge this complex state, so that you can organize and manage all cloud operations from a single spot. The best CMPs even solve some inherent cloud problems.

Whether you are taking advantage of the growth of SaaS or implementing a DBaaS, you need to find a way to create an easy-to-use yet innovative service for your customers. CMPs might help—let's take a look.

The promise of the cloud

In large part, companies are moving to the cloud to speed up the delivery of digital services. Staying relevant means a business must continually provide new value and innovative experiences for customers.

However, companies often struggle to attain the benefit of speed when they try to deliver cloud services at scale. Many user interaction models are not optimized for use in the wider IT organization

at all.

The promise of cloud solutions is big. For them to work, however, cloud solutions must solve company problems—not make them worse.

What is a cloud management platform?

Cloud management platforms (CMPs) are software that manage multi-cloud services and resources. As businesses move more and more towards using multiple cloud services at the same time, they need a way to manage them conveniently.

Using CMPs helps organizations with:

- Governance
- Lifecycle management
- Automation of all managed cloud resources
- Many other processes that relate to or interact with cloud services

Do you need a CMP?

You might not need a cloud management platform—your current cloud solutions might be working perfectly fine for your needs! But, cloud infrastructures on their own can be quite complicated and often come up short in key areas.

Here are some commonly cited problems with the cloud:

1. Cloud solutions need to reduce complexity; they need to automate across complex environments to provide more value with less work.
2. Cloud solutions need to better address compliance and governance; these are the main inhibiting factors for adopting a cloud system. Generally, cloud solutions are known to lack the compliance and governance components that many organizations require. Failing in terms of compliance and governance can lead to all kinds of problems down the road—something many companies are keenly aware of.
3. Cloud solutions need to better secure the primary benefit that most companies seek from the cloud: speed of driving digital innovation. When we can improve digital innovation, we give customers more value.

So, we can sum up the issues with cloud solutions as:

- Too complex
- Lacking compliance and governance
- Lacking proper security

How CMPs work

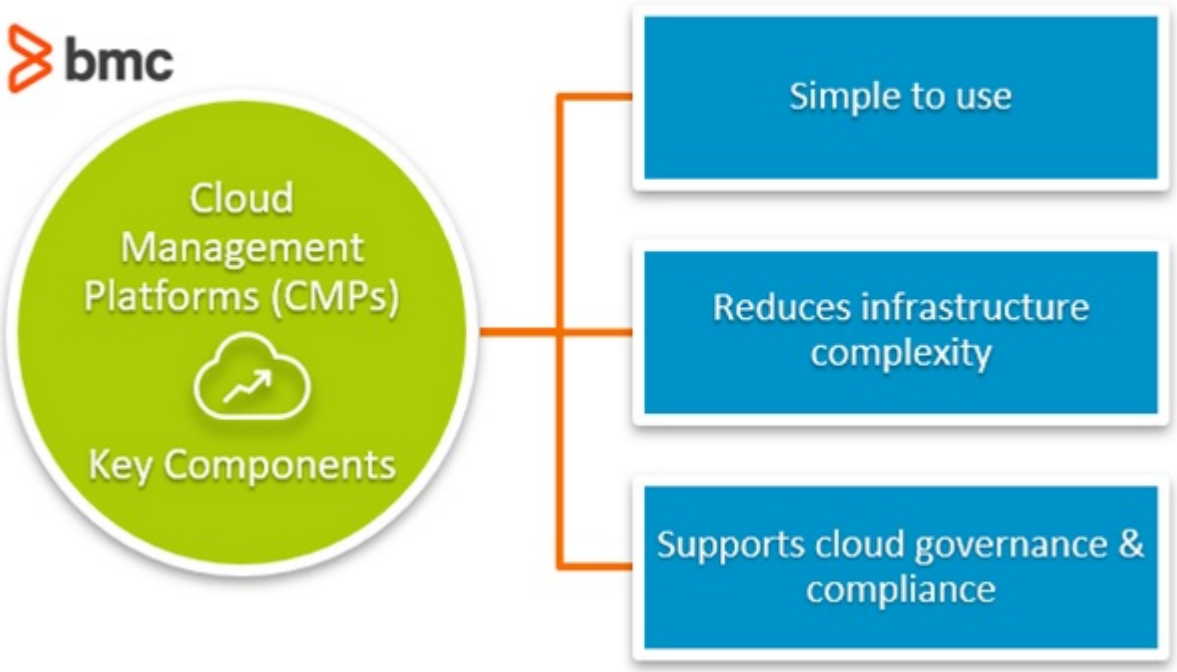
Modern CMPs extend the traditional IT infrastructure. This provides IT with a "variable compute strategy" that dramatically increases the flexibility and the speed of delivering digital services. The key is to automate all services across complex environments.

No developer wants to be locked into a subset of the infrastructure types that may be required to solve a problem in the optimal way. At a bare minimum, new clouds must be able to access all the

physical and virtual infrastructure within an organization, such as:

- Windows, AIX, or mainframe
- Hypervisors like vSphere, KVM, and Hyper-V
- Public clouds including Azure, AWS, and GCP

If clouds themselves don't do this, a good CMP just might.



Components of good CMPs

The required capabilities for cloud management platforms (CMPs) are evolving. As technology continues to become more complex, customers want to leverage the flexibility and the power that new cloud platform options provide. But customers also want the same cloud platform options to be simple and intuitive for all users.

How do you achieve that?

Here are key components of any CMP for it to be successful in the workplace.

Simple to use

Certainly, CMPs can be complicated pieces of software in their own right. A good CMP reduces complexity so that end users get the most out of cloud services.

A CMP must be integrated into a single source of service delivery, preferably a formless service delivery catalog.

Drilling in, the service request process must be extraordinarily simple for the end-user.

Digital innovation initiatives are usually focused on delivering more frequent releases of more apps to web and mobile platforms than end-user experience. By focusing on the end-user, your CMP can help drive extra value.

Reduce infrastructure complexity

Good CMPs improve the productivity of both developers and administrators. For example:

- Infrastructure provisioning is now just a basic capability. Knitting together all the different pieces of infrastructure required by complex multi-tier systems should be available to the final user and automated by the CMP.
- Supporting containers, like Cloud Foundry or Docker, means easily provisioning complex environments. This includes databases and middleware servers across and automatically scaling up or down based on system load.

Productivity trumps all other needs. If a CMP does not improve productivity, it is not worth using.

Support cloud compliance & governance

The complete infrastructure must be more secure and compliant, not less. This includes cloud and traditional IT estates. In this regard, a CMP can help in four key areas.

Governance for request and change management. For any serious cloud deployment, you must follow the processes of your organization. Just as there is an approval process for physical infrastructure, there is an approval process for virtual infrastructure.

You must integrate your cloud environment into your service management processes—otherwise, your cloud will grow out of control and ultimately slower and more expensive than traditional systems. How many organizations have been surprised at their public cloud charges? Research shows that organizations are over budget by 23% and expect that overspend to rise to as much as 47% very soon.

(Learn more about cloud governance & compliance.)

Effective CMDB usage. All cloud components in a production system should be tracked in the organization's configuration management database (CMDB). If we cannot maintain infrastructure and system control, we cannot effectively maintain CMPs.

Without these IT processes, managing and resolving issues around production systems is nearly impossible.

Required compliance of your cloud systems. Even development systems need to comply with operational standards. This is a complex problem for many businesses, especially due to a wide range of localization laws and other compliance issues.

Data and intellectual property on a development system are often as important as on production systems. Businesses must continually provide new value and innovative experiences for customers to stay competitive while also adhering to compliance regulations.

Security best practices. Certainly there are many aspects to security. Following best practices for patching is particular necessary in the cloud. Why? More than 80% of attacks exploiting known vulnerabilities and more than 75% of data breaches could be prevented by remediating those issues.

For raw numbers, there are 11,000 exploitable vulnerabilities in commonly used systems and software. Perfecting this process will dramatically reduce the risk of security issues in the cloud.

CMPs support digital transformation

To achieve the benefits promised by cloud computing organizations need to move beyond the idea of a cloud as a separate entity and instead integrate their cloud and traditional infrastructure.

IT teams that combine advanced CMPs with best practices processes, such as ITSM processes, compliance, monitoring and configuration management, can lead their organizations as they transform their technology platforms into a competitive weapon.

Related reading

- BMC Multi-Cloud Blog
- Public vs Private vs Hybrid: Cloud Differences Explained
- The AWS Well-Architected Framework: 5 Pillars & Best Practices
- Cloud Monitoring: Choosing the Right Metrics
- Converged vs Hyperconverged Infrastructure: The Differences Between CI & HCI