

Cool Vendors in Cloud Computing Management and Professional Services, 2009

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The growing acceptance of cloud computing by more-traditional enterprises is causing an upswell in the tools and services to assist these organizations to better manage and support their cloud initiatives. This research describes vendors that offer these management tools and professional service capabilities. These new tools and services come with the obvious risks associated with new markets and startups — vendors may not thrive, may not sustain their products or may change their technology direction.

Key Findings

- Cloud computing environments are becoming increasingly accepted as part of an enterprise alternative delivery model to procure IT services.
- For small or midsize businesses (SMBs), cloud computing may become a major part of IT service capabilities.
- Service quality among cloud providers varies, leaving many users looking for tools and services to meet their service-level agreement (SLA) requirements.

Recommendations

- Develop and maintain contingency plans to guard against the potential volatility associated with these vendors.
- Do not treat compute clouds as another operational silo — plan for the integration of the management of this environment with traditional operational environments using enterprise tools and processes.
- Service providers can augment IT operational capabilities using some of the technologies or vendors described in this research.

ANALYSIS

This research does not constitute an exhaustive list of vendors in any given technology area, but rather is designed to highlight interesting, new and innovative vendors, products and services. Gartner disclaims all warranties, express or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

What You Need to Know

Cloud computing is becoming one of the most visible sourcing option for infrastructure and operations (I&O) professionals. I&O professionals, thus, they must be aware of how they will manage this environment from an availability, performance, disaster recovery and service aggregation point of view. This research assists them in understanding which technologies and vendors are emerging to manage cloud computing technologies to help manage service levels for the business.

Appirio, San Mateo, California, USA (www.appirio.com)

Analysis by David Cearley

Why Cool: Appirio was founded in 2006 to provide professional services and products to enterprises implementing software-as-a-service (SaaS) solutions. It has built strategic partnerships with salesforce.com and Google, and assists companies in implementing and integrating these and other cloud computing service platforms. Appirio is part of a new class of cloud integrator that specializes in building cloud services, and in integrating multiple cloud platforms and Web 2.0 social networks (for example, salesforce.com, Google Apps, Facebook and Amazon). It provides strategy, education, implementation and change management services to assist companies such as Japan Post Service, Qualcomm, Genentech and Author solutions take advantage of cloud computing. It has provided services to more than 120 companies, and has more than 2,000 companies using its cloud application services. Appirio is a cloud integrator and a cloud application service provider. It has a range of packaged cloud services that has grown from customer engagements and its own use of cloud computing to run its business (for example, Facebook referral management, service management and collaborative sales).

Challenges: Although Appirio has recently expanded to build on other cloud platforms, it is heavily focused on salesforce.com, and its success is tied to the success of Force.com and AppExchange. It also faces competition from a range of other specialized cloud system integrators, as well as the large established service providers that are building practices around salesforce.com and cloud computing.

Who Should Care: Larger enterprises looking to explore cloud computing in targeted areas to support run, grow or business transformation are a good match for Appirio. SMB and startup companies looking to aggressively exploit cloud computing to drive business model innovation are also likely customers. Architects, developers and operations managers are most likely to benefit from Appirio's service offerings.

CohesiveFT, Chicago, Illinois, USA (www.cohesiveft.com)

Analysis by Lydia Leong and David Cearley

Why Cool: Founded in 2006, CohesiveFT provides tools to build and manage applications on virtualized infrastructures. CohesiveFT's Elastic Server platform allows companies to assemble virtual servers from components, then easily deploy and manage them on public clouds and within an enterprise deployment of virtualized infrastructures. These application stacks can be

output in formats suitable for deployment on VMware, Xen, Parallels or Amazon Elastic Compute Cloud (Amazon EC2). Users are encouraged to share their stacks with the CohesiveFT community, and users looking for common stacks, such as Ruby on Rails, will find a rich selection of templates available to them. CohesiveFT is cloud-agnostic, although it has partnerships with a variety of cloud providers. It also offers a product called VPN-Cubed, which provides an encrypted virtual private network (VPN) between virtual servers running in different physical locations, allowing customers to securely share data among multiple clouds, and to obtain cross-cloud load-balancing and failover.

Challenges: CohesiveFT is focused on one aspect of cloud management, while other vendors are taking a more comprehensive approach. CohesiveFT and other niche vendors will face increasing pressures as cloud management matures. The CohesiveFT environment is dependent on its community to define and validate stacks, and it is unclear whether a large, robust and vibrant community will emerge quickly enough to establish a viable and unique niche.

Who Should Care: IT infrastructure architects and system administrators interested in methods to create and manage infrastructure templates that are portable across multiple cloud platforms and virtualization technologies will find CohesiveFT of interest.

Hyperic, San Francisco, California, USA (www.hyperic.com)

Analysis by Milind Govekar and Cameron Haight

Why Cool: Hyperic, started in 2004, is an IT operations management company. Its founder and the management team have used their experience from the open-source Apache project to extend the open-source-based commercial Hyperic HQ application performance management tool to manage on-premises infrastructure and applications "in the cloud." The latter is supported with two offerings. The first is CloudStatus (www.cloudstatus.com), which is currently in beta and is a free offering to monitor the health of key Amazon Web Services (AWS) offerings (EC2 and others), as well as Google's App Engine. Service alerts are available via Twitter. The other is HQ for AWS, which monitors and manages a range of software running on Amazon EC2 instances. The product measures availability and performance and provides historical data within a simple graphical format identifying potential service issues. It is able to combine the cloud-based monitoring and management data with the on-premises solution (you can monitor your enterprise-based assets from the cloud as well). A browser is used to connect to the management server, which is packaged as an Amazon machine image (AMI). The database runs on Amazon Elastic Block Storage (EBS) for data persistence. Agents are deployed in the AMIs that are to be managed.

HQ for AWS comes in two primary offerings. Hyperic HQ for AWS-Developer, which is free and intended for small deployments, because it is limited to managing only four AMIs. HQ for AWS is priced on a use-based fee, and it comes in three sizes: capable of managing up to 25, 100 and 200 machine instances. Larger deployment sizes are available. The product is procured through Amazon's DevPay service.

Challenges: Although Hyperic's product suite is able to combine monitoring and management of on-premises and cloud-based services, there are still gaps in the portfolio (for example, change, release and configuration management).

There also are gaps in managed platforms, especially ERP and packaged application software (for example, SAP, Oracle and others). Furthermore, competition from the "Big Four" IT operations vendors, BMC Software, CA, HP and IBM Tivoli, as well as smaller vendors, will likely be intense in this market, because it represents a potentially large management revenue "greenfield." Hyperic, however, does have the first-mover advantage it needs to continue to

exploit market, especially as it relates to the combined monitoring of on-premises and cloud-based infrastructures.

Who Should Care: IT operations organizations that are experimenting with using cloud services provided by Amazon or Google should consider Hyperic products to monitor this environment. In addition, development teams desiring to better understand the performance of applications being designed for the cloud should investigate Hyperic's offerings.

RightScale, Santa Barbara, California, USA (www.rightscale.com)

Analysis by Cameron Haight and Milind Govekar

Why Cool: Founded in 2006 with a relatively simple AWS console or control panel, RightScale has expanded to provide a management platform for customers of AWS and other cloud infrastructure providers to more easily provision, monitor and manage cloud-based assets over their life cycles. The company has received more than \$ 17.5 million in venture funding and was cofounded by Thorsten von Eicken (CTO), who was also the founder of Expertcity.com/GoToMyPC (now Citrix Online).

Although providing extensive customization and control capabilities, the complexity of AWS (that is, EC2, Simple Storage Service [S3], Simple Queue Service [SQS] and others) is also a potential barrier to adoption — especially for less-skilled administrators. RightScale is working to change that by providing several key deliverables:

- RightScale automation engine, which manages deployments that adapt as required to system demands, failures and other events
- Cloud-ready server templates, which provide prebuilt templates for the standardized installation, configuration, backup and other aspects of common applications across varying software stacks (for example, Web/application servers, databases and grids for batch processing)
- A multicloud interface, which provides portability while maintaining transparency and control for IT organizations.

Although most of the company's business is still focused on the support of Amazon, it has a strategy to provide common management functions across multiple providers, enabling clients to more easily move between differing cloud infrastructures.

RightScale provides several editions in addition to a limited, free, developer-oriented edition. The costs start at \$500 per month, plus a \$2,500 setup fee for the management of up to 15,000 server hours per month, with increases from this level for the Premium and Enterprise Editions. The company claims more than 350,000 servers under management, representing 10,000 users.

Challenges: Although appearing to be the leader in this emerging market area, RightScale already has competitors such as Elastra, Enomaly and Kaavo, thus requiring the company to continue to focus on making its platform easier to use, while expanding cloud service provider support. In addition, major IT management companies, such as the Big Four, seeking potential opportunities within the cloud management market may view companies such as RightScale as a threat to their established frameworks, thereby causing these larger players to minimize the company or to acquire it. Amazon, with its recently launched AWS Console, is also a brewing competitor — albeit for its environment. Finally, while the potential opportunity is large, the cloud service market is of a modest size, and may not enable companies like RightScale to generate the returns sought by its prestigious backers.

Who Should Care: Line-of-business owners, data center managers, enterprise and IT infrastructure architects, and systems administrators interested in looking for methods to improve the manageability of environments that are candidates for cloud migration will find RightScale of interest. In addition, CTOs of cloud providers may be interested in finding ways to enable a smoother transition to their services.

Ylastic, Atlanta, Georgia, USA (www.ylastic.com)

Analysis by Milind Govekar and Cameron Haight

Why Cool: Ylastic is an Atlanta-based startup, founded in 2008 by CTO Prabhakar Chaganti (who was trying to launch a cloud-based video startup, but was struggling with its manageability). Today, the company is purely focused on managing cloud services provided by AWS. Ylastic supports a browser-based interface on mobile phones (including Apple's iPhone and Google's Android) and other computing devices. Ylastic's strength is in providing administration capabilities for AWS. Thus, it has capabilities like creating new CloudFront (the AWS content delivery network) distributions, as well as viewing and modifying CloudFront, EC2, S3, SimpleDB (SDB) and SQS configurations and domains. It has auditing capabilities to keep track of activities performed by user in the AWS environment using the product. Ylastic has the ability to export data, such as SimpleDB (SDB) domains and lists of files in a S3 bucket, to PDF or CSV file formats, and e-mail them. Ylastic has recently added graphical capability to visualize daily reports, alerts and service health details of the AWS environment. These reports can also be e-mailed in PDF formats. Alerts can also be sent to Jabber IM or Google Talk. Furthermore, Ylastic provides the ability for multiple users to share an AWS account, and is working on providing one user interface for multiple AWS accounts.

Ylastic charges \$50 per AWS account per month, with no setup or termination fee or any long-term contract requirements. It recently extended support from the AWS U.S. region to the European Union (EU).

Challenges: Most enterprises are looking at multiple ways of experimenting and engaging with cloud service providers, in addition to using their own on-premises applications and infrastructures. Although Amazon is one of the well-known cloud service providers among many others, Ylastic provides monitoring and management capabilities for just that environment. Ylastic solution cannot be used in a heterogeneous cloud service environment, nor can it be used in a mixed, on-premises and cloud service-based environment. Perhaps the biggest challenge will be with Amazon's recently announced AWS Console, which is available at no charge.

Who Should Care: Developers or IT operations staff that are experimenting with or have built solutions around Amazon's AWS cloud environment will find Ylastic's monitoring and management capabilities useful.

RECOMMENDED READING

"Cloud Computing's Impact on Infrastructure and Operations"

"Cloud Computing: Defining and Describing an Emerging Phenomenon"

"Key Issues for Cloud Computing, 2009"

"Cloud, SaaS, Hosting and Other Off-Premises Computing Models"

This research is part of a set of related research pieces. See "Cool Vendors 2009: Changing Models and Changing Times" for an overview.

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