ScienceLogic

White Paper

IT Infrastructure Performance Monitoring & Management

Summary

Cloud computing is the transformational technology in the evolution of the IT industry after the launch of the internet in the 1980s.

Dedicated versus Virtual Servers

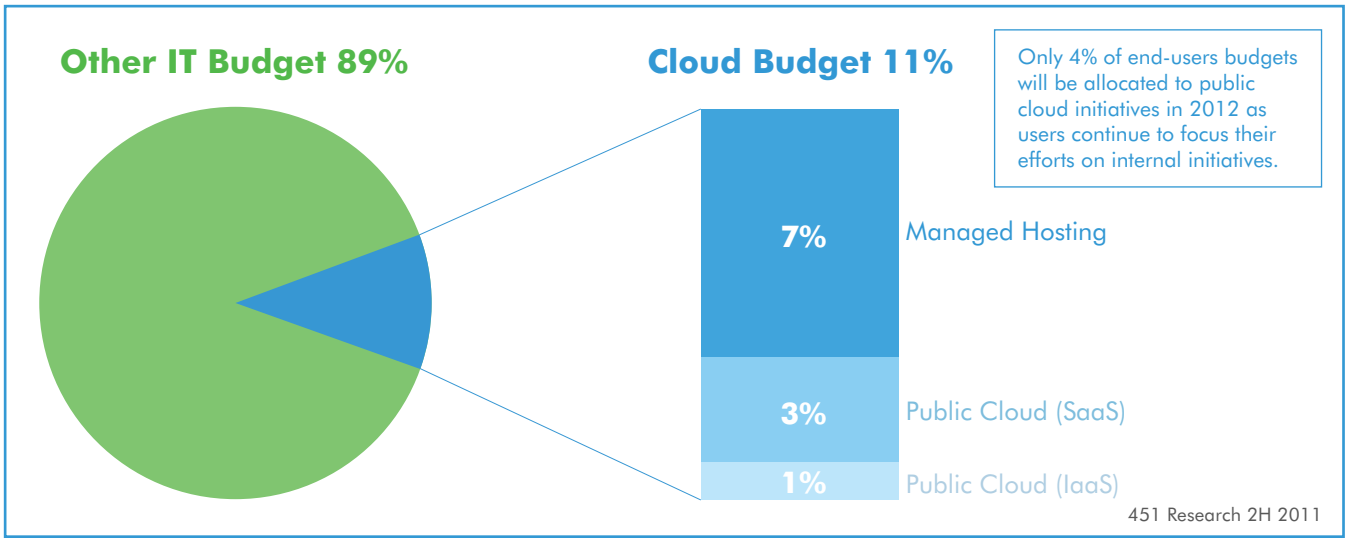
A number of new service providers that only offer cloud-based Infrastructure-as-a-Service (IaaS) have come to market. Some of them suggest dedicated physical servers are no longer needed in an increasingly virtualized world. However, the dedicated server is alive and well, and needed.

Here are just a few examples:

- Database administrators still regularly choose dedicated over virtualized servers in order to achieve the highest level of performance and reliability.
- Many applications are designed to scale up rather than out. Having access to the full resources of a dedicated server is important during demand spikes.
- IT organizations have policies against running certain applications on hosted virtual servers based on their unique security standards or concerns.

Rather than eliminating the need for dedicated servers, cloud computing has produced new requirements including enhanced agility, flexibility and control. The good news is that an increasing number of cloud service providers offer both dedicated and virtual cloud servers. The bad news is that these services are usually separate rather than seamlessly integrated. Typically Managed Hosting with dedicated servers is more a hands-on and the client relationship is more an Account Manager model. While IaaS and cloud is more akin to reliance on a Portal and a more self-service automated model with the promise of delivering savings but a higher customer churn risk.

IT Budget Allocation to Service Delivery Models



Managed Hosting and Cloud Computing

Cloud or otherwise, servers need to be managed. A key consideration is "Who should manage them?" The answer depends on a number of factors. IT organizations of all types and sizes may benefit from managed hosting. Yet their rationale for whether to self-manage or utilize managed services can be as different as the organizations themselves.

An organization might lack the internal skills or resources to manage its own environment. Yet, even with the required expertise in place, many organizations choose managed hosting so they can apply their own staff to higher value activities centered on their core business. Some organizations find managing their own hosted servers a logical extension to what they are already doing with their on-premise servers. Others find self-management a black hole for time, resources and morale.
Just as cloud computing has not eliminated the need for dedicated servers, the need for managed hosting has not gone away with the advent of cloud computing. Instead, both services must evolve in order to keep up with the changing needs of those who choose to use them.

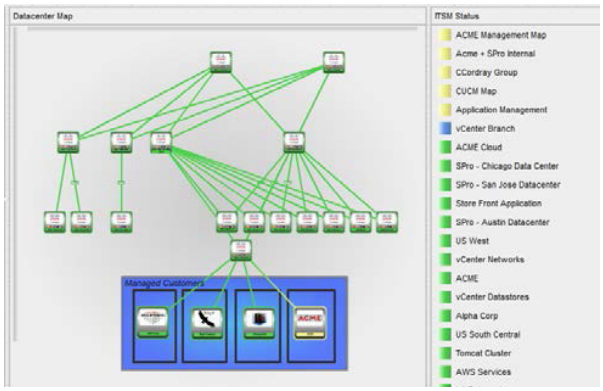
To varying degrees, all technologies become obsolete. Managed hosting providers must continually invest to maintain the best infrastructure, tools and processes for the job. Yet many providers are relying on outdated equipment and architectures. This includes networks that are not tuned for new service offerings such as virtualization or the more automated and dynamic cloud computing model. Service providers sometimes choose to forget that delivery of high quality services depends greatly on high quality infrastructure. It is challenging, to say the least, to deliver on a performance or uptime SLA when the underlying infrastructure is outmoded or designed for a different age of technology.

Some aspects of managed hosting services are not tuned to deliver information to customers when they need it. Usage reports maybe delivered a month or more after consumption has occurred. Pricing and billing statements often hide details within larger buckets so that the true value delivered (and the related costs) becomes incomprehensible. Basic things like infrastructure status can be even more opaque, requiring customers to make phone calls, send emails.

Monitoring Services

Ideally performed 24/7 and include proactive assessment of monitored data to predict and prevent system bottlenecks. Up-to-date run-books and customized remediation plans help speed recovery from unplanned events.

In addition to detailed real-time performance reports through the Customer Portal, and ongoing alerts, the ScienceLogic platform can provide regular follow-up reports and typically a Managed Hoster would allocate time to review this data with their client as appropriate to each service. This makes customers aware of critical trends, impending limits and the need for changes or additional capacity planning.



The self-service cloud model of course restricts these valuable reviews. Therefore an alternative is required which typically involves a self-service portal or report process that helps create the trust required to ensure customer satisfaction and client retention.

It's for you as a Managed Hoster/IaaS/Cloud provider to define your services based on your strengths and what you are seeing within your client base and what your prospects are requesting. Sometimes it doesn't make sense to be all things to all people. Consider covering management of specific applications like IT infrastructure, specific platforms, MS Exchange, SharePoint and other collaboration or communication tools.

Would you want to add to your current base service of operating system installation and storage? Is your focus a general purpose outsourcing offering. But remember that as you work through these decisions and weigh up the pros & cons the ScienceLogic platform is ready to grow with you as your consumption changes and adjust due to the breadth of technologies we are able to cover combined with a simple cost of goods to you model.

Example Dedicated Hosting Service Pricing

	Price Range/ Month	**Advanced Monitoring/ Month**
Dedicated Server	$70-$150	$25 - $40
Virtual Servers	$50-$125	$20 - $35

Public Cloud Examples

Simple Example
Manage your servers better with Advanced Server Monitoring. Automate server monitoring and spot problems before they affect the performance of your servers.

Server resources - monitor processor usage, memory, bandwidth and hard disk space
Port monitoring - monitor the ports your web applications rely on
Website statistics - monitor web services and commonly used web transactions
Database monitoring - maintain MySQL query speeds and identify performance issues
Content-verification policies - monitor URL and web content availability, port and nameserver response.

To get Advanced Server Monitoring free for a year, call our Support Team once you've purchased your dedicated server. You can also get us to set it up for you for a simple $35 per server.

Standard Monitoring Services

Advanced monitoring, notification, and failure responses provide a higher level of assurance and protection. We offer a variety of monitoring services—including proprietary monitoring software to watch your systems when you can't.

	Monthly Charge
Monitoring Each server comes standard with host ping monitoring and IPMI statistics. For those requiring more detailed monitoring, services running on the server can be monitored as well.	**Service** Host Ping + IPMI Statistics: $0 Host Ping + Services + IPMI Statistics: $5
Response Response options include both automated and human response choices. Automated reboot from monitoring allows for an automatic reboot of the server should a monitoring alert occur. The NOC monitoring option includes engineers actively monitoring your server to provide immediate response and personalized notification of an alert or failure.	**Service** Automated customer notifications: $0 Automated Reboot from Monitoring Failure: $5 24 / 7 / 365 NOC Monitoring: $50AND
Notification Notification services include an automated email and support ticket generation for host ping or service failures.	**Service** Email / Ticket notification: $0

Advanced Example

Advanced Monitoring Services
Get the monitoring insights you need to optimize the performance and availability of the vital servers in your organization. The Advanced Monitoring Solution supports Windows and Linux - all from the industry leading Portal.

Advanced Monitoring will allow customers to monitor a wide variety of statistics from their operating systems and application stacks. The service offering has 2 distinct reporting features; graphing and alarms. Alarms are notifications that a service is outside an expected range. Alarms can be tracked from the customer portal and also be configured to send email alerts. Graphing will show you a visual depiction of usage over time.

This can be very useful for capacity planning.

Like all other services, ordering configuration and reporting is available through the website and portal.

Key advantages include:

- Comprehensive visibility of infrastructure, services, customer views, and customer service levels
- Full transparency through any application stack
- High-levels of security, availability, and scalability
- Tiered monitoring levels to meet targeted business objectives and needs
- Robust APIs for extensive integration
- Lightweight, scalable architecture + “zero-touch” deployment ideal for cloud environments

	Monthly Charge
Basic (Hardware and OS) – Includes: • PU, Disk, and Memory Monitoring • Process Monitoring • Remote System Monitoring • Windows Services Monitoring	**Service** Linux: $0 Windows: $0
Advanced (System Health) – Includes Basic Plus: • DHCP Response Monitoring • File and Directory Checking • LDAP Response Monitoring • Mounted File System Monitoring • Network Time Protocol Response Monitoring • Network Traffic Monitoring • Performance Monitoring • SNMP Data Monitoring	**Service** Linux: $5 Windows: $5
Premium Application – Includes Advanced Plus: • Apache Monitoring • DNS Response Monitoring • Email Response Monitoring • IIS Monitoring • MSSQL Monitoring • MySQL Monitoring • Tomcat Server Monitoring	**Service** Premium: $10 Web Hosting Linux: $10 Windows: $10

About ScienceLogic

ScienceLogic delivers the next generation IT monitoring platform for the network of everything. Over 15,000 global Service Providers, enterprises, and government organizations rely on ScienceLogic every day to significantly enhance their IT operations. With over 1,000 dynamic management Apps included in the platform, our customers are able to intelligently maximize efficiency, optimize operations, and ensure business continuity. We deliver the scale, security, automation, and resiliency necessary to simplify the ever-expanding task of managing resources, services, and applications that are in constant motion.

ScienceLogic won InfoWorld's 2013 Technology of the Year award, Red Herring's Global 100 Award, Deloitte's Technology Fast 500™, and MSPmentor 250, among other worldwide recognitions of excellence. For more information, visit www.sciencelogic.com.

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