



Workplace Management from the Cloud

For Management of the Dynamic Workplace

Mobile devices are always in the cloud. Why not use a management solution that's also in the cloud? And why not use it to manage on-premise devices, too?

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The Need for Dynamic Workplace Management

Technology, telecommuting and a new generation of workers who "grew up with smartphones in their hands and computers in their laps" are revamping the work culture.

- By 2020, the U.S. Bureau of Labor Statistics projects that Millennials those born in the 1980s and 1990s will make up 40 percent of the workforce.
- PricewaterhouseCoopers reports that Millennials already form 25 percent of the workforce in the U.S. and account for more than half of the population in India. By 2020, Millennials will form 50 percent of the global workforce.²
- A survey by Harris Interactive and CareerBuilder in June 2012 found that 69 percent of employees from ages 25 to 34 work after leaving the office.³
- According to the September 2012 Q3 iPass Mobile Workforce Report, mobile employees work as many as 20 additional hours a week when away from the office.
- A Fortinet survey of 4,000 workers from ages 20 to 29 found slightly more than half view it as their "right" to use their own mobile devices at work.

A more youthful workforce, coupled with the Bring-Your-Own-Device (BYOD) trend, means today's "workplace" can be anywhere. Knowledge workers carry their workplace wherever they go – on smartphones, tablets and laptops.

This new workplace is dynamic: changing devices and locations frequently throughout the day. While the dynamic workplace offers employees more flexibility and efficiency in their work, it adds complexity to IT management.

Workers want to get their jobs done by using any service from any device, from any location, at any time. They are also more tech savvy and often use cloud computing and SaaS technologies to go around IT and get the tools they need, if IT can't deliver fast enough.

The IT department would like to empower employees with BYOD but must maintain IT standards and enforce security and compliance policies. The increasing number and diversity of personal devices being brought to work further complicate the situation for IT management.

For enterprises to remain competitive and retain their talented employees, they need a way to manage the dynamic workplace. To support the work styles of today's knowledge workers, IT must shift its focus from device-centric management to user-workplace management – from endpoint management to workplace management.

^{1&}quot;Here's Why Companies Should Give Millennial Workers Everything They Ask For," Business Insider, Aug. 23, 2012

²"Millennials at work: Reshaping the workplace," Events & Trends, PricewaterhouseCoopers, June 2012 Vol. 259

³"How Millennials Work Differently From Everyone Else," Forbes, Sept. 13, 2012

Cloud-Based Management: Barriers and Benefits

Dynamic workplace management requires three essential tasks from IT:

- 1. Provide users with any services to any devices, from anywhere, at any time.
- 2. Treat users like customers by empowering them to "purchase" IT services.
- 3. Automatically manage security and compliance.

The best way to accomplish these tasks is through cloud-based management. Why? Because the cloud is where employees are already working, especially those who use their own devices.

In fact, most employees are using more than one personal device at work. A new study by Cisco Systems says the average number of connected devices per knowledge worker is expected to reach 3.3 by 2014, up from an average of 2.8 in 2012. While 95 percent of the IT professionals surveyed say they permit BYOD of some form in the enterprise, two concerns about this incoming flood of devices remain: security and support.

Cloud technology can address both concerns. Cloud-based management allows IT to make the shift from device management to user management. With workplace management from the cloud, the number of devices is less significant than who is using them. A master copy of each user's workplace sits safely in the cloud, where the user – and no one else – can access the workplace from any device or location, at any time.

Barriers to Cloud-Based Management

What keeps enterprises from using cloud-based solutions? The three most common barriers are customer concerns about security, compliance and control. Enterprises considering cloud-based management should make sure their cloud services provider can give satisfactory answers to the questions listed in Table 1.

Table 1: Customer Concerns About the Cloud

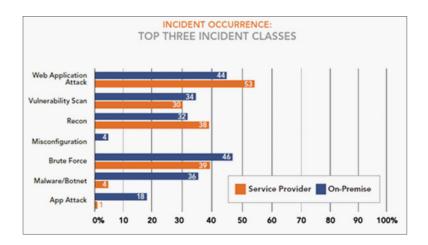
Security	Compliance	Control
How strong and consistent is your access control?	Where is my data physically located?	Is it a private cloud, public cloud or hybrid?
Can you guarantee zero unauthorized access to my business data?	Can you guarantee my data will be destroyed if I terminate your service?	Can you guarantee 99.999 percent availability of my data?
What physical security measures protect your cloud servers and storage banks?	Can you ensure data stored in your cloud meets regulatory requirements?	What happens to my data if I terminate your service?
Will my data be in a multi-tenant cloud?	Is my data encrypted during transmission to and from the cloud?	Can your infrastructure manage more than one device per user?
Can you tell who is looking at my data?	Is the data transmission channel secure?	Can I access my data at any time? 24/7/365?

 $^{^{4}\}mbox{"BYOD}$ and Virtualization," Cisco IBSG Horizons Study, Cisco Systems, Inc., May 2012

Almost every survey lists "security" as the number one reason for not embracing cloud technology. The popular notion is that on-premise data is more secure than cloud-based data. The truth is, most IT departments are struggling with on-premise data security. With increasing workloads and decreasing budgets, they don't have the resources to manage security well.

Cloud-based data is inherently more secure because the hosting companies providing cloud services can afford state-of-the-art security technology – and expert technicians to keep their data secure and compliant with regulations.

A study by Alert Logic in September 2012 disproves the commonly held belief that on-premise security is stronger than cloud security.⁵



The global study of 1,600 business customers using both on-premise and cloud-hosted systems revealed on-premise IT infrastructure was more likely to be attacked – with greater frequency and variety – than cloud-based infrastructures.

⁵"An Empirical Analysis of Real-World Threats," Alert Logic State of Cloud Security Report, Fall 2012

Benefits of Cloud-Based Management

Today, a growing number of enterprises with mission-critical activities run entirely in the cloud. Netflix, Groupon, Google and Amazon are just a few examples.

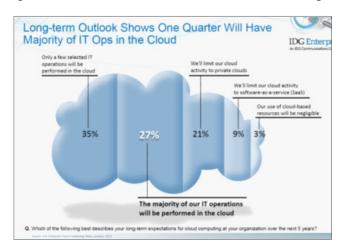
Many city governments from around the world are also taking advantage of cloud services, including Denver, New York, Manchester, Barcelona, Amsterdam, Seoul and Singapore. A report from Pike Research⁶ says that cloud-based computing allows cities to:

- Reduce capital expenditure
- Access new skills
- Reduce time-to-deployment of new solutions.

In the U.S., government agencies are moving their IT operations to the cloud, following a "cloud-first" mandate in November 2010. According to InformationWeek⁷:

- The Naval Supply Systems Command plans to use Amazon Web Services to store and distribute digital photography and video.
- The Department of Labor is looking at a cloud solution for email and other services.
- The Department of Energy is developing a community cloud.
- NASA is using Amazon Web Services.

In the private sector, six out of 10 U.S. companies have at least one application in the cloud, and 71 percent expect to increase spending on cloud services in the next 12 months, according to IDG Enterprise.



In its 2012 Cloud Computing Study, IDG Enterprise found more than one-fourth of those surveyed plan to move the majority of their IT operations to the cloud over the next five years.

⁶"Smart Government Technologies," Pike Research, September 2012

 $^{^{7}}$ "10 Developments Show Government Cloud Maturing," InformationWeek, June 25, 2012

The main reason organizations are taking advantage of cloud-based management is cost savings. A June 2012 survey of 151 federal IT managers found the U.S. government could save \$16.6 billion if each agency shifted just three mission-critical applications to the cloud.⁸

The biggest cost savings of cloud migration come from consolidating or closing data centers. This saves energy, hardware, real estate, maintenance and other infrastructure costs.

In addition to cost savings, other benefits of cloud-based management include:

- 1. Business continuity using cloud-based redundant servers for backup and disaster recovery.
- 2. Business agility reacting to market conditions with greater deployment speed and flexibility.
- 3. Scalability meeting corporate demands with a "pay-as-you-grow" model.
- **4. Expertise** letting the cloud provider take care of the technology.
- **5. Globalization** making applications available to a global workforce, anywhere and any time.

The benefits of cloud-based management flow throughout the organization, as summarized in Table 2.

Table 2: Organization-wide Benefits of Cloud-based Management

IT Benefits	Employee Benefits	Business Benefits	
Less overload, more efficiency, faster service delivery	More flexibility to work in any location, at any time	More productivity from employ- ees and IT	
Fewer tedious tasks	Faster access to data and services	Cost savings	
More time for strategic tasks, more focus on business objectives	Higher job satisfaction and productivity using their own devices	More focus on the business instead of the technology	
Easier integration of apps	More variety of services available	Scalability and budget flexibility	

 $^{{}^{8}\}hbox{``Mission-Critical Cloud: Ready for the Heavy Lift?'' www.meritalk.com/MissionCriticalCloud, June~2012}$

Managing the Three-Dimensional Workplace

To efficiently support an increasingly global, mobile and youthful workforce, IT needs to focus on managing the user's dynamic workplace – rather than managing the device. It's not about managing devices; it's about providing users the services they need.

The dynamic workplace is independent of the device; it can be accessed from a laptop, tablet, smartphone or PC. The user chooses the form factor; IT manages the workplace and automatically delivers it to the chosen device.

A cloud-based solution can enable workplace management because it addresses the three dimensions of the dynamic workplace:

- 1. Physical Workplace Management software management, inventory, backup and recovery, and remote control.
- 2. Virtual Workplace Management virtual applications and virtual desktop management.
- 3. Mobile Workplace Management mobile device management (MDM), secure email gateway, and master copy of user workplaces in a cloud-based "content locker."

Managing the three-dimensional workplace requires a peoplecentric, holistic solution.

A holistic solution is one that manages the technical side of the workplace as well as the business side. So IT assets, licenses, cross charging of services, and service contracts are managed and compliant – no matter where those assets or services are physically located – in the cloud or on the premises.

This means endpoint management is not a holistic solution. Neither is MDM or desktop virtualization. A holistic solution allows IT to manage all three dimensions, while providing self-service and automated compliance to all three dimensions.



The cloud computing paradigm makes it easy and affordable for enterprises to transition business processes to the cloud. On-premise devices, mobile devices, IT service desk and self-service catalog, assets and compliance can all be managed from the cloud – without burdening the IT department.

Instead of building a private cloud, deploying a virtual desktop infrastructure, or developing in-house MDM and endpoint management solutions, enterprises now have a better choice: workplace management from the cloud.

Matrix42 Workplace Management Solutions

Matrix42 is a pioneer in providing workplace management solutions. It's the only company that can seamlessly manage mobile, virtual and physical environments. More importantly, it's the only company to offer all of these services from the cloud.



Workplace management solutions from Matrix42 help enterprises:

- Ensure access, security and compliance. Employees can access data and services from anywhere at any time, and they can add their own devices and order services in compliance with company policies.
- Raise employee productivity and job satisfaction. Employees can provision their own devices and request services or open helpdesk tickets from their smartphones. And, cloud-based deployment allows faster setup and delivery of IT services.
- Improve IT efficiency and lower IT costs. With a user self-service portal and automated security and compliance management, the IT staff can focus on more strategic and profitable projects. IT self-service can reduce costs up to 70 percent.
- Increase profitability. Accurate asset management prevents over-spending on hardware, software, licenses and maintenance. Automated license compliance can save up to 30 percent on software costs.

Matrix42 empowers the dynamic workplace by providing any service, to any device, from anywhere. It's the first and only company to release a comprehensive, cloud-based management solution for mobile, virtual and physical devices. Now, companies can enjoy the benefits of cloud computing, virtualization and BYOD – without all the costs and hassle.

Conclusion

IT departments that adopt dynamic workplace management from the cloud can empower their users and increase their productivity while managing security and compliance.

With Matrix42 workplace management solutions, enterprises can provide the corporate work environment everywhere, at all times. Integrating physical, virtual and mobile management with self-service and compliance management, Matrix42 provides the only holistic solution for managing the dynamic workplace.

In today's corporate culture, "work" is not a place. That's why Matrix42 provides dynamic workplace management from the cloud.

Matrix42 software manages more than 2.5 million clients and has been providing workplace management solutions for 20 years. Visit us at www.matrix42.com or contact us at info@matrix42.com or 888-694-2872 to find out how 2,500 customers worldwide are taking control of their workplace to improve employee productivity, IT efficiencies, cost savings and user satisfaction.

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