HYBRID IT

THE BEST OF ALL WORLDS

CenturyLink

Hybrid IT: The Best of All Worlds

As CIOs know all too well, the continuously accelerating pace of business change is driving extreme demand for IT infrastructure agility. New competitors continually emerge as the Internet dissolves market barriers, M&A activity reshapes industries and globalization drives rapid expansion into new territories. Rising customer expectations add pressure to continually enhance the customer experience. And now that IT systems underpin virtually all customer and supply chain interactions, IT solutions must be 100 percent available — always — even as they meet that demand for extreme agility.

Challenge: *Flexible alignment with rapidly changing market conditions and customer behavior.*

At stake: *Most companies cannot keep up with business agility demands using the old, unwieldy IT model of building and operating data centers.*

Solution: *Hybrid IT infrastructure solutions provide the needed agility by offering colocated, managed, and cloud services, along with Tier One network connectivity, as appropriate to match each business application or process — plus the ability to easily switch among service types as business needs continuously evolve.*

All of this means IT organizations must deliver new business capabilities faster, even as their budgets are being squeezed. "In this fiercely competitive landscape, many companies don't even have time to put together detailed business cases before they respond to competitive changes. If you don't take advantage of the right technologies to move quickly, you will get left behind," says Elizabeth Shumacker, Vice President, Global Products & Solutions Marketing at CenturyLink Business, a global provider of managed services on virtual, dedicated and colocation platforms.

The drive to maximize IT agility in support of new business needs (e.g., digital customer experience; big data analysis) while holding down cost is leading many CIOs to re-imagine their core IT infrastructure. They're outsourcing a growing proportion, utilizing an array of different "hybrid" approaches. This re-imagining enables them to focus more of their resources on delivering business applications — not managing data centers and day-to-day IT infrastructure updates.

In fact, a recent survey of 550 IT leaders[1] revealed that for at least the next five years, most organizations will use just such a hybrid mix of outsourced services — data center colocation, managed services and cloud — along with in-house systems.

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[1] Independent survey of 550 CIOs, IT Directors, VPs of IT, and senior IT managers commissioned by CenturyLink and completed in August 2013 by Vanson Bourne, a research-based technology marketing consultancy.

HOW HYBRID IT WILL EVOLVE OVER TIME

IN-HOUSE OWNED
COLOCATION
MANAGED SERVICES
OUTSOURCED CLOUD

50

30

10

Current   12 mo   2 yrs   5 yrs   10 yrs
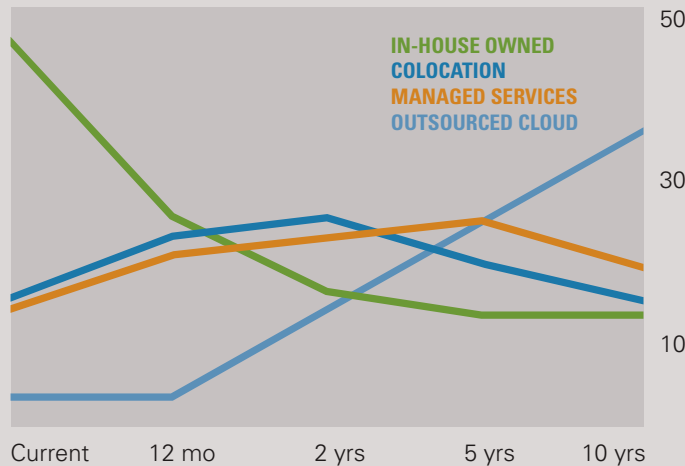
- In about two years, colocated data center services will be the most prevalent model.

- In five years, outsourced managed services and cloud will be most widely used, while colocation remains important

- While all forms of IT outsourcing remain important, after five years cloud services outgrow other outsourcing models

Data from independent survey of 550 CIOs, IT Directors, VPs of IT, and senior IT managers commissioned by CenturyLink and completed in August 2013 by Vanson Bourne, a research-based technology marketing consultancy.

The research also demonstrates how today's clouds do not meet all companies' needs, partly because of CIOs' concerns over security and performance, and partly due to the particular requirements of specific applications for which clouds are not yet well suited. For each organization, the right blend of services will change over time as business priorities shift, cloud computing matures, and new technologies emerge.

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But the research truly crystalizes this fact: the old IT model of building and operating data centers on your own has simply become too unwieldy for most firms. Instead, many CIOs are choosing data center colocation services as the first step on their infrastructure outsourcing journey. This is not only because of the high capital expense and expertise required to build data centers, but also because it can take months or years to bring them online. Also, a business already may have made capital investments in equipment that it needs to depreciate over time.

Of note, CIOs in a recent panel discussion voted "no" by a resounding 11-to-one margin when asked whether building your own data center is always the best strategy. "With the right outsourcing partner, you can leverage scale and free up your team from routine operations," notes Michael Hanken, Vice President of IT at Multiquip, a manufacturer of industrial products.[2] Analysis by DCD Intelligence further illustrates the trend, showing that in North America, almost 25 percent of the data center footprint is already outsourced, and that footprint is expected to continue to expand at 15 percent annually.[3]

Hybrid IT: Mixing and Matching Services to Business Priorities

Within the broader outsourcing trend, each company's business needs determine the optimal mix of services. "The questions are first, what are our business priories and metrics for success, and second what are the IT imperatives to drive these objectives?" says Steve Garrou, Vice President, Global Solutions Management at CenturyLink.

"Once you have identified the key requirements, it's like picking Legos. You need one set of Legos to build a ship; a different set to build an airplane."

Steve Garrou | Vice President, Global Solutions Management | *CenturyLink Business*

Garrou explains that by analyzing an organization's business needs along several dimensions including risk and security, operating expense versus capital expense, and agility — it is then possible to determine the right mix of IT services to support those needs. "Once you have identified the key requirements, it's like picking Legos," he says. "You need one set of Legos to build a ship; a different set to build an airplane."

For example, one reason many CIOs are choosing data center colocation for their mission-critical applications is to mitigate risk. Data center colocation enables them to minimize disruption and maximize control over the applications, because the existing application and its servers can simply be moved to an external data center with highly reliable infrastructure and uptime commitments written into service level agreements (SLAs).

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[2] "Own our own data center? Why would anyone do that, CIOs ask," ZDNet, April 2, 2013 © 2014 CBS Interactive.
http://www.zdnet.com/own-our-own-data-center-why-would-anyone-do-that-cios-ask-7000012955/

[3] North America Data Center Key Trends Report 2013-2014, DCD Intelligence, referenced at http://www.datacenterdynamics.com/focus/archive/2014/01/15-growth-forecast-north-america-colocation-market-2014-0

In some cases, data center colocation can also maximize agility, because it's the fastest way to get an existing application up and running in a new location. For example, an international law firm needed to quickly establish operations in several countries when it found its competitors building footholds faster in those markets — with IT services being a particular bottleneck. To support those operations, the law firm needed to provide local staff with secure access to applications storing case information. The fastest way to do that was to transfer the applications into a colocated data center. Migrating to cloud applications would have increased business risk due to the significant changes required, and added months to the process.

"Migrating lock, stock and barrel into a colocated data center environment is often the fastest, lowest-risk route for many companies."

Steve Garrou | Vice President, Global Solutions Management | *CenturyLink Business*

"Migrating lock, stock and barrel into a colocated data center environment is often the fastest, lowest-risk route for many companies," Garrou says. "Perhaps the information is in a legacy system, and the only people who know the system well are a few experts within the company. Migrating to another application or infrastructure may take more time; and then you have the question of how quickly users could learn the new application and find the data they need."

In addition, many CIOs choose outsourced data centers for disaster-recovery operations, or for legacy applications that aren't able to fully take advantage of virtualization; in other cases, regulatory compliance may require a high degree of control.

Financial services firms often choose data center colocation to ensure the security of mission-critical applications that carry proprietary information, even as they use cloud computing for other functions. More important than owning the data center is knowing where the data is "and understanding the controls around securing it and the infrastructure it runs on," says Matthew Oakley, Group Head of IT at global financial-services firm Schroders.[4] Significantly, IT leaders surveyed last year identified security concerns and backup/disaster recovery among the top reasons for not using the cloud.[5]

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[4] "Own our own data center? Why would anyone do that, CIOs ask," ZDNet, April 2, 2013 © 2014 CBS Interactive.
   http://www.zdnet.com/own-our-own-data-center-why-would-anyone-do-that-cios-ask-7000012955/

[5] Independent survey of 550 CIOs, IT Directors, VPs of IT, and senior IT managers commissioned by CenturyLink and completed in August 2013 by Vanson Bourne,
   a research-based technology marketing consultancy.

At the same time, those firms may take advantage of the cloud's on-demand elasticity for other purposes: to create development and test environments that can be quickly erected and just as quickly torn down once development is completed, or run proof-of-concept tests of big data analysis algorithms, Garrou says.

Yet over time, as third-wave cloud services providers begin offering more enterprise-ready clouds (with integrated security, orchestration and management automation), it will ultimately make sense for businesses to move even mission-critical applications to a cloud. As cloud services mature, CIOs will be able to increase agility, security and scalability, while reducing cost by shifting applications to the cloud. Also important for enabling greater cloud adoption will be integration into enterprise IT processes, Garrou says. To that end, CenturyLink is using the ITIL process framework — which is widely used within enterprise IT organizations — to define and deliver outsourced services.

The on-demand elasticity and pay-for-consumption model of many cloud services is, of course, particularly attractive for meeting unpredictable business demands or workloads that tend to experience sharp usage peaks. But for workloads that are more predictable in nature, managed services based on dedicated infrastructure can be more economical, over time, Garrou explains.

For many CIOs, there's a more fundamental business reason that influences how they choose services within a hybrid IT model: the way they measure financial performance. "If a company is measured on EBITDA and capital performance, they're probably predisposed to capital expenditure, and will want to own their own data center equipment and maybe opt for colocation services," explains Garrou. Companies that do not favor capital expenditure are likely to purchase more of their technology as managed or cloud services.

Choosing a Hybrid IT Provider

Because most companies will use a hybrid IT strategy for many years to come, it makes sense to find a hybrid IT provider that can deliver a broad range of outsourced IT services from data centers across the globe, and be unbiased in helping plan and manage overall strategy for the optimal mix of IT services. "With the hectic pace of business change, many businesses cannot really know what they will need in 3-5 years," CenturyLink's Shumacker says. "They may expand into new markets, merge with other companies, or need to reduce their technology budget."

And IT organizations must ensure they can deliver quickly to meet demand from customers and their own business groups. "Consumer expectations are now very high," Shumacker says. "I want to do my banking whenever I have time, from my mobile app; I want to search and buy my airline ticket late at night; I want to watch my favorite TV show now, not on someone else's schedule. Those same expectations are reflected in demands from line of business owners — they don't want to wait months for IT to deliver an application or capability."

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Key to a hybrid IT strategy is the ability to integrate outsourced and in-house IT services to ensure smooth delivery of business capabilities to users. Not surprisingly, in the survey of 550 IT leaders, 46 percent said their top priority when selecting an outsourcing supplier was the ability to provide end-to-end IT solutions — from assessments and planning, through delivery, to ongoing management and optimization. The next-highest priorities were scalability and expertise to help businesses at every stage of the outsourcing and application lifecycle (17 percent) and breadth and depth of services portfolio, so companies can tap into new services as business requirements change (15 percent).

For now, since companies are using data center colocation for their mission-critical applications, 100 percent uptime is just table stakes for providers, says Drew Leonard, Vice President, Colocation Product Management, at CenturyLink. That causes CIOs to look for more than contractual commitments — they also want to see a demonstrated history of reliability and a comprehensive set of policies and procedures.

In addition, perhaps sparked by the continuing spate of high-profile data breaches, businesses are focusing intensely on multi-level security — including physical security measures such as mantraps, locks and biometrics. And as they develop their hybrid IT strategies, businesses are also looking for the option to access advanced services including managed and cloud services

as well as high-speed IP connectivity all within the same data center as their colocated equipment. This helps ensure lower latency and eases management and integration.

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Conclusion: Hybrid IT Unlocks Infrastructure Agility

Despite justified excitement about cloud computing, the reality is that most businesses are adopting a hybrid IT strategy — and will use a mix of outsourced and in-house IT services as that strategy evolves over at least the next five years. To meet rapidly changing business needs, CIOs need to be able to select from a range of services that maximize agility while minimizing cost.

WHY CIOS ARE SWITCHING TO HYBRID IT SERVICES

- Ability to provide end-to-end IT solutions from assessment and planning to delivery and ongoing management and optimization.
- Scalability and expertise at every stage of the outsourcing and application lifecycles.
- Flexibility and agility to move IT workloads to the optimal platform throughout their lifecycles.
- Seeking 100 percent availability, and clearly defined SLAs.
- Strong multi-level security technology, policies and procedures.
- Scalability and global reach to accelerate business expansion into new markets.
- Proven expertise solving diverse business problems.

About Hybrid Infrastructure Solutions from CenturyLink

CenturyLink's Hybrid Infrastructure solutions infuse agility into IT infrastructure, whether your business is challenged with controlling costs, managing performance, or scaling and expanding into new markets. CenturyLink is recognized as the No. 2 retail colocation provider, with an extensive global footprint that includes more than 55 state-of-the-art data centers across North America, Europe, and Asia, with over 2 million square feet of raised floor space.

About CenturyLink Business

CenturyLink Business delivers innovative managed services for global businesses on virtual, dedicated and colocation platforms. It is a global leader in cloud infrastructure and hosted IT solutions for enterprise customers. Parent company CenturyLink, Inc. is the third-largest telecommunications company in the United States, and empowers CenturyLink Business with its high-quality advanced fiber optic network. Headquartered in Monroe, LA, CenturyLink is an S&P 500 company and is included among the Fortune 500 list of America's largest corporations.

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