

# Connecting Private & Public Clouds

## Blend Your Way To Cloud Success

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*CLOUD COMPUTING has become IT's hottest buzzword in recent years, with enterprises of all sizes taking advantage of the benefits public and private cloud infrastructures have to offer. For the small to mid-sized enterprise, blending public and private clouds is proving to be a wise strategy that leverages their respective strengths for maximum benefit.*

### How To Tell The Difference

A private cloud is similar to a conventional data center that lives behind the corporate firewall and delivers virtualized services to end users. The twist: It uses virtualization technologies to give IT greater scalability while still maintaining control over apps and data.

A public cloud lives outside the firewall in the form of third-party Web service providers that can leverage massive data center investments across a huge client base. Public cloud infrastructure frees IT from building out its own data center and lets the business quickly scale capacity to match evolving needs. Public clouds come with their own security headaches, however.

### Implement A VPN

The public cloud's key advantage—scale—can also be its security Achilles' heel, as encrypted logins can make life easy for hackers. But for companies looking to leverage the economies of scale only available from Web-based service providers, VPNs can make public Web connectivity acceptably secure.

"I am seeing too many companies, especially small companies, connecting to their public cloud via remote terminal connections," says Pierluigi Stella, CTO of Network Box USA ([www.networkboxusa.com](http://www.networkboxusa.com)). "This is not safe. Your protection in such case is only as strong as your weakest password."

Stella says logins under these circumstances should not be open to the public. Rather, they should be protected behind a VPN. Although IPsec-based VPNs tend to dominate today, Stella describes the technology as clunky and occasionally unstable, with unnecessarily complex routing.

"SSL has none of these issues and provides numerous advantages," Stella adds. "It is very stable, and routing is very simple."

### Pick Up The Remote

Remote access software can also be an effective means of bridging private and public cloud infrastructures.

"It offers adequate security, nice wire speed, [and] simplicity in its setup," says Stella, who adds that although it should not replace VPNs, it can complement them in cases where users simply need to access a handful of applications and don't need complete access to all network resources.

### Consider The Colocation Option

Despite the scalability, cost, performance, and reliability advantages of the public cloud, private solutions continue to persist. In some cases, organizational culture drives an overriding need for IT to directly control all systems. In others, regulatory requirements

prevent organizations from leveraging shared, outside-the-firewall, third-party-managed technologies. Whatever the case, it need not be an either/or choice.

"A good strategy would be to collocate private cloud resources in the same physical facilities where public cloud services are available," says Keith Morris, vice president of marketing at Talari Networks ([www.talari.com](http://www.talari.com)). "Generally, these locations have excellent network connectivity from multiple service providers, and this allows for a gradual migration of some enterprise applications to a public cloud model."

### Mix It Up

Mixed public/private cloud implementations make reliable network access an even more crucial IT pillar. Consider broadening the provider base to ensure redundancy.

"Traditionally, services like MPLS were the only way to guarantee 99.99% reliability, but techniques like WAN virtualization now offer a way to get that same level of predictable performance by using multiple service providers and any mix of private network connections or inexpensive Internet connections," says Morris, who adds that this is an ideal method to connect to public and private resources as well as colocation facilities. ■

## Top Tip: Reset How IT Projects Are Initiated

The ongoing debate over public vs. private underscores the accelerating trend of organizations increasingly subscribing to services instead of building them in-house. IT needs to change its implementation approach accordingly.

"Before you buy and install a software or service, look around for other SaaS-based products that could potentially do the exact same thing without the need of onsite or contract personnel to administer, install, or consult with," says Lee Yi, founder and CEO of Drund ([www.drund.com](http://www.drund.com)).