# Cloud, VoIP and Fiber Equals More Bandwidth

## Bandwidth Consumption Set to Explode for SMBs

Written by Louie Hollmeyer, Advanced Technology Consulting

T1s used to be considered "fast." Now as cloud adoption continues to rise and our media becomes richer and heavier, T1s, or even bundled T1s, will not suffice. Small to mid-sized businesses (SMBs) and organizations are increasingly adopting cloud services. They realize they are not in the data center business. They would much rather get out of it and focus on their core competencies.

The cloud is dramatically transforming how SMBs operate. The operational benefits and efficiencies of cloud-computing are becoming increasingly accepted and adopted. Migration to cloud technologies has not only involved production servers and software, but also business-critical applications such as VoIP business phone systems.

With the proliferation of these cloud services, and others, accessed via the Internet, the demand for bandwidth is increasing rapidly. In fact, according to Cisco's most recent Visual Networking Index, "business IP traffic will grow at a compound annual growth rate (CAGR) of 21 percent from 2012 to 2017."



There are many reasons to implement a hosted or premise-based VoIP phone system (see Wyler). For many SMBs, the "hosted" VoIP option, in particular, is a way to get enterprise-class features and functionalities at an SMB price. Regardless, VoIP inherently consumes bandwidth since voice data is transported via an Internet connection rather than an analog line. Hosting your phone system becomes just another application for the cloud.

### Bigger Pipes, But Lower Costs Overall

The rise in cloud computing, bandwidth-intensive applications, and heavy media mean even more data will be produced and consumed by businesses. This will require SMBs to have bigger pipes—larger, dedicated circuits (usually fiber) providing more bandwidth and hence, more reliable connectivity.

You can only push and pull so much data to and from the cloud over your local broadband connection. In addition, employees are accessing the Internet thru the company network. They are streaming music, watching video, and conducting bandwidth-intensive webinars and video conferences.

#### Make the Bandwidth Work for You

The good news is the cost savings and efficiencies derived from cloud initiatives exceed the costs of cloud services, not to mention the elimination of some serious CapEx. Moreover, bandwidth—in most cases—can be obtained at a fraction of previous costs. Net: most SMB leaders would rather get out of the data center business, diminish IT infrastructure, and acquire more bandwidth.

#### Fiber Footprint Expands

In addition, the availability of fiber connectivity is progressively expanding. Fiber-ready office environments are becoming more commonplace. With its inherent speed, performance and scalability, fiber makes an SMB's transition to the cloud that much smoother.

This convergence, Cloud-VoIP-Fiber, has led to unprecedented levels of bandwidth consumption. Fortunately, the "per unit" cost for bandwidth has decreased significantly. And, with fiber circuits, SMB's can quickly dial up additional bandwidth, if need be, faster and more cost-effectively than ever before.