

TCO of VoIP: What's the Real Cost?

So what would it really cost to roll out VoIP across your organization? To answer that question, you must first look at the network upgrade and deployment considerations associated with VoIP, and then weigh that against the long-term financial payoff.

To deploy VoIP, you must make sure your network is up to the challenge. You must examine your current VPN and WAN capabilities. Look at current bandwidth availability, and compare to your current data traffic levels. Then compare that to your estimated needs for voice traffic. Also, does your network have the capacity to grow with your company?

Look at your LAN environment. Examine how many hubs are present in your network. Analyze your Ethernet switch statistics for evidence of packet errors or excessive collisions. Any equipment shortcomings will need to be corrected before moving forward.

A potential expense that is often overlooked is power backup. Unless you're utilizing POE handsets (that draw power from your Ethernet), you will need a separate UPC to backup the phone handsets themselves. Another issue is remote workers. How will they maintain connectivity if there is a power failure at their location?

Now that you have an overall picture of the cost of what it might take to deploy VoIP, you can weigh that against the payoff in the long term. The first mistake that many companies make when looking at VoIP is to think of it in terms of its up-front cost alone. The reality is that most businesses tend to amortize the cost of a phone system over 5-7 years. As an example, let's look at the cost of VoIP over a 6-year span, and compare it to the cost of a traditional PBX system.

Typical 6-Year Expenses Associated with Existing Traditional PBX

Expense	2006	2007	2008	2009	2010	2011	Total
Equipment Expenses	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Long Distance	\$14,268.00	\$14,268.00	\$14,268.00	\$14,268.00	\$14,268.00	\$14,268.00	\$85,608.00
Internet	\$1,596.00	\$1,596.00	\$1,596.00	\$1,596.00	\$1,596.00	\$1,596.00	\$9,576.00
Local line charges	\$6,402.12	\$6,402.12	\$6,402.12	\$6,402.12	\$6,402.12	\$6,402.12	\$6,402.12
Total	\$22,266.12	\$22,266.12	\$22,266.12	\$22,266.12	\$22,266.12	\$22,266.12	\$101,586.12

Typical 6-Year Expenses Associated with VOIP PBX

Expense	2006	2007	2008	2009	2010	2011	Total
Equipment Expenses	\$6079.80	\$6079.80	\$6079.80	\$6079.80	\$6079.80	\$1.00	\$30,398.98
Long Distance	\$6,647.78	\$6,647.78	\$6,647.78	\$6,647.78	\$6,647.78	\$6,647.78	\$39,886.68
Internet	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Local Line charges	\$4,397.40	\$4,397.40	\$4,397.40	\$4,397.40	\$4,397.40	\$4,397.40	\$26,384.40
Total	\$14,056.77	\$14,056.77	\$14,056.77	\$14,056.77	\$14,056.77	\$7,977.98	\$78,260.83
Cumulative Savings	\$8209.35	\$16,418.70	\$24,628.05	\$32,837.40	\$41,046.74	\$55,334.89	\$55,334.89

(Assumptions: 2 site installation with 40 total phones, 30% of LD was between office-site to site, LD saving achieved by centralizing calls through one site, local line charges achieved by renegotiation of service provider contract and bundling of internet access)

As you can see, the long-term savings of VoIP tend to overshadow the upfront expenses in new equipment.

Hosted Vs. CPE

Multiple vendors now offer hosted IP-PBX solutions. The idea is that voice and Internet access are integrated over the same local loop connection. A hosted solution can be tempting due to the ability to place an employee anywhere, and give them access to the corporate network and the corporate phone system. However, there are several cost issues with hosted environment that many vendors are reluctant to share. Hosted licensing fees can add greatly to the cost of VoIP, not to mention QoS issues that can be common with this type of technology. You must examine what will it cost your business if your phones are interrupted for a day or even more.

Vendor Considerations

When selecting a VoIP vendor, be sure you understand short- and long-term upgrade costs. You want a vendor who will provide an end-to-end SLA and assume ultimate responsibility. You need to feel comfortable with their infrastructure capabilities and that they have addressed all security issues. Ultimately, you must ensure that your vendor can help you to realize the true potential of VoIP, as the reduction in operations, maintenance, and phone charges can be profound if the technology is used properly.