



# Hosted VoIP: A better call?

*As they upgrade their telecommunications systems, more schools are considering a move to cloud-based VoIP services*

As school districts replace their antiquated phone systems, a growing number of districts are choosing hosted, or "managed," voice-over-IP service. Besides being easier to manage, hosted VoIP service also enables schools to leverage federal eRate discounts more effectively, its supporters say.

Unlike premise-based VoIP service, hosted VoIP is a cloud-based solution that delivers telephone service over the customer's data network. The customer has no call-routing equipment or software to house, manage, or maintain on site. Many school districts have welcomed

the hassle-free nature of hosted VoIP phone service—and many have found that it's more cost-effective as well, because it's often eligible for Priority One eRate funding.

"As their old telephone equipment becomes end-of-life, more customers are switching to VoIP because they realize that, long term, that's where the industry is going. It doesn't make sense when buying new equipment to buy something that will have a limited lifespan," said Harry Cook, lead channel manager for AT&T Business Solutions.

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Hosted VoIP solutions, like those offered by AT&T, are easily scalable and can be used by multiple customers at the same time, making them more cost-effective and reliable for many users, Cook said.

"There are some economies of scale here. It should be cheaper than a premise-based solution, and ... the customer doesn't have to worry about fixing or maintaining it themselves," Cook said.

Three years ago, South Bay Union School District in Eureka, Calif., upgraded the phone system at one of its two school buildings to a hosted VoIP service provided by AT&T.

South Bay is such a small school district that hiring in-house technical staff to manage a phone system would be too costly, said Patty Valtenbergs, the district's technology coordinator. With approximately 500 students, South Bay is a small school district in the mountains close to the Oregon border.

"The hosted [solution] looked great. I could manage some of the phones, but I didn't have to worry about the circuits and router," Valtenbergs said. With hosted VoIP, she can easily assign phone numbers and voice mail using an online interface.

"I wanted to keep it where anybody who has any ability or interest could actually be trained," Valtenbergs said. "I didn't want to get complicated."

With the district's old private branch exchange (PBX) system, if officials needed any reprogramming or repairs done, they had to call a technician who charged by the hour. Now, any repairs or maintenance costs are included in the cost of the hosted VoIP service. And, being eRate eligible makes the whole phone system really affordable.

"As far as our phone bills [are concerned], with a 90-percent discount [rate], we pay about \$40 per month for the entire school site with about 30 phone lines," Valtenbergs said. "We do have to pay some additional costs for some analog lines, but with the eRate, it's still cheap. Maybe \$15 a month for the analog lines."

South Bay did have some initial start-up costs, such as the purchase of the telephone handsets, upgrades to its

data network, and purchasing a new All-Call system—an automated notification system that can call stakeholders quickly in the event of a school closing or other emergency situation—for \$17,000.

The features of the hosted VoIP system are very robust. "The online management is really nice. I added nine new staff members with ease," Valtenbergs said. "We've got our voice mail, we can check it online, [and] you can have messages forwarded to your cell phone or another number."

Hosted VoIP is also a big time saver for the technology staff at Hancock Place School District in St. Louis, Mo. This small urban district maintains 200 telephones across three school buildings.

Outsourcing the phone system allows the district's staff of three to focus on other issues important to teachers and students. Their old system was old and no longer supported.

"When it would go out, I would have to find somebody who could fix it. We couldn't do any of that internally," said Michelle Dirksen, director of technology for the district. "With the hosted solution, while it still has that [chance] to go down, we don't have to take care of it at all. Besides the PoE [Power over Ethernet] switches we had to bring into the district, it's out of our hands."

Hosted VoIP service is reliable and is more efficient, Dirksen said, adding: "For us, it was really a time saver. It was something that could be outsourced and not hurt anyone here, and most of the staff here doesn't even know that we don't take care of [phone service] here on our end."

Using the online interface, Dirksen can run reports on telephone usage, change users, assign phone numbers, and more. eRate discounts help make hosted VoIP affordable, too. Installing PoE switches and purchasing the phones were the only up-front costs, Dirksen said.

#### eRate eligibility

One of the biggest advantages of hosted VoIP is that the monthly cost of the service is eligible for eRate discounts as a Priority One service.

The eRate annually provides more than \$2.25 billion in discounts on telecommunications services, internet access, and the equipment ("internal connections") needed to bring connectivity into classrooms. Schools and li-

braries are eligible for discounts of up to 90 percent of the cost of these services, depending on the percentage of their students who qualify for free or reduced-price lunches and whether they are located in an urban or rural area.

There are two types of eRate-eligible services: "Priority One" services are ongoing services that typically are billed monthly, such as telephone service and internet access, while "Priority Two" services are one-time infrastructure investments such as wiring, routers, switches, file servers, and other internal connections.

In processing the thousands of eRate applications it gets from schools and libraries each year, the Universal Service Administrative Co. (USAC) first pledges funding to meet the demand for all eligible Priority One requests. Then, if there's any money left over, USAC funds as many requests for Priority Two services as it can support, starting with the neediest applicants—those who qualify for the highest discount percentage—and working its way down the discount scale.

Because of the high demand for eRate funding, however, USAC rarely has enough money left to fill requests for funding on Priority Two services from applicants who qualify for discounts below the 80-percent threshold. That means most applicants are more likely to receive funding for Priority One services than Priority Two services. If a school district were to install and maintain its own VoIP network, this would fall under Priority Two services for the purposes of eRate funding.

On the program's Eligible Services List, USAC refers to hosted VoIP as "interconnected VoIP."

"We've gotten tons and tons of questions since 2005 about hosted VoIP services, or managed VoIP services—that's another term that is used," said Brian Stephens, senior technology and regulatory analyst for the eRate consulting firm Funds for Learning.

"They can be eligible for support," Stephens said of hosted VoIP services. However, he added, "there are some fairly specific eligibility regulations tied to those services—and so it's not really accurate to say, universally, any type of hosted VoIP service is eligible for Priority One funding, because each vendor ... has a slightly different definition of what [is meant] by a hosted service, or what

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## Hosted VoIP: Does it make sense for your schools?

Contracting with an outside service provider to host your VoIP service offers many potential advantages, but it might not make sense for all school districts. As with any project, school technology leaders must do their homework and must carefully weigh several questions when determining whether outsourcing their telephone service makes good business sense for their schools.

"The biggest problem with outsourcing now is an inexplicable faith in service providers," said Geoff Tritsch, vice president of Vantage Technology Consulting Group, during an ed-tech conference earlier this year. "Too many [schools] give critical functions over to outsourcers without doing their due process." He noted that outsourcing your IT functions doesn't "absolve you from managing."

Outsourcing any IT functions also carries several possible risks, Tritsch said—including the long-term viability of the service provider; the privacy and security of information; the performance of mission-critical applications; and the potential loss of flexibility that comes with vendor lock-in. The key question to ask, he said, is whether these risks are greater, less, or the same with outsourcing?

Other questions to ask as you consider moving to a cloud-based VoIP system include...

- What does an outsourcer bring to the table that you don't already have in-house?
- How much control would you lose (or perhaps gain) by outsourcing?

- Is the outsourcer stable? Likely to merge?
- What has been the experience of other organizations that have chosen the same provider? (Be sure to check references.)
- How does the outsourcer address disaster prevention and recovery?
- How will customer service be handled? Will the change improve or degrade the customer service you're already getting?
- What are the qualifications and experience of the employees whom the outsourcer will provide? How will performance assessment and monitoring be handled? What recourse will you have if anything goes wrong?
- What changes or upgrades will need to be made to your school technology infrastructure and WAN links? What about present assets and investments?
- To what extent might your decision limit choices in the future?

#### SLAs are 'critical'

Service level agreements (SLAs) are "critical" to the success of any IT outsourcing project, Tritsch said. A good SLA should define what the outsourcing company will do and how, as well as acceptable response times and your recourse if these aren't met.

SLAs must be measurable and enforceable ... but don't go overboard with them, or you'll risk ruining the relationship, Tritsch said. The purpose is to "get



all the issues on the table," so there are no surprises when problems arise.

When drafting an SLA, consider how performance will be measured—and by whom. "You need independent metrics," Tritsch said. "Don't just rely on the outsourcer's."

Also, consider your exit strategy: Do you have a plan for resuming the delivery of services yourself if things don't work out? And finally, are there limits on price increases at the end of the contract term? If not, you might feel trapped if the service provider decides to double its costs when the contract expires.

Outsourcing is merely "a tool," Tritsch concluded. "Use it where it has the most value—and don't forget your safety goggles."

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is included as part of that service offering."

Stephens said it's important "to take a detailed look at the functionality and the technology behind [the service] to make sure it satisfies all of the applicable eligibility requirements."

The actual handsets, the physical phones themselves, are considered end-user devices and are never eligible for eRate support, Stephens said.

"We hear of a lot of creative ways applicants and service providers try to shoehorn handsets into a funding request, but from a regulatory standpoint, if a service includes phones, there has to be a cost allocation for those phones," he said.

There are very specific rules regarding the amount, type, and configuration of equipment that can be included at a school or library location as part of a Priority One service. To qualify for eRate discounts as a Priority One service, there can be very little hardware deployed at a school or library location.

"The takeaway for applicants is that we are seeing an increasing amount of scrutiny by USAC during funding request reviews," Stephens said. "We are seeing questions like, 'Can you give us the make and model of all of the equipment that may be included as part of your Priority One request?'"

USAC is evaluating closely to make sure hosted VoIP

services meet all the requirements, not only to be classified as an "interconnected VoIP" service, but also to ensure all of the on-premise equipment rules are satisfied, Stephens said.

### Writing detailed RFPs

Cook said he believes hosted VoIP is a better option for many schools, but "the trick is to make sure that [customers] have a full understanding of what's included in the service and what's not."

He advises school customers to structure their Requests for Proposals (RFPs) in such a way that the total costs for implementing hosted VoIP are clearly outlined, so bids can be compared accurately.

Any hosted VoIP solution has five parts that need to be addressed, he said. Not all of these parts are eRate eligible, but they might be necessary for implementation:

1. The VoIP cloud and its distribution pipe (potentially Priority One eligible);
2. On-network communications riding over the customer's wide-area network, and prioritization of network traffic (potentially Priority One eligible);
3. Off-net communications, or outside of the WAN—including public switched telephone service and 911 emergency service (potentially Priority One eligible);
4. Local-area network upgrades required to support VoIP (potentially Priority Two eligible); and
5. End-user equipment, such as the IP phone sets (not eRate eligible).

"Every customer should understand these parts to make sure that an apples-to-apples comparison is done during bid evaluations, as some vendors may bid cloud-only [services] and others may bid a total solution," Cook said. "Without understanding this, the customer may be surprised during installation, as funding for potentially eligible parts of the solution was never requested." **eSN**

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### LINKS:

**Universal Service Administrative Co.**

<http://www.usac.org/sl>

**AT&T Education**

<http://www.corp.att.com/edu/e-rate.html>

**South Bay Union School District**

<http://southbayschool.org>

**Hancock Place School District**

<http://sd.hancock.k12.mo.us>

**Funds for Learning**

<http://www.fundsforlearning.com>

## How to get the most out of the eRate

Because it's likely eligible for eRate funding as a Priority One service, hosted VoIP service is seen as an attractive option by many school districts looking to leverage federal eRate discounts as they upgrade their telecommunications systems. Here are five other tips that can help ensure eRate success as well.

### 1. Always check the Eligible Services List (ESL) before buying.

"One thing that we always encourage applicants to do is to take a look at the Eligible Services List, which is the document that governs product or service eligibility," said Brian Stephens, senior technology and regulatory analyst for eRate consulting firm Funds for Learning.

Applicants often purchase a new product or service that is eRate eligible but then don't apply for discounts on this product or service—perhaps because they weren't aware of its eligibility, Stephens said. By evaluating all new purchases for eRate eligibility, schools and libraries might save themselves money.

The Universal Service Administrative Co. (USAC), the agency that administers the eRate, issues a revised ESL before the filing window opens for each new funding year. The new ESL for funding year 2012 is now available for downloading from USAC's web site (<http://www.usac.org/sl>).

### 2. Apply regardless of your discount level.

Some applicants who fall below the 80-percent discount threshold—the typical cut-off for Priority Two discounts on internal connections—might think: Why bother submitting an application? Yet, earlier this year, the Federal Communications Commission said it would tap into unspent monies to fund all Priority Two requests for the 2010 program year. The FCC is rolling over an additional \$850 million in unspent funding for use in the 2011 program year as well.

"That's actually the first year of the program, since [its debut in] 1999, when all of the Priority Two funding requests were satisfied," Stephens said, noting that in funding year 2009, funding for Priority Two requests extended only to the 77-percent discount level.

Even if your school district doesn't qualify for a high discount percentage on Priority Two services, apply

anyway, Stephens recommended. Every year, there is some funding that is committed, but never used for one reason or another. After the deadlines pass, that money can be rolled forward for redistribution.

"You just never know what's going to happen. You could have a year when some funding gets reallocated, like in 2010. Or, you could have a funding year where the rules change in midstream, and ... that might lower the discount threshold," Stephens said.

Not only does submitting an application increase your chances of getting funded; it also lets the FCC know there's a high demand for Priority Two connectivity.

For funding year 2012, there will be at least \$2.29 billion available for distribution. The official amount has not been announced, but as of last year, the \$2.25 billion-a-year funding cap originally established for the program now increases each year to account for inflation.

### 3. There are alternative ways to calculate your discount level.

"The National School Lunch Program eligibility is one of the methods that can be used to calculate the discount rate, but there are other methods that can be used as well," Stephens said.

For example, many applicants have had great success in conducting a survey to determine their discount rate, as oppose to using the NSLP numbers, he said. For one reason or another, school district officials might believe their NSLP participation numbers don't accurately reflect the relative poverty level in their area. There are specific requirements about the kinds of questions you should ask and the return rate you get on responses; USAC provides sample survey tools on its website for reference.

### 4. Be ready for an audit.

"Document retention is critical to success in the eRate program," Stephens said. "It's really not enough to do things correctly. You need to be able to prove that you've done things correctly."

The most successful applicants are the ones who have very robust and organized document retention policies and procedures, he said.

Keeping documentation organized involves a lot of

cooperation within school districts, Stephens said. Many departments have to work together: Verification of school lunch data might fall to food services, competitive bidding might fall to accounts payable, and implementing the services might fall to the technology department.

"Getting that coordination to occur and making sure everyone is on the same page is critical," Stephens said. "Sadly, there are a lot of applicants every year who have funding either denied or rescinded because they were unable to produce documentation that proves they were compliant with some type of program requirement."

### 5. Stay on top of changes to the rules.

"You definitely don't want to be denied on some sort of technicality, some sort of new rule that you were unaware of when you submitted your application," Stephens said.

Last year, there were many regulatory and procedural changes, including brand-new Forms 470 and 471. This year, the changes are fewer—but for many applicants, it still will be the first time they will have encountered the new forms.

"We are certainly encouraging everyone to be sure they are giving themselves adequate time when they are preparing their applications," Stephens said. "We are encouraging everybody to ... review the training materials that are out there on USAC's website."

The more applicants can stay educated and knowledgeable about the eRate's rules and regulations, the better their chances of success. Keeping up with deadlines and following through with every step of the process also improves your chances.

"It's amazing how many applicants go through all that work to get funding requests approved and then for whatever reason never use them," Stephens said.

Funds for Learning offers free news, analysis, and commentary about the eRate on its website (<http://www.fundsforlearning.com>). Readers can subscribe by eMail, RSS feeds, Facebook, or Twitter. The company also offers an online tool that helps applicants through the entire eRate process—from creating forms and staying compliant to keeping track of changes and deadlines.

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# AT&T Voice DNA<sup>SM</sup>

## A Network-Hosted VoIP Solution

### AT&T Voice DNA<sup>SM</sup>: A Complete IP Communications Solution

AT&T Voice DNA<sup>SM</sup> is a cutting-edge, fully hosted, network-based Voice over Internet Protocol (VoIP) service that delivers enhanced communication tools over AT&T's industry leading global IP network. It includes advanced features, unlimited calling, and a full suite of management services and tools that help you provide the best overall service to your employees and partners.

### Benefits Across Your Organization

- Enhance productivity with advanced features including VIP routing, conferencing, click to call and remote worker/mobility support.
- Centralize control of communications across your entire organization including branch and home office sites, allowing you to easily add sites, users and features.
- Improve your Return on Investment through capital expense avoidance for PBXs and key systems, and a potential reduction in costs associated with moves, adds, changes and deletes (MACDs).

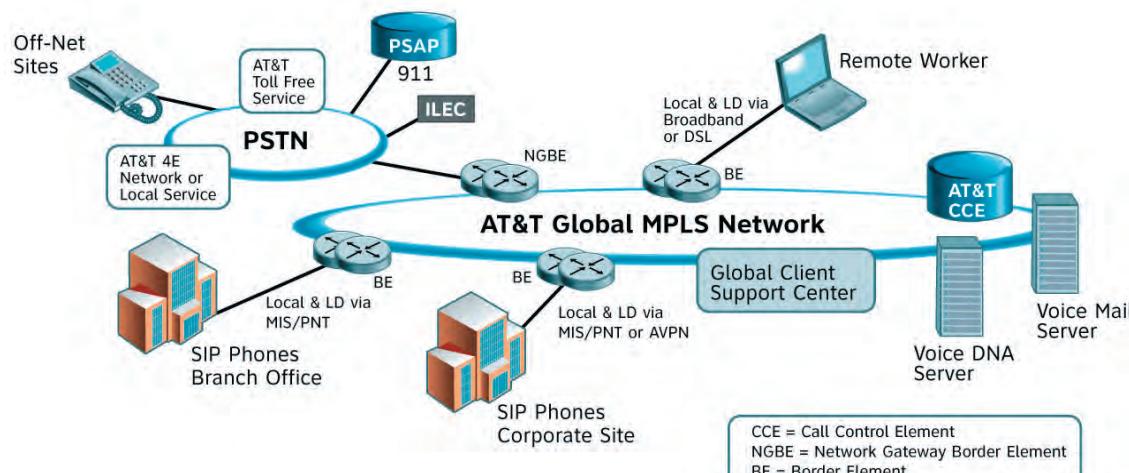
### Calling Plans to Meet Your Communications Needs

AT&T Voice DNA<sup>SM</sup> supports inbound and outbound calling on your data network. It provides unlimited on-net, unlimited local and unlimited long-distance calling plus competitive international rates for all your U.S. sites. With AT&T you gain the efficiency and economic benefits of network convergence for your organization.

### Convenience and Control for Administrators and Employees

The administrator web portal is intuitive and user friendly, providing centralized administration across your organization for MACDs, reporting and management capabilities. The personal web portal lets your employees manage their calls and features through a user-friendly online interface. Once logged in, they can check call logs, listen to voice mail messages and manage call settings with the click of a mouse.

### AT&T Voice DNA<sup>SM</sup> Diagram



**Note:** AT&T Voice DNA<sup>SM</sup> is only available where E911 services can be provided

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### Benefits

- Mobile employees can be more responsive by listening to voicemail via the web
- Remote workers can even utilize the full benefit of AT&T Voice DNA<sup>SM</sup>
- End users can reach out instantly without having to make a conference call reservation

### Organizational Benefits

- Utilize Find Me/Follow Me to reach employees with just one number
- Unite multiple locations with a simple to manage, voice/data network
- Adjust to your evolving needs by using a scalable service
- Aid in security/disaster planning with our hosted solution
- Reduce operating expenses through decreased administrator moves, adds and changes
- Enable just one carrier to meet your local, long distance and data services needs

