

Promise

superior Voice over IP with network assurance

Today's Voice over IP service providers face an overwhelming challenge when it comes to assuring voice quality over networks that they have no access to. Most react to this challenge by relying on the demarcation point as its division of responsibility. However, this reaction fails to address the real issue — customer quality of experience.

To confidently offer Voice over IP, service providers need an accurate, network assessment solution that can cost-effectively evaluate and maintain the end-to-end performance of their customers' networks as well as keep an eye on the networks of other service providers.

AppCritical SME

AppCritical provides complete visibility of the quality of the end-to-end network. Even without administrative access or agents, it can evaluate the performance capability and identify and diagnose sources of degradation on networks managed by customers or other service providers.

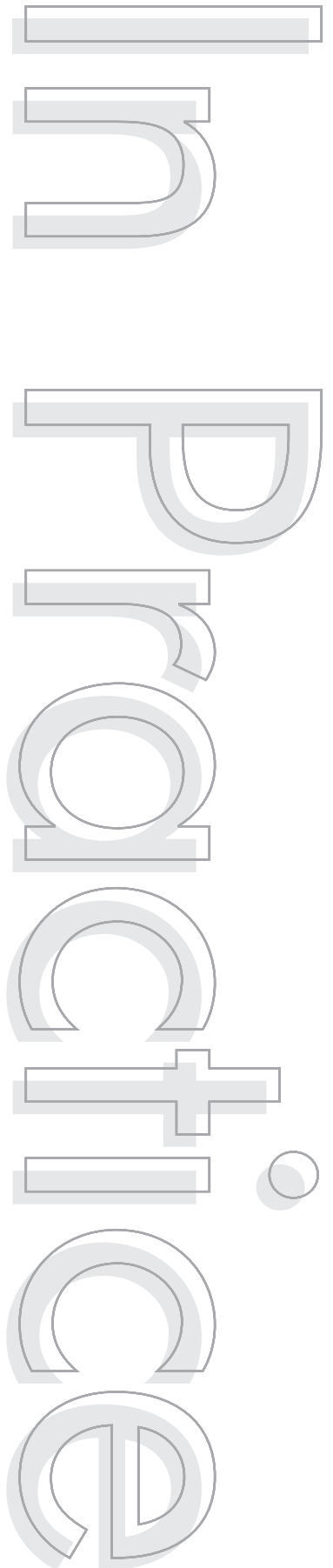
With AppCritical, service providers can eliminate the damage a poor performing network can have on voice quality — and company reputation. It is detailed enough to provide a complete analysis of the network condition and its ability to support VoIP, yet simple enough to be administered remotely and without impact on a live network.

Not only does this maximize network engineers time, but it also leads to faster, more efficient troubleshoot and improved customer service.

Product Highlights

- **Vendor and device independent**
Provides impartial analysis of the full path within minutes.
- **Works across administrative domains**
Visibility within networks not owned or controlled by the organization provides a complete end-to-end view and accurate diagnosis of all faults.
- **Leverages team expertise**
Comprehensive diagnostic information and Help System removes all guesswork and eliminates the need to participate in time-consuming root cause analysis. Improves expertise of every user.
- **Thorough reporting**
Packages all test results into a detailed report that provides customer and engineers with resolution plan.

 appCritical



Peace of mind

WTC Communications eliminates risk with VoIP network assessments

When the team at WTC Communications decided to offer Voice over IP to its small-to-medium business customers, they knew the plug and pray method wouldn't cut it. While testing VoIP in its own operations, they could hear the effects unknown network problems can have on voice quality and this 74-year-old independent telco wasn't willing to put its solid reputation on the line.

Yet, to compete with giants like Bell and Cogeco Cable, and with a handful of ISPs and CLECs eyeing its market, WTC knew it had to jump in quickly — and, most importantly, land on its feet.

Competitive advantage

"The services we offer are a reflection of the company and while we could see that VoIP would offer us significant market potential, we aren't willing to roll out a service that isn't going to work as expected. The condition of our customers' networks is critical to our success and therefore worth the investment."

— Tom Lynn,
President,
WTC Communications

"The need for network diagnostics was obvious. Between our two offices, we could hear the stutter and calls were often only a one-way transmission. We knew we couldn't offer this service to our customers with this risk," said Tom Lynn, president, WTC Communications.

The technical team had the unenviable task of trying to find the problems. "Relying on a hodge-podge of open source tools and trial and error troubleshooting techniques were very slow," said Jeff Crowe, WTC's Director of Technology. "Going over every configuration and making sure it was set properly was too tedious to be effective."

WTC needed a multi-faceted network assessment solution that would have value throughout the lifecycle of its VoIP rollouts — from pre-deployment assessment to troubleshooting and ongoing maintenance — and for both internal use and on its customer sites.

After researching a variety of technologies, WTC chose AppCritical for its broad applicability, depth of information, ease of use and end-to-end visibility.

No guesswork

With the software installed and four hours of training under their belts, they started testing their own network and found many little problems that were not noticeably impacting regular data traffic but could easily be "heard" with VoIP.

Its own situation proved the important of network performance and today, WTC has made it mandatory that all customers participate in a pre-deployment assessment before rolling out VoIP.

"We aren't going to roll out a service that isn't going to work. Being able to qualify the network's ability to support VoIP not only protects our reputation but differentiates our service to our customers," said Lynn.

Dave Keith, WTC's Director of Sales and Marketing says the company will go "the full nine yards" to ensure the network is ready. "We are the only company in the region offering pre-deployment assessments. We've invested in the technology because the customer's experience is most important to us."

With AppCritical's NIS installed on a server and the sequencers placed in three different cities, WTC needs only the customer's IP addresses to test across the Internet, through peering groups, to all end points. End-to-end visibility eliminates finger pointing.

Follow the paper trail

As part of its service, WTC provides its customers with a comprehensive report that details the current condition of the network, including an explanation of all shortcomings. In addition to measuring bandwidth, utilization, loss, jitter and MOS, the location and cause of performance degradation are pinpointed. The VoIP Assessment Report is an interactive document, with hot links to an extensive intelligence system that details the steps to resolution.

"The report has a bit of a wow factor," says Keith. "One of our customers — a software company, which is pretty up-to-date on technology — was surprised to learn so much about their own network."

WTC can then offer to remediate the problems or simply pass the information to the customer's IT department.

New business

While WTC is primarily relying on AppCritical to protect it from nightmarish VoIP deployment situations, Lynn sees even more potential for the future. Plans are underway to bolster revenues by offering a full network maintenance service to its small to medium business customers, including break/fix troubleshooting and regular health checks.

The technology's remote troubleshooting capability will dissolve geographical boundaries that have limited market opportunities in the past. Some of WTC's customers have locations across the coun-

try and being able to evaluate the end-to-end performance without having to install agents or be on the customer's site, means WTC can now service branch offices without incurring travel costs.

Already the technology is proving its value to the customers. During one assessment, Crowe was able to locate a 10mb hub that had been unknowingly added to one customer's network. The hub introduced a duplex conflict as well as increased traffic and was degrading performance. Had it not been identified, it would have killed the VoIP rollout.

Backed by AppCritical, WTC will not only land on its feet, it's on track to stay one step ahead of its competition.

The bottom line

For the independent telco, AppCritical SMB delivers tangible business value:

- **Get it right the first time**
Evaluating the network before deploying VoIP ensures a successful rollout.
- **Reduce support costs**
Identifying and then resolving performance problems immediately saves money by eliminating the need for a truck roll
- **Prevent problems before quality is affected**
As part of the network's regular maintenance cycle, catch problems before call quality degrades.
- **Improve customer service**
Prompt resolution improves relations with customers and reduces costs
- **Competitive advantage**
Offering network assurance to your customers demonstrates you value their success.
- **Increase revenues**
Remote access and end-to-end visibility allows regional players to expand into other markets by broadening their reach

Improved efficiencies

"The times when we used to spend an entire day troubleshooting a problem are gone. AppCritical makes my job a lot easier and it means I can do more with my day.

— Jeff Crowe,
Director of Technology,
WTC Communications

Critical performance for critical applications

Apparent Networks, Inc. develops and markets software that provides a unique approach to improving application performance by addressing and diagnosing live converged networks as part of pre-deployment assessment, break-fix response and continuous network evaluation and maintenance. AppCritical™, its agent-free network diagnostic, assessment and measurement solutions, quickly identifies and resolves network bottlenecks and faults that drain resources and prevent applications from performing at their peak.

AppCritical's core technology centers around its unique ability to unobtrusively measure the fundamental characteristics of any network path located between two devices. It is further enhanced by a fully developed Expert System capable of providing highly reliable, real-time diagnosis of network-related faults. It is able to pinpoint network characteristics and faults directly related to the performance of a wide range of network-dependent applications.

AppCritical employs an active testing methodology that does not require passwords or ownership of the intermediary network devices and does not require agents at the remote endpoint. Although it is active and does generate packets, it does so in a unique manner that makes it possible to obtain detailed information without creating large amounts of traffic.

It has an extremely light touch, typically less than 1% additional load, allowing it to be used under all conditions — including across live networks at anytime of the day or night — without disrupting current applications or users.

AppCritical is architected to allow for a wide range of possible deployments. It can be installed as a complete, single user package on a technician's laptop as well as a highly distributed collection of test points within the most complex enterprise environment. In addition, the data generation and collection component can be deployed and executed remotely within a completely separate or even fully isolated environment.

The test generation methodology does not require end-point agents so only a single point needs to be installed at a central location. This allows it to serve a key role within the customer support organizations of network-dependent vendors where it is typically utilized by hundreds of support engineers testing thousands of different network segments located inside the firewall-protected spaces of their customers' premises.

All analysis information is retained within a centralized relational database providing immediate search and retrieval across hundreds of thousands of existing tests. Full capability to associate and disassociate any test to a configurable CaseID allows for a clean, customizable method of cross referencing related tests within the database as well as providing linkable references to an external CRM or trouble ticket management system.

Customers include ACS, IBM, Symantec, Network Appliance, HP, McData, TELUS, DHL Systems, the United States Department of Defense, Lockheed Martin, Bank of New York and Electronic Arts. The privately held company has offices in Seattle, WA and Vancouver, Canada. For more information, visit www.apparentnetworks.com.



Introducing the AppCritical modules

- Professional Edition
- SME Edition
- TechSupport Edition
- Enterprise Edition
- MSP Edition

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