

Unified communications: maintaining optimal performance

 By [Brent Lees](#)

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The enterprise work environment has changed dramatically. Long gone are the days when business was confined to desktop PCs and a 9-5 working day. Today, the explosion of online, social and mobile technologies has paved the way for a 24/7 global workplace, with the distributed workforce viewed as a critical business enabler.

With employees now spread across multiple offices and borders, unified communications (UC) is often seen as the backbone of the business, keeping employees wired and working together. Not only does it provide an integrated communications platform to streamline business processes, it helps employees - and businesses - carry out their work more efficiently and in a timelier manner, regardless of location.

Forrester Research predicts that unified communications and collaboration will become a "standard communication infrastructure," with the market set to hit nearly \$62 billion by 2018[1]. Yet as more organisations embrace UC to increase collaboration across remote employees, customers and partners, issues like broken images and garbled audio can have a profound impact on a company. So how can businesses ensure optimal performance is maintained at all times?

Understanding the complexity

Despite its popularity, unified communications is one of the more complex services in the IT world and can be challenging and time consuming to implement and manage. Not only must a large number of moving parts work together smoothly to orchestrate a successful communication or collaboration session, but applications like conferencing, video, and collaboration have high-performance and always-on availability requirements to meet the high expectations of users. So it's easy to see the pressure CIOs are under to get UC deployments right.

Perhaps one of the biggest problems is that end-user expectations are different for UC applications, particularly in the realms of voice and video. For example people view an always-available dial tone as a given. So if they pick up the phone and there's no dial tone, they will be very frustrated. Also many UC apps, like voice and video, must operate in real-time. If the users voice isn't coming through the phone system near-instantaneously, it's a failed communication.

It's also not just end-users that suffer, but businesses too. Voice, email and video communications are mission critical capabilities for today's enterprise, so organisations cannot afford for any slowdown in communication. Poor performance and outages can lead to significant productivity losses and, worse still, security risks can damage brand reputation. So how can organisations get it right?

Exceeding Expectations: The need for support

For CIOs and IT teams responsible for supporting a unified communications (UC) system, it can be challenging to troubleshoot and resolve performance issues. Maintaining a high degree of availability and control over other applications contending on the network can lead to system downtime and higher operational costs.

Should application outages occur, it's imperative that IT Operations, Application and Network teams are able to detect, isolate and fix the problem as quickly as possible. Yet currently the majority of problems are only discovered after end users call in. So in order to maintain an optimal level of performance throughout the end-to-end life cycle, IT teams need to be able to pinpoint and troubleshoot issues before users are affected.

Traditionally IT teams have managed unified communications systems through either native UC administration tools, or a variety of disparate systems, including network and application performance tools. However, this approach provides only a fragmented view, which can make it difficult to identify where the problem lies. For example, when a problem occurs, the network team blames the application team, the application team blames the operations team, and the list goes on. As a result, problem identification, diagnosis, and resolution can take days and weeks instead of minutes due to a lack of agreement.

Also native UC administration tools often do not provide enough information to understand the scope and root cause of service interruptions, and even if a misconfiguration problem is identified, many teams simply don't have the time or resource to find out how widespread the problem is or prevent additional issues.

Adopting a holistic approach

With all signs pointing towards the data deluge continuing, businesses need to be confident that they have access to all the information when striving to achieve a well-rounded picture of an application-performance problem. As part of this problem, organisations need a management tool that looks at the IT infrastructure and user experience from a holistic point of view. This means analysing the network, application and wider infrastructure simultaneously to determine what good performance looks like. Then, should a problem arise, the root of the cause can quickly be identified and addressed.

It's also important to remember that not all applications are created equal, and neither are users. So a great way to speed up unified communications applications is to prioritise them when it comes to bandwidth distribution. For example, email may be taking up a large amount of bandwidth while communications like video suffers from slow load times. So organisations need to be able to give priority to video traffic across the network through Quality of Service (QoS) features.

QoS provides a way to identify and protect important network traffic and restrict applications that are undesirable on the network. QoS management ensures that bandwidth is appropriately prioritised at the individual application level and that users receive the bandwidth they require to accomplish business-critical work.

Making business without borders a reality

In an increasingly global marketplace, business without borders is an aspiration for growing enterprises. However in order to make this vision a reality, organisations need the technology and infrastructure to support it. Unified communications can provide companies with an integrated communications platform to support the growth in location-independent computing, bringing the promise of increased collaboration across employees, customers and partners. But these benefits are negated if IT lacks the ability to monitor and resolve any issues around performance or latency.

By implementing a tool that proactively manages the end-to-end unified communications lifecycle, including new deployments, upgrades, and ongoing operations, companies can gain full visibility into the performance of UC applications at all times. Only by adopting a holistic approach to improving end-user experience, can companies be confident that unified communications applications are available and responsive regardless of where and when they are being accessed, leaving CIOs free to grow their business across locations without worrying about technology-related roadblocks.

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