How to Optimize Network Performance

Devolutions

A POORLY PERFORMING NETWORK CAN COST YOUR BUSINESS IN MORE WAYS THAN ONE

A poorly performing network can cost your business in more ways than one. Dealing with a slow network means that calls are dropped, files take longer to send, applications take longer to load, and productivity plummets as users wait around for tasks to get completed. That's why knowing how to optimize network performance is crucial to your business's everyday success.

Optimizing network performance is all about being proactive — because proactivity leads to productivity. The faster you catch network problems, the faster you can solve them and everything can go back to working smoothly.

A network that is performing as it should is one that can sustain the demands of users, applications, and business requirements. Networks have different requirements, depending on the size of the business, the number of users and applications, and the scope of the network infrastructure. Nonetheless, the tips for optimizing network performance remain the same.

Keep reading to learn 5 simple tips for optimizing network performance, which will help you optimize your company's overall performance!

1. Monitor Network Performance

How do you know if your network is performing as it should be? Well, you'll never hear about it.

Complaints about slow loading times or laggy video calls are a sure sign that your network may not be performing at an optimal level. Once network problems have reached users, though, you're already behind on finding and fixing the issues.

That's why the most important part of optimizing network performance is being proactive about it.

Network performance monitoring (or NPM) is the end-to-end monitoring of network performance to identify network performance issues that are affecting end users and customers — even if those network problems reside outside of your local network infrastructure.

Continuously monitoring network performance allows you to:

- Continuously test your network for performance degradation.
- Proactively identify network issues before they affect users.
- Quickly troubleshoot problems and find solutions using data about problem cause and location.
- Collect data and create a performance baseline.
- Increase productivity by ensuring everything is running smoothly.

Don't let your users be your monitoring system. There are a variety of network performance monitoring solutions on the market that will monitor your network for you and alert you if any network degradation occurs.

2. Determine When the Network Is at Fault

Most network administrators have experienced this a lot; as soon as things start to slow down, everyone is quick to point the finger at the network. While the network is often the culprit of problems like laggy video or slow internet performance, often doesn't mean always.

To optimize network performance, you need to understand if your network is actually experiencing interruptions or delays, and if so, what the problem is and where it is located.

So many of us have gotten into a game of back and forth with different service providers all pointing the finger at each other. No one wants the problem to be on their side, mostly because no one has the proper tools to diagnose the issue.

That's why it's important to monitor different ends of your network and strategic network locations to clearly identify which of the various groups involved in delivering a given service should accept responsibility. By pinpointing the source of the problem quickly and irrefutably, it compels the responsible group to take any necessary corrective measures.

3. Get Alerted of Network Issues

The easiest way to be proactive when it comes to network performance is to know immediately when something has gone wrong and to act on it. You can monitor network performance and collect data, but if you don't react as soon as a problem occurs, none of that matters.

Most network performance monitoring solutions allow you to set up alerts as soon as a network problem occurs, or when there's a sign of network performance degradation. That way, you can quickly find and fix problems before they affect users.

By addressing performance issues quickly, it'll help you optimize network performance in the long run, because you'll be more prepared for future problems, and more likely to be on the lookout for any recurrence.

4. Compare Network Performance

You never really know how good you've got it until you know how much worse it can get.

This is true with network performance. It's difficult to know what good or bad network performance looks like without a comparison point.

Continuously monitoring network performance and collecting performance data over time allows you to create a baseline of what good performance looks like, so you can easily compare performance over time to your ideal level. The more you optimize your network, the more your "good" performance level increases!

It's also important to compare network performance between different parts of your network to know whether performance is consistent, or if it's worse in certain locations and why.

Compare network performance between your headquarters, data centers, remote offices, and cloud infrastructures (like AWS or Azure). Setting up monitoring agents at these different locations will do the comparison for you, and help you prioritize which network locations need to be optimized, and where your network is underperforming.

5. Update Your Network

A network should grow with you. As your business grows, it creates more demands on your network. With every new application, location, and user, your network gets more and more responsibility added to its plate.

It's therefore ridiculous to think that the same network infrastructure you had for a company of 10 employees can sustain a company of 100.

While you should definitely do your due diligence and seek out solutions first, the truth is that networks do wear out, and sometimes they need replacing. So if you're still running on old cabled Internet, it's an easy bet to say that a new wired connection could solve a lot of your problems.

Don't Stop Optimizing

No matter how efficiently you optimize your network performance today, networks don't stay perfectly optimized forever. As you add new applications and users, upgrade devices, and encounter new customer demands, your network will fall behind if it doesn't grow with you.

Efficient, high-performing networks require continuous monitoring and maintenance. Fortunately, as mentioned earlier, there are network performance monitoring solutions around that will monitor network performance for you and remind you to keep putting in the work to optimize your network, the same way you optimize business practices. Network performance monitoring isn't just about optimizing; in fact, the three most important network performance use cases are Auditing, Troubleshooting, and Continuous Monitoring.

So as your business keeps growing and changing, make sure to refer back to this list, and do the steps all over again. Your users will thank you.