

WHY DO YOU NEED NITROSPHERE?

Nitrosphere develops products that accelerate, secure, and reduce costs of SQL Server applications over the WAN or cloud. Nitrosphere products pay for themselves within months by improving productivity, reducing risk of breaches, and in direct savings on bandwidth costs. This is what we have been doing for over a decade.

Customer Scenarios

Do you need to improve application performance?

- For cloud applications with geographically dispersed end users or other connection points
- For applications being migrated from on-premise to cloud
- For end users in home or remote offices, or hotels and other locations with public Wi-Fi networks
- Between geographically separated servers for data replication or other data access such as application servers connected to database servers

Are you concerned with securing your data in transit?

- Between endpoints that may be inside or outside the firewall
- Using consistent encryption methods regardless of application

Are bandwidth costs hitting your bottom line?

- Due to cloud services charging for high bandwidth
- Due to cloud services charging for volume of data moved to/from the cloud service
- Due to increased bandwidth requirements of offices/locations outside the data center

In one software-only solution, Nitrosphere delivers:

- Improved end user experience and operational processes by accelerating network traffic between any endpoints
- Secured data in transit using encryption methods compatible with your enterprise
- Reduced bandwidth costs across the enterprise

Why do you need **NitroAccelerator**?

Software-only solution gets you:

- Easy installation and upgrades
- Little to no configuration
- No downtime
- No professional services required to deploy
- Flexible deployment to just the endpoints you want to affect
- No hardware to maintain or upgrade

Frequently Asked Questions:

I already have a WAN acceleration/optimization appliance such as Riverbed, Bluecoat, Silverpeak, etc. Why do I need Nitrosphere?

- **Many Nitrosphere customers use our products in conjunction with WAN accelerators.** WAN accelerators commonly use a technique called “False Ack” for database application which means that it tells the application that the data has been received when, in actuality it has not been delivered yet. This false acking can cause unstable database connections when communicating over channels with packet loss. Due to this, many enterprises configure the appliance so that database traffic is just passed through and not accelerated. With Nitrosphere your data gets to its destination using the native application/database protocols which means you get the full stability offered by those protocols even when packets are lost due to congestion or low quality networks.

I'm considering purchasing a WAN acceleration/optimization appliance such as Riverbed, Bluecoat, Silver-peak, etc.. Why do I need Nitrosphere?

- **Nitrosphere improves reliability.** As noted above, WAN accelerators use false acknowledgements that can cause instability. NitroAccelerator achieves its performance gains without the use of false acks.
- **Nitrosphere costs less.** WAN accelerators can be very expensive with initial costs between two locations at over \$30K just for the hardware. Large enterprises can easily spend millions of dollars on WAN accelerators, whereas Nitrosphere customers can deploy complete solutions for less than \$10K.
- **Nitrosphere is more secure.** While WAN accelerators can encrypt traffic between locations, in order to implement end-to-end encryption, they require that you provide the encryption keys for applications you want to accelerate. This means that the appliance first decrypts the data, then operates on it, then re-encrypts it. This is not end-to-end encryption. Hardware accelerators also increase the attack surface for hackers by caching



your corporate data to disks on the device, meaning that if the appliance is breached, so is your enterprise. Nitrosphere is the only true end-to-end encryption and acceleration provider.

I'm considering using a remote application/desktop solution such as offered by Citrix and others. Why do I need Nitrosphere?

- **Nitrosphere costs less.** Like WAN accelerators, these solutions usually require hardware and are very expensive. Common deployments for 1,000 desktops can cost \$500K to \$1M. As a software-only solution, Nitrosphere does not have to sell expensive hardware.
- **Single point of failure.** The reason that companies started migrating to distributed solutions from mainframes in the 1990's was to avoid single points of failure and to put the applications closer to the end-user. In the event of a data center outage, can you afford to have potentially thousands of end-users/locations completely offline also? Nitrosphere enables you to implement applications with modern architectures while enabling you to make decisions based on what your end users need without the limitation of worrying about performance or security at the endpoint.
- **Doesn't always solve performance.** While remote application/desktop solutions can sometimes address latency issues, they don't always result in acceptable performance for end users in branch or store locations. Nitrosphere can help provide a bridge of performance for these locations while working in conjunction with the remote application/desktop solution.

Why don't I just purchase more bandwidth?

- **Bandwidth costs add up.** When you purchase bandwidth, you are generally adding an additional monthly cost for as long as you are using that bandwidth. This applies whether you are running on-premise or cloud-based applications. And you multiply these costs for every site that needs more bandwidth, which, for some Nitrosphere customers, added up to tens of thousands of dollars per month. Therefore, they use Nitrosphere to lower their bandwidth costs as well as improve performance.

- **Doesn't always solve the problem.** If you have a mobile workforce or offices in remote regions, additional bandwidth may not be available to them. Nitrosphere may be the only cost-effective solution in this case.
- **Cloudy with a chance of rain.** Cloud services can compound the issue by charging for the actual volume of data moved into/out of a cloud-hosted database. This adds additional charges on top of your bandwidth costs. Nitrosphere helps minimize the amount of data moving into and out of the cloud-hosted database.

My performance is fine. Users are not complaining. Our performance monitoring tool returns good results. Why would I need Nitrosphere?

- Defer bandwidth upgrades
- Save on current bandwidth costs
- Reduce network congestion to free up resources for other apps
- Free up resources for your current SQL Server by processing data faster

We are migrating to the cloud. How can Nitrosphere help us?

- Migrating to cloud can negatively impact performance of apps that formerly ran within your data center. Using NitroAccelerator you can get LAN level performance out of your cloud applications.
- NitroAccelerator can also save you bandwidth costs for your purchased bandwidth from your cloud providers

•  **For more information go to <http://www.nitrosphere.com>**