



WAN Optimization Works

Unleash the power of your business network with KPN International's WAN Optimization Works (WOW) service. By dynamically assigning bandwidth to users and applications, KPN International WOW ensures optimized economies within your network. Increased performance from the same total bandwidth results in an improved end-user experience.

The Business Question

Productivity is driven by rapid and reliable access to business information systems. Users, however, often complain of poor response times as applications compete for the available bandwidth. Buying more bandwidth does not automatically improve business productivity. The solution is to optimize data flow for time-sensitive applications, thus ensuring your users experience rapid access, regardless of data volumes.

KPN International's solution

KPN International's WAN Optimization Works service delivers bandwidth when and where it is needed. Smart allocation of bandwidth ensures that your end-users receive quick responses from mission-critical applications, and stops resource-hungry, non-urgent applications from using up your network's valuable capacity. The WOW service is designed for networks of various sizes, ranging from networks that span less than ten sites to networks with larger numbers of sites distributed over various countries or continents.

Automatic networking

KPN International WOW assigns bandwidth to competing users and applications according to a simple set of rules. Defined at the Network Application Control Center (NACC), the rules define minimum performance standards for all applications and users. The NACC relays these rules to dedicated devices, also known as IP Engines.

The IP Engines are located in each local area network and collectively monitor traffic and manage data flow.

Because the IP Engines cooperate with each other to form an automatic network that adheres to global objectives, your network continuously delivers optimum performance for all users and applications. WAN Optimization Works also accelerates the TCP protocol in order to minimize response times. Built-in redundancy means the system can instantly react to isolated network or IP Engine failures, with Smart Path technology always sending data over the best available connection path.

Real-time monitoring of system performance

An intuitive WOW dashboard gives you an instant snapshot of system performance, with the ability to drill down to each individual computer terminal and application. Importantly, the dashboard measures true system performance as experienced by end-users, with bandwidth demand tracked by user and application. Information provided by WOW can be used to plan network and bandwidth upgrades to ensure your system continuously meets its performance objectives.

The IP Engines all communicate with each other to form an integrated, synchronized distribution system that optimizes network productivity.



Data flow from sites without physical IP Engines can also be managed, thanks to the NACC's capability to run virtual IP Engines. Distributed algorithms allow the IP Engines to continuously respond to real-time changes in network data flow, while delivering the flexibility to adapt to changes over longer time frames, for instance growth in users, migration of databases, or introduction of new applications.

Seamless integration

KPN International WOW can be installed on top of any existing business network, and simply requires a connection to the KPN International server which runs the IP Boss control center. The service can be applied to both closed IP networks and hybrid networks which incorporate internet connections.

KPN International – dedicated service provider

WOW implementation projects typically start with the KPN International team discussing network usage and performance objectives with the client. IP Engines are then installed on each LAN, where they are used to analyze network performance and assess productivity gains from network optimization. When

delivering the service, KPN International maintains regular contact with the client to verify that the IP Engine is operational, and evaluate the results of the optimization.

Thanks to the expertise within the team, KPN International's dedicated service approach offers added value. The team works with you from the initial contact through the full consultancy, implementation and service delivery cycle. Because the same team is involved throughout the cycle, they understand your operations and are focused on delivering productivity gains to your business.

Substantial benefits

KPN International's WAN Optimization Works service optimizes network performance, allowing businesses to increase productivity across their existing network:

- Transparent insight into applications and their bandwidth requirements
- Efficient bandwidth usage and optimization of resources
- Improved end-user experience
- Powerful network management instrument
- Effective enabler of cost savings

About KPN International

KPN International is a market-leading pioneer in providing multinationals with services in the domain of communications, networks and data centers. Services that are based on smart tools which model and optimize the complex relationship between applications and a converged global network.

For more information, please visit www.kpn.com/international or call +31 10 428 9571.