How to improve and future-proof your network

Find out more about various network challenges and how they can be solved with SD-WAN

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New times require new solutions

COVID-19 has turned many things upside down for all of us, both at home and at work. New routines have taken shape for people who have had to work from home. This has increased the need for smart and flexible network solutions, for example, which have to be reliable. The intelligent network technology Software Defined – Wide Area Network (SD-WAN) is increasingly becoming an important component for municipalities and businesses that need to safeguard their IT solutions so that they are always available in a secure, flexible and smart way. Here we highlight a number of cases where SD-WAN is the perfect solution. These examples demonstrate problems and solutions in a concrete way. In addition, we provide an article that summarizes the benefits of SD-WAN.

Enjoy the read!

Mikael Westerlund, CTO

Optimized, fast and secure in the cloud

Secure   Efficient

The benefits of SD-WAN

Software Defined Wide Area Network

Flexible   Comprehensible

What does your network solution look like? Does it meet all your requirements regarding speed, security and flexibility? Or are there aspects you would like to be better? With SD-WAN from GlobalConnect, there's a good chance you can cover all your needs. The guide presents a number of different situations that place demands on network solutions and how SD-WAN solves them

The need for employees to be able to work remotely has already prompted many companies to move, or prepare to move, data to public or hybrid cloud solutions. But cloud-based solutions require a reassessment of the digital infrastructure, so that the required level of security is maintained while also ensuring a good user experience.

Many municipalities and organizations also feel that the existing WAN structure creates unnecessary delays in their networks. Simply upgrading the bandwidth rarely solves that problem. Instead, it should be replaced with a more intelligent installation that is optimized for cloud-based services from the start. One example is the ability to configure next-generation firewalls and take advantage of the great benefits offered by the cloud. The result is increased efficiency achieved in a simple and secure way. This is why SD-WAN is the future.

Do you have an IT challenge you would like us to solve?
You are welcome to give us a call +46 (0)18-843 10 00 or visit our website at globalconnect.fi/SD-WAN

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Scaling up your business – quickly, securely and easily

- ✓ Secure access to the municipality's data and applications
- ✓ Ensure that everyone always has secure access to both the network and the internet

Example of a challenge

The municipality is opening a school/preschool in an area where fiber is not yet available, but a secure connection to the municipality's network is important and urgent.

Proposed solution with SD-WAN

A pre-configured box with SD-WAN is sent to the school/preschool. As soon as the box is connected, the internet becomes available via the existing connection. Staff at the new school/preschool get fast and secure access to the municipality's network applications and a local internet connection with a next-generation firewall built in.

Prioritizing traffic and securing access to important data

✓ Allocate extra bandwidth to critical applications during periods of high load

✓ De-prioritize traffic that is not critical for the organization

Example of a challenge

At one of the municipality's LSS homes (for people with disabilities who need assistance), the network is used by both staff and residents, which means that the data traffic is both personal and organization-related. Regardless of the number of users who are online, there must always be unhindered and sufficient access to the organization's critical data, such as medical records and scheduling systems.

Proposed solution with SD-WAN

In a solution configured with SD-WAN, it can be ensured that the organization's critical applications always have sufficient capacity and are given the highest priority in the network.

Managing your network via the central IT department

✓   With the ability to monitor connections across the entire network

✓   With full control over how network capacity is used at different branches and in different countries

✓   With the possibility to rectify problems and prioritize data flow at selected sites

Example of a challenge

One of the municipality's facilities is having serious problems accessing important files on a shared server.

Proposed solution with SD-WAN

An overview portal, which forms part of an SD-WAN solution, makes it easy to see the municipal facility and take a closer look at its local performance.

The IT department can immediately see that a specific error is blocking access to the common server. The fault can also be rectified centrally via the web portal, and staff at the facility gain access to the important files.

Ensuring cost efficiency and flexibility

✓ Include facilities in areas not connected to the company's fiber network

✓ Connect temporary sites and other facilities and activities

Example of a challenge

The municipality needs to create a temporary facility in an area that does not have fiber.

Proposed solution with SD-WAN

A hardware box pre-configured with SD-WAN is sent to the facility. When the box is connected at the temporary facility, internet access is provided via a secure 4G connection with a built-in firewall. The staff at the facility get access to the company's network applications and also access to support from the headquarters.

Ensuring a faster and more stable network

✓ Where it is not necessary to route data traffic through the main facility

✓ With direct access to the internet from facility sites via a built-in firewall and access to local domains

✓ With the possibility to host critical applications in secure data centers and with direct access from all facility sites

Example of a challenge

Long waiting times and loss of capacity occur on the network as all the traffic is routed through the firewall of the main facility.

Proposed solution with SD-WAN

By switching to a modern solution based on SD-WAN network technology, direct access to the internet via a built-in firewall is provided from the individual sites. This significantly improves performance.

Critical applications can also be moved to a high-security data center – and all the company's sites can be given direct access to stored data.

Staff at the main site and the network's other sites have a better user experience thanks to a faster and more stable network, as data is no longer routed through one single site and one single firewall.
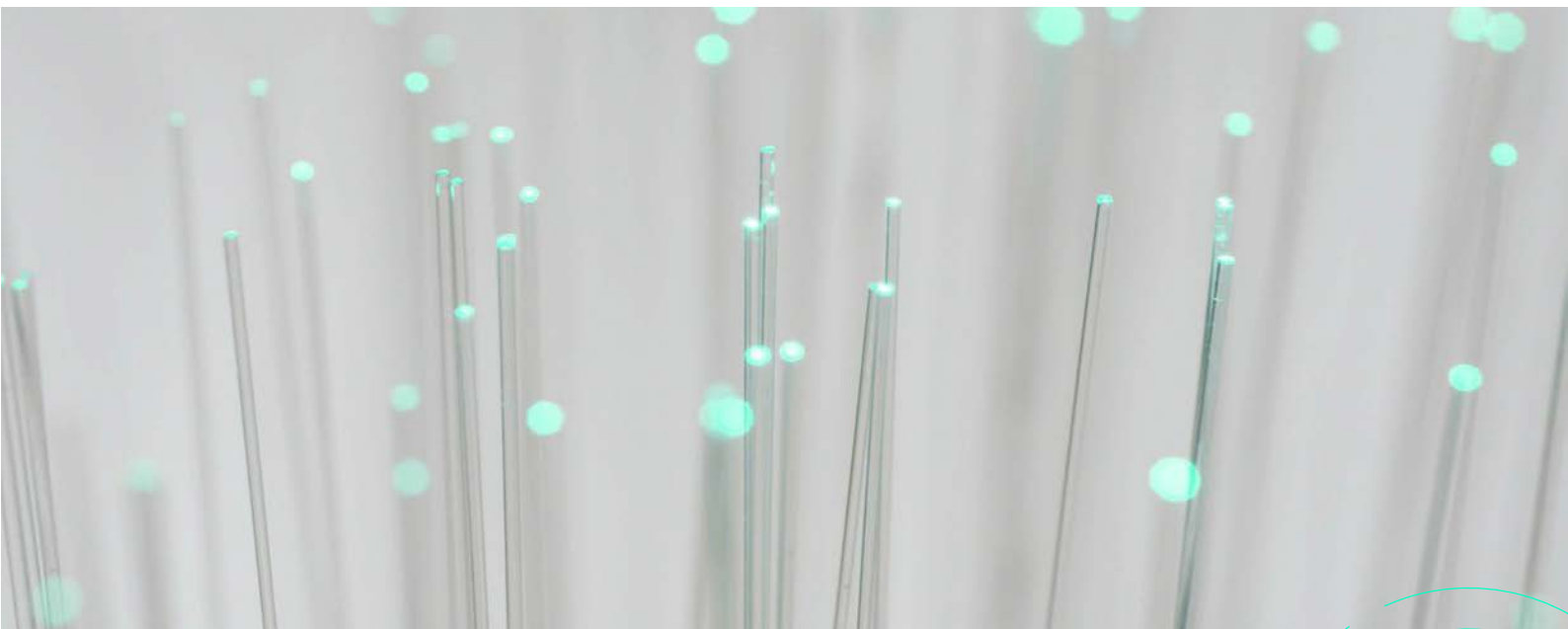
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Achieving a better overview of the entire network

✓ And quick answers to questions like – "Is the internet working properly at site X?"

✓ Thanks to a complete overview of all the facilities and their capacity usage

✓ As a result of detailed reports about application usage and overall network performance

Example of a challenge

The IT department is asked to carry out an assessment of the current status of three selected sites that have experienced capacity problems from time to time.

Proposed solution with SD-WAN

A portal that forms part of SD-WAN solutions makes it easy to get an overview of all the parts of the network. This means it is possible to quickly ascertain that all three sites are functioning properly and that the staff working at the various sites have access to all the necessary applications.

For completeness, a report can be created to show that the network load of the facilities is high due to streaming activity.
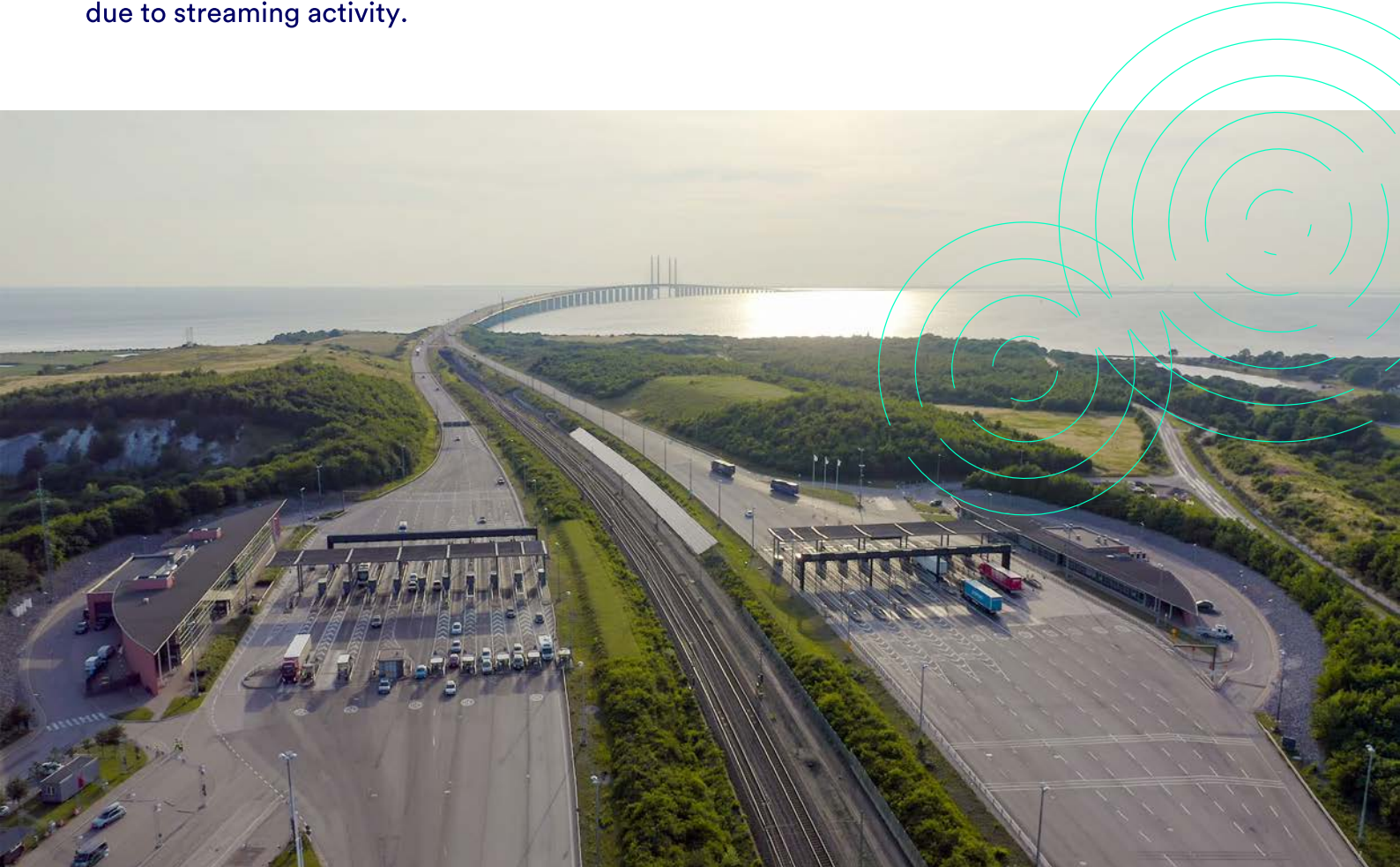
The intelligent network technology – SD-WAN

Many IT managers have had the thought that "it must be possible to do this in a smarter, faster and cheaper way". And while the frustration of an excessively complex and inflexible network solution grows, questions remain in the backs of their minds: Is our network structure sufficiently modern?

Is the system architecture adapted to enable employees to work and share data more and more easily, wherever they are? Are we prepared if the municipal management and municipal director decide to implement comprehensive digitalization? Many questions, and the answer is often SD-WAN.

Do you want to provide the highest level of user experience? Then you should get a network platform from GlobalConnect.

The municipal director was seething with anger about a video meeting that wasn't working smoothly. He couldn't understand how there could suddenly be so much disruption, and called the IT department to get some answers.

As he fetched a cup of coffee to give him strength, he forced a smile at the group of summer interns sitting watching their laptops on their lunch break. How could he or the IT department have known that it was the young trainees who were using most of the network capacity to stream movies?

The incident prompted him to sit down with the IT department and discuss the municipality's strategy – can our network solution be made smarter, simpler and more secure? As frustration with the existing, non-transparent and inflexible network solution spread, new questions arose: Is our security structure up to date? Is our IT environment as good as it can be, in terms of enabling our employees to work and share data seamlessly, wherever they are? Are our critical applications forced to fight for bandwidth with various streaming services and social media channels? And what if the municipal management aims to make the digital journey at express speed – is the digital infrastructure flexible enough to handle that?

How should the journey be shaped to allow the municipality to function successfully in an increasingly digital world? Which needs have to be met, and why? For most municipalities, the needs start with a desire to have a flexible, smart and secure network platform, implemented together with a competent and experienced partner. An SD-WAN solution from GlobalConnect is based on expertise and established technology, with broad and strong growth. It supports the striving of every IT department to improve flexibility and efficiency, while also providing indispensable benefits to the organization as a whole.

A better user experience with a managed network platform

The ability to prioritize business-critical applications and minimize non-critical traffic results in a more stable WAN with increased availability of your company's most important services. A web-based control panel provides an overview of all sites around the world and the ability to monitor service levels in real time and see which applications are being used in the network. The integrated analytics section also makes it possible to use simple settings to produce reports that provide a good basis for planning the IT strategy that best supports the organization, or reports with a historical overview and real-time data to quickly solve problems right away. These are just a few examples of the possibilities offered by a modern and future-proof digital architecture, of course with secure encryption and effective protection against malicious intrusions as close to their source as possible.

With a managed SD-WAN solution, GlobalConnect also takes full responsibility for the entire network, identifying issues that may cause poor performance and providing recommendations and advice about how to use the network more efficiently and intelligently. The aim is to create the best possible user experience for your employees, customers and partners – and maximum control over the network for your company.

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