



A stable, cloud-ready network today supporting NXP Semiconductors' global business tomorrow

Why did NXP need to refresh their network architecture

NXP needed to make it easier for employees to collaborate, work effectively when away from the office, and store and share large files. That meant increasing their use of cloud-based services for office applications, such as email, video conferencing, and data storage. NXP also required the simplicity and convenience of hosted solutions for managing HR and other company-wide functions.

How did NXP manage business as usual, despite an ever-expanding and rapidly growing organisation

The redesigned network architecture provides for immediate breakout to the internet at every site, bypassing the regional data centers. Each site has its own connection to the internet, which is separate from its connection to the corporate network. Larger sites have duplicate connections for added resilience.

What has a new network architecture enabled NXP to do

The redesigned architecture and move to our infrastructure has given NXP a more stable and resilient network than before. This delivers a greater use of cloud-based applications, allowing enhanced collaboration between sites. And, importantly a connection that is secure by design.



'We wanted a well-priced, reliable and scalable network from a provider that could ensure consistent global delivery. The NTT proposal for an MPLS network and internet access service fitted perfectly.'

Maurice Arntz, Senior Director, Infrastructure IT Solutions, NXP Semiconductors

CHALLENGE

Why did NXP need to refresh their network architecture

Prior to the transformation, the corporate network was around six years old – too old to have been designed with access to cloud applications in mind.

Every site had a network connection to its nearest NXP regional data center in Europe, Asia, and the Americas; internet breakout was available only at the data centers.

‘That worked fine while the majority of our IT services were hosted locally and network traffic was mostly intra-company,’ says Maurice Arntz, Senior Director, Infrastructure IT Solutions at NXP.

‘But, as we ramped up our use of cloud applications, the network struggled to support the sharp rise in internet traffic.’

As the contract with NXP’s connectivity provider approached renewal time, Arntz seized the opportunity to refresh the network architecture and optimize it for consumption of cloud services.

‘We wanted a well-priced, reliable, and scalable network from a provider that could ensure consistent global delivery,’ says Arntz. ‘NTT’s proposal for an MPLS network and internet access service fitted perfectly.’

‘We were convinced by their ability to help us realize our network transformation, and their readiness to build a good working relationship with us.’

SOLUTION

How did NXP manage business as usual, despite an ever-expanding and rapidly growing organisation

Our MPLS network gives NXP the option to converge voice and data and reduce outgoing call costs by making the transition to IP voice.

However, just before contract signature, a new requirement arose. NXP acquired Freescale Semiconductors, doubling the size of the business overnight.

‘The acquisition added a whole new dimension to our network transformation. We had to integrate the two companies onto a single network at the same time as rolling out the new architecture to every site,’ says Arntz. ‘NTT accommodated our expanded requirements seamlessly into the contract.’

Together with NXP we agreed a multi-phase project for rolling out the entire network, including the Freescale integration.

‘Business had to continue as normal throughout,’ points out Arntz. ‘In particular, all our design centers and factories operate 24/7. Halting design and production for a network renewal was out of the question.’

To avoid interruptions, we added and tested the new connections at each site before disconnecting the old ones. ‘A key member of the team was our dedicated project manager, who provided excellent support for what was a complex network transformation,’ says Arntz. ‘Overall project governance was very effective, and NTT maintained engagement with us at all levels. It truly felt like a collaborative journey.’

Arntz also cites our ability to find creative solutions to unexpected problems. For example, when damage to cables at a site in the UK took out both their internet and corporate network connectivity.

‘NTT quickly installed temporary wireless connections at the site, while the subcontractor replaced the cabled connections,’ recalls Arntz. ‘It’s an approach that proved useful as a backup at other sites when, for example, major roadworks in the area risked disrupting in-ground cables.’

OUTCOME

What has a new network architecture enabled NXP to do

‘Now every site has its own internet access, we have the bandwidth to use cloud applications efficiently,’ says Arntz. In addition, NTT implemented SIP trunking, which enabled the two largest NXP sites in the Netherlands to make and receive voice calls over the MPLS network.

The solution incorporated enhanced monitoring capabilities, which provided increased network visibility. ‘We have more insight into our network, and can quickly flag any issues,’ says Arntz. ‘At the same time, they are very proactive around incident handling and resolution. That means far fewer outages affecting network performance.’

In addition, the new network is much more secure. ‘The nature of our business makes us a prime target for cybercriminals,’ explains Arntz. As a matter of course, NXP rigorously protects their intellectual property, and ensures their development and manufacturing environments are highly secure. ‘We’ve now ring fenced our company through the security features in the network design and on the network itself,’ says Arntz.

He’s also confident we can handle the network-related implications that come with NXP’s dynamic agenda of mergers, acquisitions and divestments. Having incorporated the Freescale acquisition onto the network at the start of the contract, a year later we helped NXP’s divestment of their Standard Products business line run to plan, with a network separation project.

‘NTT smoothly carved out the network supporting Standard Products’ five factories and approximately 10,000 employees,’ says Arntz. ‘They’ve proved they can easily support this type of business activity that’s so common in the technology industry.’

Besides our network solution, Arntz appreciated the harmonious working relationship between the two companies.

‘As well as being capable, their people are a pleasure to work with, which really matters with a big contract like this,’ says Arntz. ‘They score well on our internal supplier ratings.’

