



## Long Waits on the Digital Orient Express

Even though Thailand is on the other side of the globe, their physical infrastructure seems to work better than the digital one. That is the opinion of Tytex, which has been struggling with many daily interruptions to their internet connection and outrageously long response times for mail: E-mail and applications run on central servers in Denmark, and especially e-mails with large file attachments rolled through the network at a slow pace. File sharing and using the ERP- system in the Thai subsidiary was also very slow. WAN-optimization turned out to offer the best value for money, and the response time has now been reduced from several minutes to a few seconds.

*"Generally file sharing between our six locations is very slow but acceptable. Thailand was the exception. Here the international outbound line was very unstable, and we lost the connection several times a day. Our first challenge was to find an ISP which could deliver a stable connection. In the end we chose a more expensive fiber solution, but now we have been guaranteed a WAN response time of 250 milliseconds, an improvement from 700 previously. Between Denmark and Slovakia the response time is only 60 ms, so the next challenge was to find out how to further optimize traffic between Thailand and Denmark,"* says Michael Stampe Nielsen, ITsupporter at Tytex.

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### From three Minutes to ten Seconds

*"We of course considered establishing a decentralized mail server in Thailand, but that would mean that only the mail traffic would be optimized, and we also wanted to improve access to business applications, which would demand another server. At the price of one server including software licenses we chose Riverbed's WANoptimization, and the good result leaves me speechless. Previously it took us 166 seconds to open a 6 MB PowerPoint presentation, but now it takes only ten seconds. Furthermore, almost all applications we work with run faster. That is a marked improvement to our Thailand staff of 25 employees in administration and production. They now have a smoother workday without wasting time unnecessarily",* says Michael Stampe Nielsen.

A Riverbed box in each end of the WAN between Denmark and Thailand do not change the physical response time of 250 ms through the WAN, as the response time depends on the actual network speed. But since Riverbed only transfers new data and caches data already sent locally, the transfer of the total document happens much faster, significantly improving the response time experienced.

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RanTek A/S is a danish IT-company with more than 20 years of experience. Along with our technologypartners, RanTek supplies effective and reliable IT-optimization solutions and create proven value and significant financial savings for our customers. Simplified, automated and protected.

**RAN(TEK)**  
Reberbanevej 8, 8900 Randers  
Tlf. 8710 0102  
sales@rantek.dk  
www.rantek.dk



### **Virtual Speed Optimization**

*"If we send a 1 Mb file, maybe only the 10 kb are transmitted through the WAN all the way to Thailand. So Riverbed indeed optimizes our WAN speed, and I dare not even think about what Riverbed can do for us between our other locations, where the response times are significantly lower than between Denmark and Thailand"* Michael Stampe Nielsen adds and continues: *"RanTek was right about the gains in terms of time and money which we got from WAN optimization, even though their estimates sounded very optimistic at first. But RanTek has acquainted themselves really well with our specific needs and use of applications, and we are impressed by their effort. WAN optimization is a really good investment for us, and I suppose that the most incredible thing is, that ROI is less than one year"*.

### **Challenge**

Unreasonably long response times for mail, file sharing and the use of the ERP-system in the Thai subsidiary. E-mails and applications run via central servers in Denmark and especially e-mails with large attachments rolled slowly through the network.

### **Solution**

Riverbed WAN optimization between the locations in Denmark and Thailand.

### **Result**

Earlier it took 166 seconds to open a 6 Mb Powerpointpresentation, and now it takes only 10 seconds because of the virtual speed optimization. Mail, file sharing and all other business applications run faster. This means that Thailand employees now have a smoother workday without unnecessary waste of time.

### **About Response Times**

*A high response time occurs because of latency on the WAN- connection. The higher the latency, the longer the response time. Latency is the delay on a ping from it is sent over the WAN until it is received at the other end. It is measured in milliseconds (ms). 250 milliseconds is equal to ¼ of a second, which does not seem like much in the real world, but is a great deal in the digital world.*

*Production company Tytex in Ikast, Denmark produces medical textiles, which are sold to health sector suppliers Tytex has 300 employees worldwide, and beside the head quarters in Denmark it has sales offices in the USA, Germany, Japan and Thailand as well as production in Ireland, Slovakia and Thailand.*