A converged Cisco IP network is enabling Danske Bank to realise its branch of the future strategy

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Tom Søderholm, Vice President, Networking, Danske Bank

Cisco Systems is helping Danske Bank turn its branch of the future strategy into reality. The Bank’s new converged IP infrastructure is transforming the way Danske Bank talks to staff and sells to customers. Applications are running more securely and facilities management is now being run efficiently and cost-effectively.

BUSINESS CHALLENGE
Founded in 1871, Copenhagen-based Danske Bank A/S is the largest bank in Denmark and the third largest in Scandinavia. Danske Bank is both the overall Group brand name and also one of the four main Danish brands (the other three being BG Bank, Realkredit Danmark, and Danica Pension). In Denmark, Norway and Sweden, the Group serves almost three million retail customers and a significant part of the corporate, public and institutional sectors.

With its philosophy of ‘one group, one system, one process’ Danske Bank has successfully integrated several acquisitions over the last few years, most notably BG Netbank, which alone brought Danske Bank a further 10,000 employees, 248 branches, and 2.3 million customers.

Danske Bank’s CEO, Peter Straarup, sees Group strategy as focusing on restructuring its distribution network to support the way financial solutions are being sold to customers: directly via the Internet and telephone banking, and physically to retail customers in the branches and business customers in finance centres. In particular, retail banking strategy is to build on the existing strength of traditional branches where more complex, high-value products can be sold face-to-face.
NETWORK SOLUTION
Danske Bank chose Cisco as its primary network vendor because of its strength in both IP and Systems Network Architecture (SNA) networking. The Group’s IT platform is one of northern Europe’s largest, and Danske Bank has switched to an advanced Cisco IP network that can distribute or multicast different types of information to many users simultaneously via its Cisco routers. Around 600 branches are connected to the infrastructure, which supports 2,000 servers and 23,000 workstations.

Danske Bank views its branch network as a platform for doing business better, more efficiently, and more profitably. Today, the IP enabled bank branch is becoming the epicentre of a major transformation, enabling higher employee productivity, better customer service, and improved security through network applications, such as IP telephony, video applications for staff and customers, IP-enabled ATMs and kiosks, IP video surveillance systems, and wireless LANs.

“THERE IS A LOT OF MONEY TO BE SAVED WITH CONVERGENCE ON ONE’S NETWORK, AND IF IT’S A HIGH PERFORMING ONE, THEN WHY NOT USE IT FOR ALL YOUR APPLICATIONS. WHY DUPLICATE RESOURCES WITH ALL THE COST THAT ENTAILS, WHEN YOU CAN CONVERGE BRANCH SERVICES ONTO ONE, MULTI-PURPOSE IP INFRASTRUCTURE.”

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In such a branch of the future, online staff facilities such as distance learning and self-service and HR applications can be implemented at marginal cost. Expert assistance can be brought instantly to a desktop irrespective of geography, and branch staff can operate as part of a wider, richer team. Marketing and sales campaigns can be constructed at both local and national level: their focus can be varied by place and time of day.

Danske Bank’s Vice President of Networking, Tom Søderholm, says that the Bank’s Cisco-powered network is running some 18 months ahead of the Group’s business needs. He adds: “Today, maximum value and performance at branch level cannot be achieved without technology. Our IP network is the single most critical component in realising Danske Bank’s branch of the future strategy. We work closely with Cisco to make doubly sure that current business needs are properly supported by the network infrastructure, that it is sufficiently flexible to accommodate new applications, and that information and applications are always available.”

Cisco Systems IP Content Acceleration technology provides the ability to move heavy or media-rich content around the IP network without causing delays or downtime. With IP Content Acceleration, information that branch staff are likely to refer to very frequently (such as product details) or large data files (such as broadcast video) will be stored and distributed from several locations geographically close to branches instead of a single remote data centre. The IP infrastructure allows the bank to adjust its bandwidth requirements quickly in order to carry voice or video traffic over the network without affecting its overall performance. Quality of Service (QoS) functionality ensures that sound or vision plays faultlessly, with no time delays or loss of quality.

The relationship Danske Bank has with Cisco goes beyond the traditional vendor and customer partnership, extending into product development, beta testing Cisco technologies and providing valuable user feedback. Tom Søderholm explains: “It’s a relationship where we very much share ideas and discuss things openly. This kind of collaborative working breeds a unique environment of mutual trust. New ideas flow back and forth across the table and we’re able to consider them sensibly, calling on the necessary competencies to talk through opportunities and drive them forward.”
BUSINESS VALUE
As part of its ‘Communicating at Danske Bank’ project, Danske Bank explored how its IP network might handle different media types and how staff might respond to new methods of communication. The Group has been piloting the transmission of a rich mix of information (including instant messaging, PowerPoint presentations with embedded video, and live videoconferencing) to everyone.

In creating this customised communications environment for its employees, Danske Bank took just four weeks in summer 2003 to implement Cisco Content Delivery Network (CDN) technology for its 30 major sites. CDN provides the Bank’s dealers with up-to-date finance news live each morning. The Group’s Communications department has already produced variously themed video productions, which are beamed out via the IP network.

Video files are distributed later to all bank employees, and to dealers who may have missed the earlier live briefing. An evaluation designed to compare the effectiveness of on-demand services with other forms of conventionally-delivered communication revealed that branch staff responded much more positively and remembered messages delivered dynamically.

Tom Søderholm says: “Danske Bank will have to go through a culture change before the company reaps the full benefits from this technology, but we have created an awareness of the possibilities that this technology brings, deploying it to eight thousand of our staff.”

Self-service terminals, such as bank ATMs, are evolving from being money dispensers to multi-function devices from which customers can pay bills, buy mobile phone top-ups, and other goods and services. Cisco Systems is working with leading vendors to IP-enable the ATM channel to allow banks to upgrade this crucial service. Banks will then be able to equip their ATMs with a whole range of new services and integrate them with other systems and delivery channels such as branch, call centres and the Internet.

Danske Bank’s ATMs are already linked into its network via Cisco routers, but the bank is planning to move to IP-enabled ATMs, so that new applications can be distributed to them. As the bank seeks to divert low value transactions away from branches towards self-service ATM-type devices, it will be able to exploit this channel more effectively by using IP to offer customers personalised messages and alerts, targeted promotions, and high impact video-based services.

Today, more than ever before, there is a steely focus on branch security, business continuity and operational risk and – teamed with security technologies such as IPSec, Triple DES and AES – the Danske Bank IP infrastructure offers the highest levels of network and application security available.

The Danske Bank IT team has explored running branch IP video surveillance security cameras over IP, so that when alarms are activated pictures are fed directly to the local police station (and even straight into police cars via GPS) to provide them with an instant picture of what is going on in the branch. Danske Bank is also using IP to centralise other services – such as heating, ventilation and air conditioning (HVAC) and lighting.

“There is a lot of money to be saved with convergence on one’s network, and if it’s a high performing one, then why not use it for all your applications?” concludes Tom Søderholm. “Why duplicate resources with all the cost that entails, when you can converge branch services onto one, multi-purpose IP infrastructure?”
CUSTOMER CASE STUDY

TECHNOLOGY CALL OUT

The Bank uses the Cisco 1105 HSE Hosting Solution Engine in its two data centres (in Glostrup and Brondby) to manage the heart of its IT business – the fully redundant IBM Sysplex mainframe computing systems that house all the company’s financial databases and applications. In each data centre, 10 mainframe systems are IP-enabled using a server farm with intranet web interfaces to SNA applications. Cisco Catalyst 6500 Series switches support load balancing, where applications are spread across Danske Bank’s IBM mainframes. If one machine becomes unavailable, service to the Bank’s customers and staff is not interrupted. The deployment of Cisco Catalyst 6500 Series switches also helps the business improve load balancing across its Windows hosts, allowing it to seamlessly roll out applications without experiencing traffic problems across its network.

The Group is using Cisco Content Networking, with Cisco Content Engines at each of the Group’s finance centres pulling video content, web and text-based files from servers within Danske Bank’s data centres, via Cisco 2650XM and 2651XM Multiservice Routers at each branch. At both the data centre and major sites, the Cisco Catalyst switches and Cisco IOS routers enable the transmission of content across the Danske Bank network, under the control of the Cisco Content Distribution Manager. Cisco QoS parameters allocate appropriate priority to applications traffic and voice communications to ensure that the transmission of video content files does not degrade the network’s overall performance.

ACNS (Application and Content Networking System) delivers pre-positioned, or cached, videos to the branches, as well as streaming video of major announcements over the network. CNR (Cisco Network Register) is a dynamic addressing feature that has become a critical component in Danske Bank’s overall network environment. Dynamic addressing simplifies network administration because the software keeps track of IP addresses rather than requiring an administrator to manage the task. This means that a new computer can be added to a network without the hassle of manually assigning it a unique IP address. Danske Bank estimates that without CNR it would need another fifteen staff to handle network administration.