



Danish School Uses Black Box Emerald KVM-over-IP Technology for Reliable Remote IT Support

BACKGROUND

A group of 17 middle schools in and around the Danish city of Helsingør rely on a centralized IT department with seven staff members to provide technical support to students and teachers. Because students typically bring their own devices or borrow a community computer, the IT department handles issues across a variety of operating systems and devices. The distance between schools and unpredictable demand for IT support present further challenges for the IT department, particularly in providing support where and when it is needed.

CHALLENGE

Members of the IT staff traditionally visited the schools on a rotating schedule. However, this failed to address the need for support when issues occurred and also incurred the time and cost of travel — up to 20 km each way — even when no support was required. To eliminate the inefficiency of scheduled visits and to improve students' day-to-day access to tech support, the IT department decided to deploy a network-based solution for remote IT support and troubleshooting. The department turned to the Emerald® high-performance KVM (keyboard, video, mouse) platform from Black Box.

SOLUTION

The Helsingør Municipality built the Black Box Emerald KVM platform into a support booth — not unlike a phone booth — that provides students with technical support for their laptops and other devices. The Emerald platform provides an essential level of security, as well as the point-to-multipoint extension functionality needed to enable the schools' new remote IT support model. The award-winning Boxilla KVM management platform from Black Box simplifies management of the KVM network from a user friendly, web-based GUI.

The first deployment, at Skolen ved Rønnebær Allé, relies on one Emerald transmitter and eight Emerald receiver devices to carry video and USB signals over IP between the middle school and remote IT department. While the Emerald platform supports transmission over the public Internet, the schools use their own dedicated fiber network instead.



CLIENT:
HELSEINGØR MUNICIPALITY

CLIENT WEBSITE:
WWW.HELSEINGØR.DK

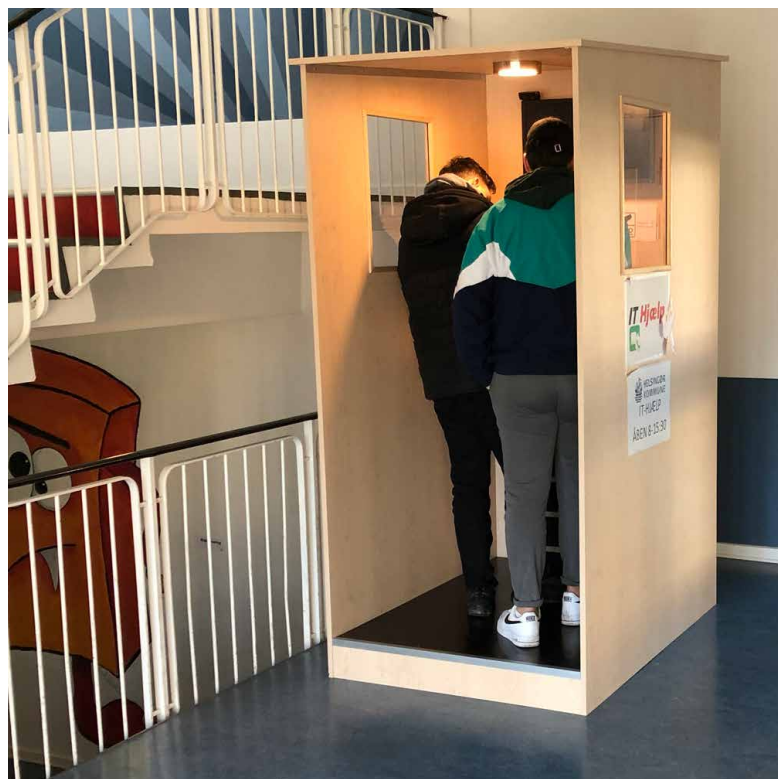
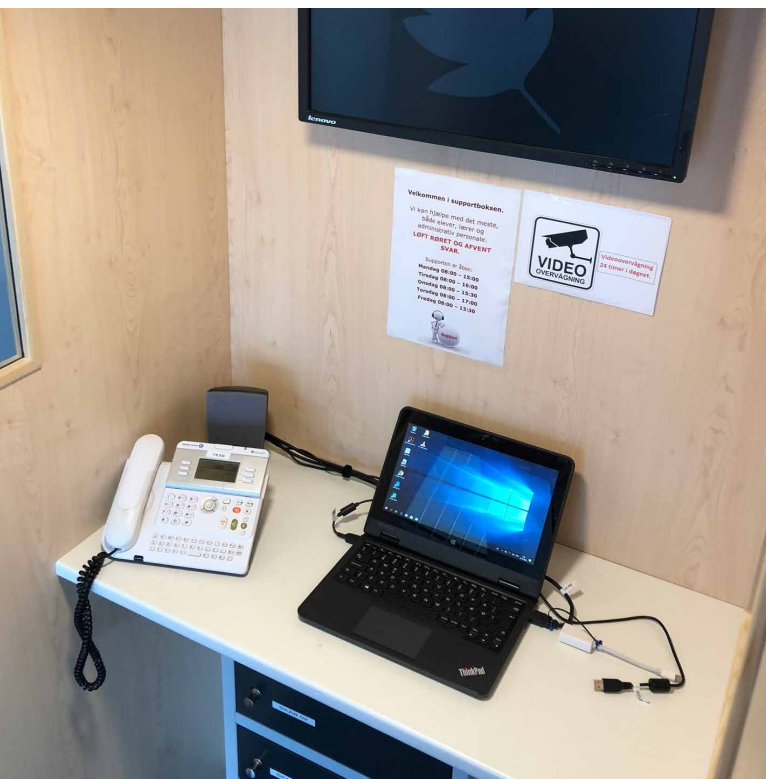
REGION:
DENMARK

INDUSTRY:
EDUCATION

SOLUTION:
EMERALD KVM OVER IP
MATRIX SWITCHING AND
EXTENSION

SERVICES:
CONSULTATION, HARD-
WARE INSTALLATION,
MAINTENANCE





SOLUTION (CONTINUED)

At the school, a support session is initiated through a SkyLink video call on an iPad in the booth, in case the student cannot connect to the Internet. Once the student connects the problematic laptop or device into the Emerald®-based solution via DVI or HDMI and USB, an IT staff member can assume control, launch a webcam chat session, and begin troubleshooting.

“It’s probably one of the world’s first IT solution that combines a phone box with online support for school students,” says Mads William Oehlenschläger, Tech Support Specialist at Helsingør Municipality. “The idea originated from Kim Baumgarten, IT manager at the Center for Citizens’ Services, IT and Digitalization (BID) at Prøvestenen. And it actually works on several levels. For one, the problem often is that students can’t get their computers onto the Internet. We’ve addressed that. We also wanted to establish personal contact with students using the webcam so that they can see us and we can see them. That’s really why we built our new IT support ‘box’ this way. Plus, students always love it when they see us ‘hacking’ their screens.”

RESULTS

The support booth, or “box,” built on Emerald allows students to simply call the IT department when they need help, rather than wait for the day and time a staff member is scheduled to be on site. They can get help much sooner using a system that’s straightforward for users at both ends, students and IT support staff. “Pretty often,” says Oehlenschläger, “we simply fix the problem for students, and they are on their way again. Case closed.”

When all 17 schools are connected to the IT department via the Emerald KVM platform, the need to drive between schools will be greatly reduced, if not eliminated. While the

IT department will cut both costs and travel time, students will gain immediate access to the service desk throughout the school day, every day.

Helsingør Municipality is demonstrating this IT support model for other schools in other communities, and it is considering connecting its service desk up to the local city hall to provide support as needed.

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