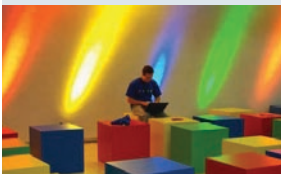


Lego bricks, code labs, and a whole lot of Chrome

A cleverly devised wireless LAN transformed Munich's ICM overnight into an enormous playground for Google developers

Google:

Google's innovative search technologies connect millions of people around the world with information every day. Founded in 1998 by Stanford Ph.D. students Larry Page and Sergey Brin, Google today is a top Web property in all major global markets. Google's targeted advertising program provides businesses of all sizes with measurable results, while enhancing the overall Web experience for



Piles of colorful Lego bricks decorate the tables. Comfy chair cushions and attractive sofas and stools look inviting. Display boards show the way to events such as Code Labs and Breakout Sessions – and upstairs in the gallery, table football and Wii are ready for the first match.

Attendees to the Munich International Congress Center on September 23 were greeted by an unusual sight: Instead of the usual congress attendees in suits and ties, groups of young people dressed in jeans and T-shirts crowded around the registration points in the lobby eager to get their hands on their admission badges. Eventually over 500 would turn up.

The event that transformed the ICM was the Google Developer Day 2008, an invitation from the search engine to anybody interested in continuing the development of Google tools and applications for the Internet. A star at the event: Chrome, the Web browser from Google.

Chair cushions and wireless LAN for all

Brightly colored furniture, cool, young attendees – the changes simply could not be overlooked. And yet behind the scenes, Google had been very busy transforming the ICM into what the visitors expected on the day: A development laboratory, a high-tech campus, a platform for exchanging knowledge and experience, and for networking.

The most essential tool of the event worked unobtrusively in the background: A wireless LAN available to all participants and presenters, installed especially by Google for Developer Day. This ensured that all of the seminar and conference rooms had network coverage, as were the lobby and the Google Lounge.

Tough requirements

The requirements of the WLAN were demanding: 500 participants had to be able to surf the Internet and share data via the public wireless network – at high speed, of course. The presenters were to have a separate network offering access to their presentations and direct Internet access. Additionally, the administration of the entire wireless network was to be completely separate from the rest.



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At a glance:

23 access points:

LANCOM L-54 Dual,
LANCOM L-305agn and
LANCOM L-54ag

10 sector antennas:

LANCOM AirLancer O-D80g

1 WLAN Controller

LANCOM WLC-4025
with Public Spot Option

2 VPN routers

LANCOM 1721 VPN

2 x 20- und 34-Mbit lines
for the Hotspot users

1 ADSL 16,000 line for
presenters and management

1 WLAN, 3 VLANs and more than 450 Hotspot users

A total of 23 LANCOM access points and specialized sector antennas were installed in the relevant areas of the ICM and provided complete coverage in the conference rooms. Two other workshop rooms were connected via wireless bridge as cable connections were not available.

A LANCOM WLC-4025 WLAN Controller handled the management of the entire wireless LAN, including the provision of 3 completely separate virtual LANs (VLAN): One for the public Internet Hotspot, one for the presenters, and an administration VLAN. The Public Spot Option running on the Controller ensured secure and legally compliant operation of the Hotspot. On the day of the event, the Hotspot was used by more than 450 participants.

Three lines were available for Internet access: Two lines (20 Mbit, 34 Mbit) were allocated to the Hotspot users. A LANCOM VPN router connected these to the Internet. This ensured that sufficient bandwidth was available at all times to all of the participants.

The network for administrators and presenters was connected to the Internet via a separate ADSL 16,000 line and another LANCOM VPN router.

Configuration overnight

Preparations for the Google Developer Day were thought-out in great detail. On-site installation of the access points and WLAN Controller had to take place in tightly planned time slots – as did the configuration of the complex network infrastructure which was conceptualized by the LANCOM Solution Partner LemonTec IT Systems KG.

The fact that the installation and configuration were carried out without problem, quickly and with a modest financial outlay was aided by the perfect division of the tasks at hand: Whereas on-site network infrastructure was installed by Google personnel, configuration and administration of the network and VLANs was handled via VPN connection from the LemonTec offices near Hamburg, Germany – overnight! Monitoring and management of the network were also handled remotely by LemonTec. The result was smooth operations at the Google Developer Day 2008.



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