

ProCurve Networking by HP

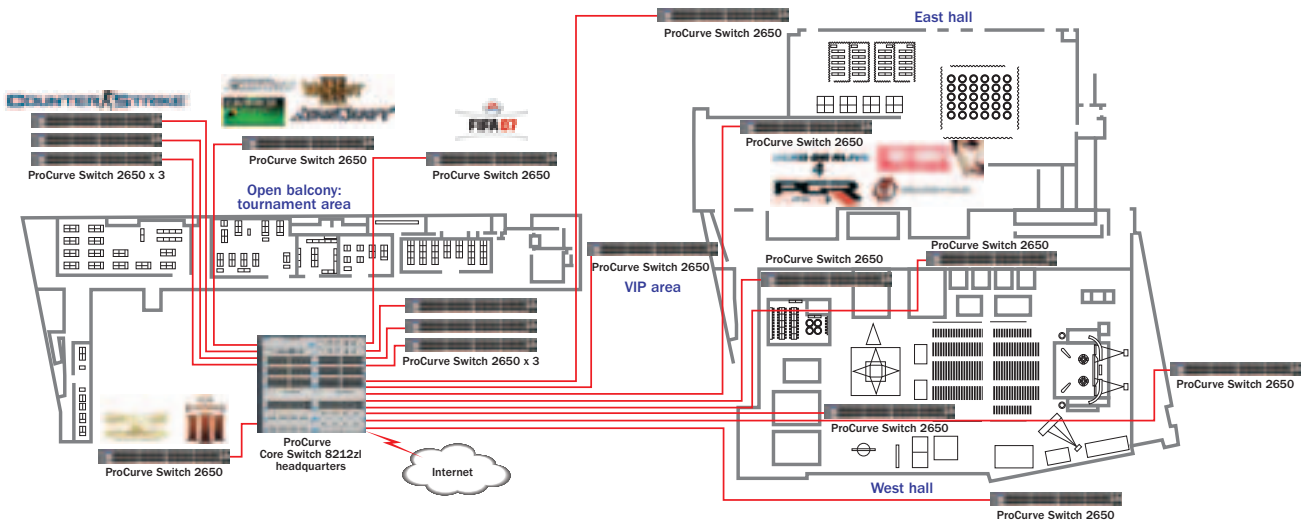
# Powering the World Cyber Games



“The speed, skill, and efficiency of how ProCurve deployed the network infrastructure for the World Cyber Games Grand Final was astounding. The build-out for the WCG reaffirmed the decision to partner with ProCurve Networking by HP to deliver the network infrastructure that was powerful, secure, and dependable.”

**Hyung-Seok Kim, chief executive officer,  
International Cyber Marketing, the global  
organizer of the WCG**

## Networking the World Cyber Games



This challenge was no game. ProCurve engineers were asked to deploy and test an enterprise-size stadium network in less than 48 hours. It also was an e-gaming conference—one of the most difficult networking challenges imaginable. Simply put, the network had to deal with all types of traffic under constant heavy loading.

If that weren't enough, the network had to be both open and secure, with security unified across wired and wireless environments. It needed a distributed intelligence that could adapt to all use models and applications. And it all had to be done in two days.

ProCurve Networking by HP handled all that and more in the Grand Finals of the World Cyber Games (WCG).

### The World Cyber Games

The World Cyber Games ([www.worldcybergames.com](http://www.worldcybergames.com)) is the premier global video game tournament and culture festival. Founded in 2000 as a way to promote international exchange and harmony through extensive online and onsite events across the globe, the WCG has grown steadily ever since—with contestants from more than 74 countries, as well as millions of online spectators worldwide enjoying the events in real time.

ProCurve has partnered with WCG since 2005, when ProCurve provided the official network infrastructure for the WCG Grand Final in Singapore. In 2007, ProCurve was named the official global networking infrastructure

provider for the WCG. Under the three-year agreement, ProCurve will design and build the secure network environment for the annual WCG Grand Final, as well as for three Pan Regional Championship tournaments in the Americas, Europe, and Asia.

The most significant event for the WCG is the annual WCG Grand Final. In 2007, the Grand Final was staged at Qwest Field in Seattle, Washington. More than 700 of the world's best gamers competed for the title of Grand Champion in their respective game titles. For ProCurve, the challenges began the week before. With access to Seattle's Qwest Field limited before the start of the Grand Final, ProCurve experts were faced with constructing an enterprise-size network in less than 48 hours.

### Building the Grand Finals network

The intense, real-time nature of the WCG competitions demands a network that offers impeccable reliability and performance. In addition, the high-profile, global scope of the WCG makes network security a major consideration.

Network elements include streaming video and audio, intrusion security, Voice over IP (VoIP), Quality of Service (QoS), latency, and some of the most demanding users imaginable—not to mention the raw bandwidth requirements. In short, the network has to deal with all types of traffic under constant heavy loading.

“The challenge is world-class for vendors as well as participants,” said John McHugh, vice president and general manager of ProCurve. “The WCG represents one of the most technically difficult enterprise network deployments in our experience.

“So why risk participating? A strong analogy is when Henry Ford, founder of the Ford Motor Company, was asked his justification for investing in auto racing. His classic response was: ‘Win on Sunday, sell on Monday.’ ProCurve signed a three-year agreement to be an official sponsor of the World Cyber Games for that very reason. These events enable us to demonstrate that we really understand where new technology is going.”

In less than 48 hours, ProCurve engineers Ben van Kerkwyk and Chris Ruybal constructed an enterprise-size network that powered 1,000 network devices, including 700 gaming computers, the WCG press center, and the tournament zone and sponsor area. In addition, the ProCurve network provided the infrastructure that delivered online and real-time event coverage that reached 30 million people across the globe.

“The traffic requirements of gaming are similar to those of an enterprise voice-over-IP (VoIP) or video-over-IP system,” said Ruybal. “The WCG network was built to create a flexible, stable, and dependable competition environment, while providing a secure wireless overlay across the entire WCG venue spread across hundreds of thousands of square feet at Qwest Field.”

## The ProCurve Solution

The network construction for the WCG Grand Final featured one of the first enterprise deployments of the **ProCurve Switch 8212zl**. The 8212zl, based on HP-developed ProVision ASIC technology, delivers a core-to-edge network solution that unifies network technology, infrastructure, software, operation, management, and support. Utilized with the **Wireless Edge Services zl Module**, **ProCurve 5400zl** switches, and ProCurve **Radio Port 210**, the solution delivered full and secure wired and wireless coverage across the event. In addition, 25 **ProCurve 2650** switches (for a total of over 1,200 ports) were utilized at the network edge.

“This was a clear high-profile demonstration of the reliability, security, and performance of a ProCurve adaptive network in one of the most demanding, intense showcases on the planet,” said ProCurve’s van Kerkwyk. “The ProCurve Switch 8212zl was at the core of the entire Qwest Field network, and our Wireless Edge Services zl Module controlled the stadium wireless. Everything worked exactly the way we designed by adapting to changing needs.”

Despite all the network demands at Qwest Field, the 8212zl easily handled all loads during the event—leaving WCG officials impressed.

“The ProCurve network for the WCG Grand Final performed flawlessly,” said Michael Arzt, general manager, International Cyber Marketing USA. “Network delays affecting game play during the tournament would mean that the game must be replayed, which would cause unacceptable hindrances in the overall competition. That simply was never a concern due to the efficiency and effectiveness of the ProCurve network.

“In addition, the network easily addressed both real and potential security threats in the form of viruses and trojans.”

## Summary

Faced with a supreme challenge of deploying an enterprise-size network in 48 hours for a major international event, ProCurve Networking by HP delivered a dynamic, secure, and efficient network infrastructure for the World Cyber Games Grand Final.

“The ProCurve engineers, Ben and Chris, delivered great networking consultancy to the event, and we are very happy to have ProCurve networking solutions,” said Hyoung-Seok Kim, president and chief executive officer of International Cyber Marketing, Inc. “Without the support like that from ProCurve, we could not organize our Grand Final event and other national operations. ProCurve is not just valuable to us, but also important to our 1.5 million global WCG tournament participants.”



World Cyber Games 2007 Grand Final, Seattle



Preparations for opening ceremonies



World Cyber Games 2007 Grand Final players



Closing ceremonies

## Products utilized

- **Switch 8212zl:** A high-performance, full-featured chassis switch solution that offers reduced complexity in a complete core-to-edge network solution and delivers to market the industry's first core switch with a lifetime warranty.
- **Switch 5400zl Series:** Consists of Layer 2/3/4 switches that deliver advanced intelligent edge capability in a chassis (6-slot and 12-slot) form factor.
- **Switch 2600 Series:** A collection of cost-effective, stackable, multi-layer, managed switches with 48, 24, or 8 auto-sensing 10/100 ports and dual-personality ports for 10/100/1000 or mini-GBIC connectivity.
- **ProCurve Wireless Edge Services zl Module:** Working in conjunction with ProCurve radio ports, it provides centralized wireless LAN management of advanced wireless services, enabling a highly secure, multi-service network on ProCurve zl switches.
- **Radio Port 210:** Provides support for IEEE 802.11g wireless operation and works in conjunction with ProCurve Wireless Edge Services xl and zl Modules to enable a highly secure and resilient, multi-service, adaptive wireless LAN.

## For more information

To learn more about ProCurve Networking, please visit [www.procurve.com](http://www.procurve.com)

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