



The Power of Being There®



## Case Study Avocent systems assist Hutch to enable customers to 'see the world in your hand'

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**Ravi Pantusen**  
*Vice President of IT Operations*  
Hutchison CAT Wireless Multimedia Ltd.



### Growth creates opportunity for IT improvements

Hutchison (Hutch) CAT Wireless MultiMedia Ltd. was the first mobile service provider in Thailand to launch CDMA 2000 1X mobile services, an end-to-end, high-speed wireless multimedia service. With CDMA 2000 1X, Hutch provides customers with anytime, anywhere access to information and entertainment.

Behind the same Hutch brand is a seamlessly connected system maintained by the Hutch IT infrastructural team. With the use of Avocent KVM switching systems, the team is empowered with anytime, anywhere access to all their servers.

Following the CDMA 2000 1X mobile services launch, Hutch staff strength went from less than 50 people to 900 and is expected to grow another 30 percent within a year. With the increase in personnel and the challenge of supporting Hutch brand on-demand high-speed multimedia services, Hutch needed an equal growth in IT systems. Two new data centres were built to support the CDMA 2000 1X offerings and overall business expansion.

“Before the launch of Hutch, I had five staff in system administration, managing approximately 20 servers with a low-end switch,” said Ravi Pantusen, vice president of IT operations for Hutch. “Providing CDMA 2000 1X services demands a lot from IT systems; the forecast was for 500 servers for a start and all to be managed by six administrators.” The new data centres have an array of servers and platforms including Windows 2000, HP-UX workgroups, HP SuperDomes, SUN Solaris workgroup and SUN SF15K.

“Faced with managing hundreds of servers located at two different buildings in Bangkok (IFCT Tower and CAT Building), and having a limited number of IT staff to maintain them, we needed a powerful solution that allows centralized control and unlimited access to both our local and remote servers,” he explained.



The Avocent AMX matrix switching system (shown here) works in tandem with the Avocent DS1800 KVM over IP switch to provide Hutch with the advantages of integrated digital and analogue technology.

### **The Avocent solution**

After recommendations from other corporate users and armed with internal research that demonstrated Avocent switches to be highly reliable, he approached Access Consulting Services (ACS), an Avocent partner in Thailand, with a request for a connectivity solution to manage Hutch's two data centres. Consultation sessions resulted in the need for a centralized management solution that is highly scalable, secure and easy to manage. Hutch decided to implement the DS1800 KVM over IP switch and AMX™5000 switch appliance and thereby gain the advantages of integrated digital and analogue technology.

### **Maximum server density per switch**

"Because of our high, server density environment, the more servers we can control per switch, the lower the cost that goes into controlling one server," said Pantusen, in explaining the choice of an Avocent solution. "Such savings comes from reduced labor and hardware costs. The AMX5000 switch, with 32 server ports per unit, fits our requirements nicely. We save on time, too, with fewer switches to control than we had with our legacy switches."

### **Unlimited access from anywhere**

The AMX5000 analog matrix switching system is interoperable with the Avocent DS1800 KVM over IP switch. The result for Hutch is maximum flexibility in designing data centre server farms. They now have a competitive solution that provides powerful direct connection and unlimited access to any server in the network, from any location. Administrators reduce travel time because they do not need to be physically at the devices to maintain them.

"Negotiating Bangkok's traffic from one data centre building to another can be very time consuming. Now all the servers are within reach by sitting at our desk which greatly improves our productivity," said Pantusen. "Remotely rebooting the servers and troubleshooting as the system boots up is something we could not have achieved without the DS1800 switch. We can even simultaneously monitor several server sessions from a single screen using the DSView software."

DSView® management software provides click and connect control of all connected devices to the DS1800 switch, from a single monitor screen. DSView software uses industry-standard IP (Ethernet) connections and secure DES encryption to transmit KVM signals.

The ability to have anytime access to "critical" servers is crucial for business operations. With the Avocent DS1800 KVM over IP solution, Hutch administrators have complete access to their servers. Multiple users can also access the same critical server at the same time. "We have immediate hands-on access to our system the moment there is a problem; this solution has greatly helped us towards our goal of zero downtime," said Pantusen.

### **Scale according to business growth**

Hutch intends to increase their server count in stages, so the KVM solution has to provide for growth. Pantusen recognizes this advantage in Avocent KVM switching systems. AMX switches can be cascaded to increase centralized control of more servers. By adding more AMX appliances when needed, Hutch can scale according to the number of servers required to support the business. When the AMX5000 switch further connects to the DS1800 KVM over IP switching system, the scaling potential is infinite. There is no limit on the number of devices that can be connected and controlled, from 10 devices to thousands of them.

### **Save space, support multi-platforms**

Consolidated control of the servers through the combined Avocent AMX switch and DS1800 digital switch saves Hutch premium space that would otherwise house the keyboards, monitors and mice needed to access hundreds of servers. The Avocent solution also helps resolve the challenge of controlling a multi-platform environment because it provides access to PS2, SUN and USB servers and serial devices.

### **Secured access**

"Security played an important part in our selection of the Avocent remote access solution," said Pantusen. "One key security

feature was the ability to set different levels of access for each user. Through the DSView Interface, the user will only be able to view the list of servers that he or she has preset permission to access. This effectively shuts out unauthorized users."

### **Future**

Hutch plans include a third data centre in the near future. With the level of control already gained through the use of Avocent remote access technology, the addition of more Avocent KVM products could be on the horizon.

### **About Avocent**

Avocent® (NASDAQ: AVCT) is the leading worldwide supplier of KVM (keyboard, video and mouse) switching and connectivity solutions that provide IT managers with access and control of multiple servers and network data centre devices, with no distance limitations.

Avocent was formed from the merger of the world's two largest KVM (keyboard, video and mouse) switch manufacturers: Apex and Cybex Computer Products Corporation. More than two decades of experience goes into Avocent KVM switches, remote access and serial connectivity solutions, and customer service.

Avocent products are distributed by the world's largest server manufacturers and installed in Fortune 100 companies around the world.

Avocent has more than 700 employees; and sales, operations and R&D centers worldwide. Corporate headquarters are in Huntsville, Alabama, USA. Visit [www.avocent.com](http://www.avocent.com) for more information about Avocent products.

### **About Hutchison CAT Wireless MultiMedia Ltd.**

Hutchison CAT Wireless MultiMedia Ltd. is a joint venture between the Communications Authority of Thailand and Hutchison Wireless MultiMedia Holdings Limited. The company provides marketing services for digital CDMA mobile telephone services. The services include voice and advanced data applications with the emphasis on leading-edge, state-of-the-art services and products.