

## ELECTRONIC ARTS **CANADA**



### *About Electronic Arts Inc.*

• With its focus squarely on creativity and quality, Electronic Arts has grown into the world's largest interactive entertainment software company. With revenues exceeding \$1.2 billion U.S. for fiscal 1999, it is a driving force in the highly competitive interactive entertainment marketplace. The company mission includes developing, publishing and distributing dynamic entertainment software for personal computers and video game systems. Two of these systems are the highly publicized and extremely popular Nintendo® 64 and PlayStation®. Electronic Arts develops and markets its products under eight well-recognized brand names, including Electronic Arts™, EA SPORTS™, Maxis™, Origin™, Bullfrog Productions™, Westwood Studios™ and Jane's® Combat Simulations and Gonzo Games™. Their vast worldwide distribution network operates in over 75 countries. Internationally, there are 13 major product development centers.

• One of these key development studios, Electronic Arts Canada, is a state-of-the-art, five-story campus style complex located in Burnaby, British Columbia, employing over 500 highly skilled people. Opened on January 4, 1999, this 207,000 sq. ft. facility was specifically designed to facilitate and promote a high level of design productivity while simultaneously maintaining a casual, creative working environment for its people. This complex houses a motion capture studio, professional quality sound studios and an information resource center. In keeping with their desire to provide an atmosphere that fosters teamwork and high employee morale, a health and fitness center, a 65 seat theater with a 16 by 9 foot viewing screen and a company store were added for use by employees.

# High Technology

## The Challenge

- One of the main concerns in the development of the Electronic Arts Canada building was network communications. In an innovation-driven technology market where bigger/better/faster is key to gaming success, this studio had very special networking requirements.

- A critical success factor for Electronic Arts is the timely and accurate distribution of information between work areas. The network and its applications formed an integral part of the design of this high-tech operation. The needs were diverse. There was a requirement to have a high-speed, high-bandwidth network to accelerate data transmission in the workplace. Projects in this studio were to be typically very large, requiring the capability to transmit CD-sized amounts of data quickly and effectively between workstations.

Bandwidths needed to offer a performance level that would accommodate current and future needs. It was clear that Electronic Arts would have a growing need to develop and produce larger, more intricate games. As projects and missions change, the studio would also require a network with the flexibility to quickly adapt to workstation growth and a redeployment frequency of 100 percent per annum. It was essential for Electronic Arts to have a flexible but stable network system ensuring optimum performance that would lead them well into the 21st Century.

• *A critical success factor for Electronic Arts is the timely and accurate distribution of information between work areas.* •

- The **NORDX/CDT, Reid Crowther** and **BMS Communications** team were selected as key business partners to help build the cabling infrastructure for the software development studio in Burnaby, BC. Reid Crowther provided the electrical and communications cabling consultation for this extensive project. Their experience in the design and building for high-tech network solutions was an invaluable asset to Electronic Arts. The Project Manager and Engineer for the design elements of this project was Behzad Merhrabadi, P. Eng., RCDD. Mr. Merhrabadi designed a structured cabling system that provided flexibility and security for Electronic Arts. Electronic Arts was particularly impressed with their design for a secure structured cabling system and has subsequently retained them for phase two of this project.

- The BMS Communications team played another central role for Electronic Arts. The BMS Communications team is backed with over 20 years of communications experience. Their ability to implement this project in a very short period of time was important in order to move this project from the design stage to the launching stage.

# High Technology

## Description

### *of the Installation:*

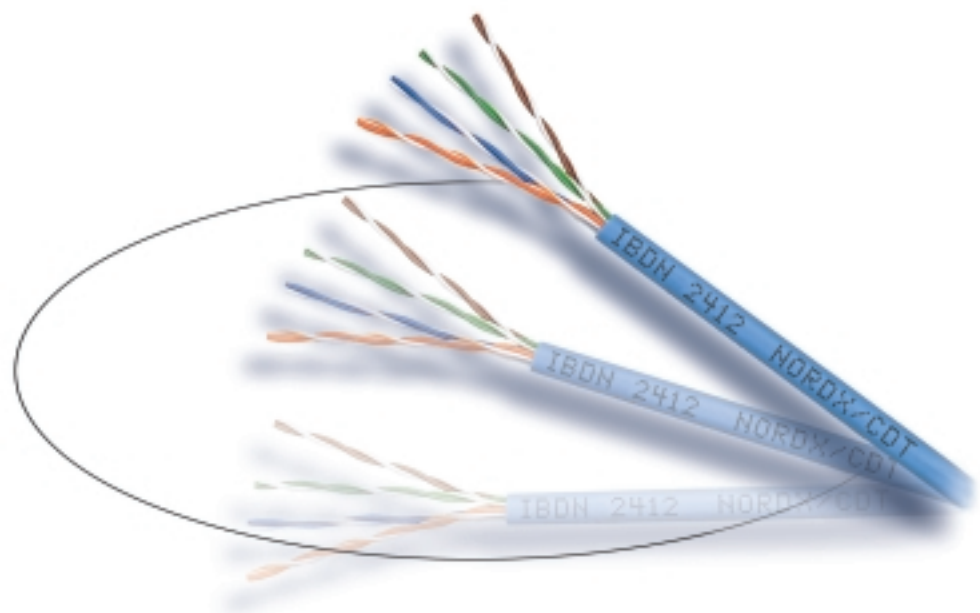
- This large installation required high-density data and voice runs to each workstation. It consisted of some 8000 cable runs, 400 consolidation points and BIX Wall mount systems in 16 telecommunications rooms.

- Telecommunications rooms: BIX Wall Mount Cross-Connect Systems were installed to ensure compact, high performance wire management. Darren Freeman, Senior Network Analyst at Electronic Arts, commented on this unique benefit:

"BIX Cross-Connects have proven to create less mess in the network closets, and after 14 months they look the same as they did on move-in day: neat and tidy."

- Cable installation: Raised floors were used to provide pathways for cable trays. These cable trays were used to feed IBDN 2400 cables. BIX connectors were used at the consolidation points to accommodate the IBDN 2400 Cable which is designed to provide a bandwidth of up to 200 MHz in the cabling channels. The MDVO modular outlets provided a six-port outlet for cable terminations at each work area.

- *This large installation required high-density data and voice runs to each workstation.*



# High Technology

## *The Network Solution*

• In selecting their all-important network solution, Electronic Arts Canada followed the recommendation of the design team from Reid Crowther. This design was based on an IDC wall mount system with cross-connect wire. The design tender documents were released by Reid Crowther among the selected pre-qualified contractors. As part of this process, the NORDX/CDT and BMS Communication Services team was selected. One of the key features of this design was the use of the BIX connectors with unjacketed jumper wire instead of traditional patch panels and patch cords. Following are some other key features and advantages presented.

• The BIX Cross-Connect System supports future high-speed data applications to bandwidths of beyond 200 MHz. Electronic Arts would then benefit from accelerated data transmission to the network while supporting business critical application systems.

• Consolidation Points under the raised floor house the BIX 10A mounts that feed four workstations of approximately 400 square feet. These Consolidation Points provide flexible termination connectivity. Each workstation has six data and voice outlets.

• Moves and Changes (MACs) are done via pre-terminated MDVO 6 port surface outlets.

• Quality performance: BIX components are designed to exceed proposed Category 6 standards. Electronic Arts Canada can rely on unsurpassed performance from their network for years to come.

• IBDN System Certification: 25 year product warranty and a lifetime application assurance for the cabling system. This guarantees the system will support future and present applications for which this system was originally designed. This would eliminate any potential future costs for maintenance and ensure sustained peak performance in their network.

• Space savings: Electronic Arts Canada placed a high value on the space saving feature of the BIX Wall Mount System in their telecommunications rooms. Only active components need be mounted in racks and cabinets. Space savings for communications equipment represent significant cost savings and flexibility to migrate new systems on an as needed basis rather than port patching based on proximity or wire management issues.

# High Technology



## Conclusion

• In planning for the construction of Electronic Arts Canada's new software development facility, their management group was faced with the difficult challenge of providing a powerful, high-performance network to accommodate ever-growing needs such as larger, more complex game software and higher bandwidths. The unique design of the BIX Wall Mount System along with Consolidation Points provides flexibility to re-deploy and migrate to new technologies to support Electronic Arts Canada's future network growth. They chose the NORDX/CDT, Reid Crowther and BMS Communication Services Ltd. solutions because it met and exceeded all of their requirements. NORDX/CDT is proud to have played a vital role in the planning and completion of this world class software development facility.

### **Company**

Electronic Arts (Canada)

### **Location**

Burnaby, British Columbia

### **Vertical Market**

High technology

### **Number of Sites/Buildings**

Five-story, campus-style complex

### **Cabling System**

IBDN BIX Cross-Connect

For more information please contact:

Michele Lanteigne

NORDX/CDT

Tel.: (514) 822-7515

Email: [michele.lanteigne@nordx.com](mailto:michele.lanteigne@nordx.com)

Electronic Arts, EA SPORTS, Maxis, Origin, Bullfrog Productions, Westwood Studios and Gonzo Games are trademarks or registered trademarks of Electronic Arts Inc. in the U.S. and/or other countries.

Jane's is a registered trademark of Jane's Information Group Ltd. Nintendo 64 is a trademark of Nintendo of America Inc. PlayStation is a registered trademark of Sony Computer Entertainment Inc.