

### Global Television using Virtual Studio Technology

Toronto, Ontario

You may already know that **Global Television** is using **Virtual Studio Technology** as it revamps its local newscasts and prepares for the total transition to full high definition.

This project was known internally here at AEL as “**Project X**” and is an excellent example of system integration. AEL is a systems integrator both in “Audio Visual” (or you may wish to call it Multimedia) and Broadcast.

The onrush of technology is creating a new set of demands on our capabilities as systems integrators. The Global remote news production project was unique in that it involved a concept and technology that had never been attempted anywhere else in the industry. Development of such a system involved the assembly of a full scale proof of concept in a lab setting at the Applied Mississauga office. A DS3 loop was brought in and a return circuit to Vancouver was provided. Over a period of 8 months different system alternatives were built and tested often with the assistance of the high level product development personnel from each of the prospective vendors.

Throughout the process, strides were made in terms of quality, operational aspect and the unique challenges of system timing. The final system configuration which can be readily deployed in about two weeks per location provides exceptional gains in efficiency and the overall look of the on air product.



Global has integrated the Orad ProSet, an HD/SD virtual set system that imports models, along with geometry, textures and animations, from multiple design platforms. The broadcaster then uses Orad’s signature HDVG (high-definition video graphics) rendering platform to ensure that the set runs glitch-free and in real time.

## Broadcast & Post Production Systems



“Orad allows us to deliver a consistent high-end news product in all of our markets, both large and small,” said **Gerry Belec**, Global Television’s Director of Technology and Design. “Using the Orad ProSet, we can present news to our viewers in a familiar setting, from the anchor desk, using virtual plasma-screens, but with added graphics value including 3-D elements in a larger-than-life way when appropriate. The Orad tools are a bridge to exciting new techniques of conveying information to an audience.”

“Nowhere in the world has a broadcaster taken this regional master control approach to operation on such a large scale,” said **Avi Sharir**, President and CEO of Orad.

Owned by Canwest Global Communications Corp., Global TV’s broadcast supercenters are located in Vancouver, Toronto, Edmonton, and Calgary, with additional stations in Lethbridge, Saskatoon, Regina, Winnipeg, Montréal, and Halifax, with sister CH News stations in Victoria, Kelowna, Red Deer, and Hamilton.



To give you an idea of how extensive this particular system integration project was, following is a list of the major components. Please be informed that not all stations were equipped with all of these components. The key network stations were equipped with most of them.

- Thomson Grass Valley DNP system based on K2 media servers and Aurora editors
- Thomson Grass Valley Aurora Ingest and Aurora Play connected to ENPS newsroom system
- Ultimatte U-11 SD/HD chroma key units, 28 throughout the project (1 mated to each Orad HDVG)
- Ikegami HDL-45A HD box cameras
- Canon KJH16x7.7B lenses
- Telemetrics Custom “H Track” frame system and Televator unit each with one PT-LP53 head
- Autocue QMaster prompter software and QBox IP-based prompter
- Thomson Grass Valley Trinix routers, 16 or 32 squared Harris Panacea routers
- Miranda XVP-1801 down-converters
- Evertz modular and conversion products (embedders, DA’s) including GPS time reference equipment used for overall system timing
- Telex Adam voice-over IP intercom system

For more information on this project, please contact **Paul Stechly** or **Donnie Gallant** in our Toronto office.