Country level energy management brings a requirement for integrated software, hardware, network and communication elements to optimize energy management.

Energy Management

Worldgrid management

This energy management project delivers sophisticated integration projects and real time Smart Energy solutions to Energy and Utilities companies around the world. In particular, it has equipped 70 nuclear power units with its Supervision and Command and Control software. These are located throughout the world and include the world's largest smart metering system.

CHALLENGE

In managing some of the world's most comprehensive and advanced energy and utility infrastructures you need to be certain of a multitude of standards and codes. These are far ranging and include internal and national standards covering effectiveness, function, security, ergonomics, environment and more. Advice from bodies including the American National Standards Institute helped inform Adder Technology to ensure that the control room and supervision system delivered was secure and efficient.

Security, access, failsafe options, performance, location and switching were all challenges that were considered and integrated into the final solution provided by Adder Technology and installed by a third party integrator.

The challenge was to allow a vast number of computers to be located in multiple, remote and ultra-secure server rooms with nominated users granted secure access. These computers then needed to be managed by multiple operators in a separate control room. This quiet control room provides the operators access to the supervision system which controls and monitors all matters relating to energy distribution at a country level. Each user also required a defined profile which permitted defined access and USB control.

SOLUTION

The integrating team researched all available AV extender, matrix and KVM options and decided upon the AdderLink Infinity solution. This high performance KVM solution was chosen for its security, performance and the 'simple to use and user-friendly interface'.

The hardware solution comprised multiple AdderLink Infinity Manager (A.I.M.) units, 1000+ AdderLink Infinity (ALIF) transmitters (server side) and AdderLink Infinity receivers (user side). This allowed nominated operators access to the right computers and ability to switch between computers together with network and hardware redundancy options. The IT security features included full end to end encryption, user identification, definable user permissions, USB control and access rights which were also included for the installation.

User stations were also equipped with the Adder CCS-PRO4. This hardware requires no software installation and provides a user the ability to seamlessly interact with up to 4 computers using just one keyboard and mouse. This creates a cleaner environment, clearing the desk of multiple mice and keyboards and improving user efficiency.

Energy Management

development.' 'The result has been a huge success, a fully secure and flexible control room KVM solution. This KVM matrix enables their infrastructure and will continue to evolve as the products develop'. 'My thanks to all involved'.

FEATURES

- View a 2560x1600 or two 1920x1200 resolution sessions
- Easy to use user interface
- Defineable user profiles
- View, access and switch your computing resources remotely
- USB True Emulation - supporting almost any HID device
- Switch to any connected computer via intuitive on screen menu
- Digital stereo audio, 2 way communication (speakers and microphone)
- Fanless
- Secure, end to end, encryption

RESULT

The project has been over 2 years in the making with continued close cooperation and maintenance planned to run well into the next decade. This has bought about a very close working relationship.

Natasha Laslett, Adder Control Room Specialist, said 'It has been a fantastic project to be a part of and I'm looking forward to how it will continue to develop over the coming years. The scale of the project in number of computers and distances between them has been immense. We must also recognise the technical team who have provided insight into areas that has impacted upon product

RELATED PRODUCTS

Adder offer a vast range of products to suit your needs. Other products available include:

ADDERLink INFINITY 1002
ALIF1002/P; ALIF1002/R; ALIF1002/T

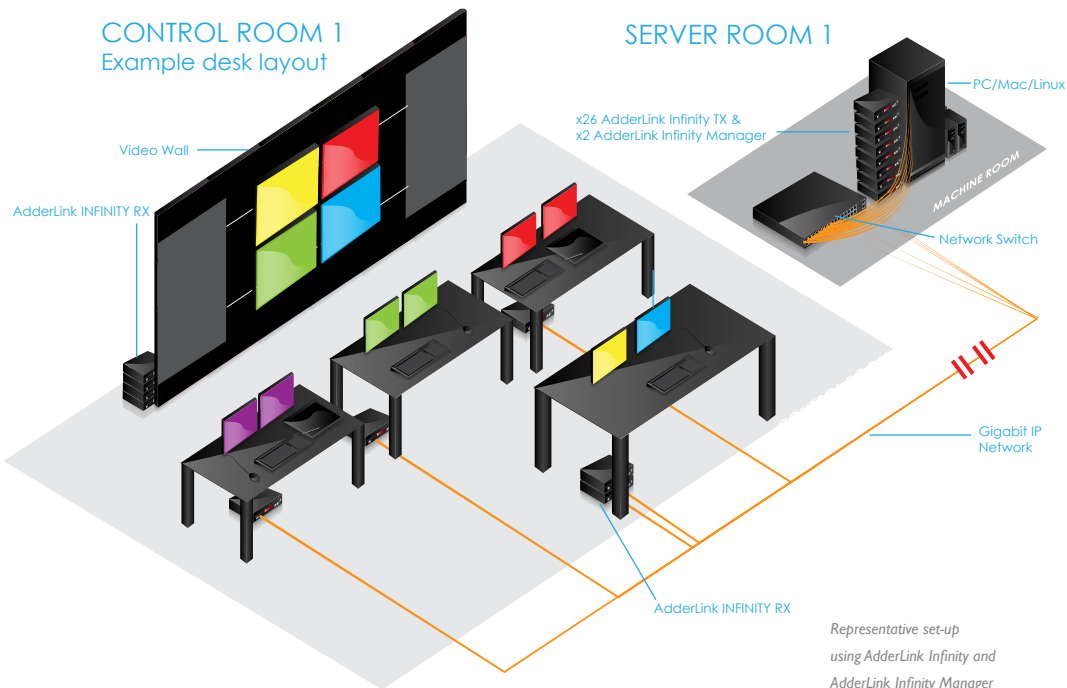**ADDERLink INFINITY dual**
ALIF2002/P; ALIF2000/R; ALIF2002/T

ADDERLink INFINITY Manager (A.I.M.)
ALIF-AIM

ADDER CCS-PRO4
CCS-PRO4

CONTROL ROOM 1
Example desk layout

Video Wall

AdderLink INFINITY RX

SERVER ROOM 1

PC/Mac/Linux

x26 AdderLink Infinity TX & x2 AdderLink Infinity Manager

MACHINE ROOM

Network Switch

Gigabit IP Network

AdderLink INFINITY RX

Representative set-up using AdderLink Infinity and AdderLink Infinity Manager

ADDER ®