

## CASE STUDY

### GENENTECH USES COACTIVE'S TECHNOLOGY TO CENTRALIZE MONITOR AND CONTROL FUNCTIONS IN A MIXED LEGACY AND NEW EQUIPMENT ENVIRONMENT



#### Background

Genentech — one of the world's leading biotechnology companies — uses human genetic information to develop, manufacture and market pharmaceutical products worldwide. Their rapidly expanding campus in South San Francisco has more than twenty buildings. Many of these buildings include automated environmental and process control systems built using Siebe Global Control Units.

Genentech wanted to centralize the monitoring and control of their building automation systems residing in two different buildings on opposite sides of their campus. The goal was to provide more efficient control, and reduce personnel and support costs. Because this was a retrofit environment, Genentech needed a system that could integrate different types of controllers.

#### The Challenge

Genentech faced the challenge of integrating different types of equipment into a cohesive network. Many of the controllers communicated using the LonTalk protocol, while the Genentech Intranet was composed of Ethernet subnets with an FDDI Token Ring backbone. The compa-

ny also used a proprietary PC-based management software system.

Genentech wanted to leverage their existing communications infrastructure and management software. They also wanted a solution that would work with the existing control networks, could support new equipment, and would not require new infrastructure. Specifically the solution needed to be effective in an environment where:

- Some of the existing controllers only communicated in LonTalk protocol;
- The existing Ethernet/FDDI network would be used for data transport;
- Information could be used by the management software already in use; and
- New process and environmental control equipment could be added without system changes.

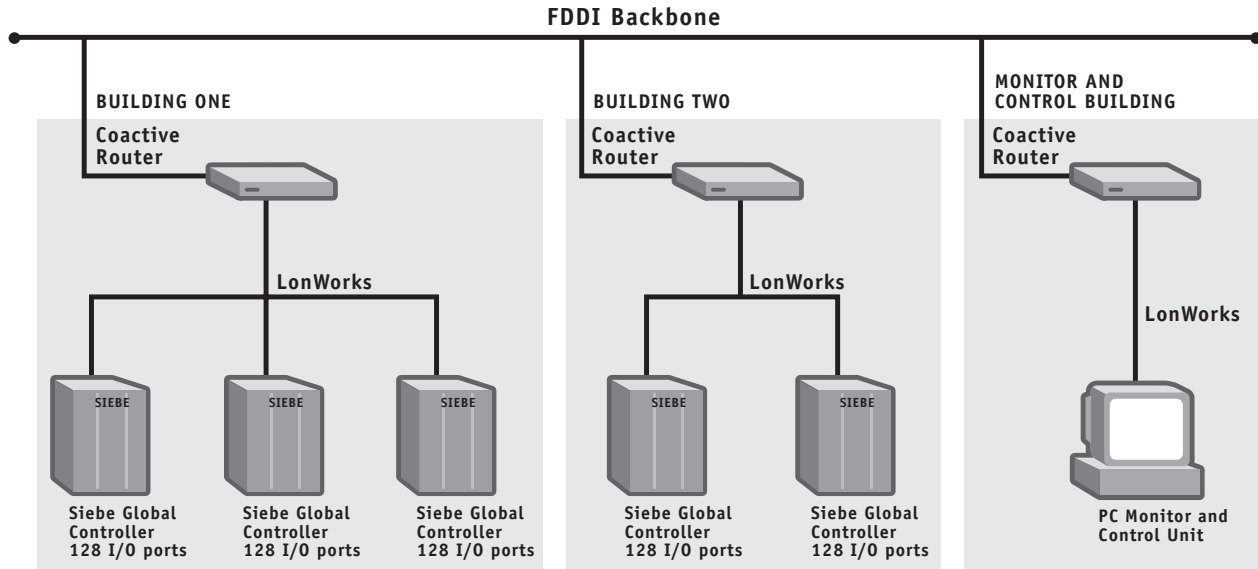
Genentech turned to Coactive Networks, the market leader in providing open solutions for connecting LonWorks to enterprise networks and the Internet.

#### The Solution

Genentech installed Coactive Routers between the LonTalk network, which included both legacy Siebe Global Controllers and new units, and the existing Ethernet LAN. The systems management PC interfaced to Ethernet via a Coactive Router. This solution provided communications capabilities between the existing control networks, the PC monitoring station, and any new control networks or monitoring stations that are added in the future. Coactive's Router products, as part of Coactive's IOConnect Architecture, provide a reliable, embedded, distributed solution to integrating next-generation networking technologies on both the control and data networking sides of the system.

Genentech's system allows management to monitor and control environmental conditions and processes performance from a centralized location. It also allows the company to integrate legacy and new equipment into a unified, fully visible, campus-wide network, resulting in improved performance, efficiency and cost savings.

## GENENTECH



### About Coactive's IOConnect Architecture

The Coactive IOConnect Architecture addresses the convergence of control and enterprise networks with an open, embedded, distributed, and scalable solution based on a coherent approach towards the connectivity problem. The IOConnect Architecture supports a variety of control standards including LonWorks, the leading control network technology, and has been specifically designed to support and leverage Internet Protocol (IP) standards and technologies. This approach provides unmatched flexibility, reduces system costs, and enables new functionalities. The technical benefits offered by Coactive's IOConnect Architecture include:

- Leveraging existing LAN wiring and IP infrastructures in control systems;
- Increasing the return on investment made in the data networking infrastructure;
- Allowing the physical and logical segmenting of large control systems;
- Reducing the total cost of ownership of control and automation systems; and
- Enabling a new class of applications via seamless web and database access to control information.

### About Genentech

Genentech is a leading biotechnology company that uses human genetic information to develop, manufacture and market pharmaceuticals to address significant unmet medical needs. The company has headquarters in South San Francisco and is traded on the NYSE. More information on Genentech can be found on the World Wide Web at <http://www.gene.com>

### About Coactive Networks

Coactive Networks is a leading provider of open solutions for connecting control systems to enterprise networks and the Internet. The company offers a full line of routers, servers, and gateways for creating powerful next-generation applications, and is the market leader in providing connectivity solutions for LonWorks, the leading control network. Coactive is a privately held corporation based in Sausalito, CA. Detailed information on Coactive products, news announcements, seminars, training and support is available on the World Wide Web at <http://www.coactive.com>.