

FutureFLEX ABF Lets Research Center Satisfy High-Tech Guests' Demands for Optimum Bandwidth and Flexibility

The Intermountain Network and Scientific Computation Center (INSCC) at the University of Utah in Salt Lake City serves as a temporary home to research groups requiring high-performance computing and networking needs. Here, collaborative and interdisciplinary research is conducted in such diverse fields as physics, meteorology, chemical engineering, mathematics and more.

Accommodating the research teams' needs demanded a flexible, cost-effective solution for delivering fiber to modular workstations. With a conventional networking scenario, INSCC would have to spend an inordinate amount of time and money terminating and reconnecting fiber to comply with each set of guests' data requirements and cubicle configurations.

Using FutureFLEX ABF, an innovative fiber-to-the-desktop solution was devised. With a floor plan consisting of multiple cubicle configurations containing four to six workspaces, the goal was to deliver up to 18 fibers to each cubicle configuration in order to give guests "plug-and-play" access to their specific data requirements. A zone network topology was selected as the most efficient means to achieve this goal on each of three floors of the four-story INSCC building. The system design allows for blowing up to 36 fibers to each cubicle configuration, and also allows reconfiguration of the network at will by supplying singlemode, multimode, 62.5- or 50-micron fiber, as the user requests.

Access from the INSCC to the main university network is provided via an underground ABF infrastructure. This portion of the University of Utah's ABF infrastructure has two of the longest FutureFLEX runs in the system at 5,900 feet.