

ARCHIBUS Success Story

Creating a Self-Help Telecommunications Application at Carnegie Mellon University

Carnegie Mellon University was founded in 1900 in Pittsburgh by industrialist and philanthropist Andrew Carnegie, who wrote the time-honored words, "My heart is in the work," when he donated the funds to create Carnegie Technical Schools. Today, Carnegie Mellon is recognized as a pioneer in the use of computing in education. Its Andrew computing network, named for benefactors Andrew Carnegie and Andrew Mellon, is among the most advanced on any campus. To support the school's growing computing demands, the university's Computer Aided Facilities Management (CAFM) staff developed a Web-based, self-help telecommunications application using ARCHIBUS.

Taking Inventory

Kevin Ford, CAFM Administrator at Carnegie Mellon, was instrumental in getting this self-service application off the ground. "Our goal was to update and replace Rich Text drawings for all campus buildings so that users could view updated CAD drawings themselves—whether they need the information for maintenance, networking, scheduling, or business reasons," says Ford. He and his team began the project by surveying



approximately 4,200 faceplates within the dormitory, fraternity, and sorority buildings across campus. Since Carnegie Mellon is a wireless university—a feature that lets students work from virtually anywhere on campus—the team was able to capture data while they toured the campus, speeding up the survey process. "We brought around two laptops loaded with ARCHIBUS and configured the data and drawings right in the field," says Ford. "Jack information was immediately entered into the ARCHIBUS database, saving us an enormous amount of time. We completed entire floors in just a few hours."

Developing Standards

Another goal of the project was to develop telecommunication standards. Some existing standards were quite long, cluttering the university's CAD drawings. Ford developed a new color-coded system to use on these floor plans, using hatch marks to signify voice and data combinations. The team also shortened many of the unwieldy codes into standard symbols.

A Vast Improvement

The university's Telecom Division of Computing Services department uses the ARCHIBUS Telecommunications & Cable Management and ARCHIBUS Overlay for AutoCAD® with Design Management applications to graphically document telecommunications faceplate and jack information on updated AutoCAD drawings. This information is also uploaded to ARCHIBUS for data

reporting, and is made accessible to the university community via the ARCHIBUS Web Central access solution. The CAFM project staff provides training and technical support to university personnel to streamline and automate this process.

As a result, users can now go to Carnegie Mellon’s Property and Accounting Web page to view updated drawings in an industry-standard format—a vast improvement over the previous manual way of locating telecommunications networks. Drawings are published in DWF format and posted to the Web, where users can click on faceplate symbols to review the data related to their job or work area. For example, business managers who control telecom usage for a department can access jack information for their offices via the Web. Building and floor views appear neat and clean without excess information crowding the drawings.

Faceplates by Room

Floors For Building 025
Records 1 - 3 of 3

1 Drawing
2 Drawing
3 Drawing

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ARCHIBUS/FM

407 SC-1-ABUS - Please right click for drawing options.

025-02533-003-002
133
025-1-129-001
025-1-127-001
025-1-127-002
127
129
025-1-125-001
125
025-1-125-002

Room Details for 025-1-127

Room Standard	Division Code	C50000
Room Category	310	Department Code 540600
Room Type	Room Area	62.00
Room Use	521	Employee Headcount 0

Faceplates for 025-1-127

“The system helps staff relate their existing AutoCAD skills to the ARCHIBUS applications,” says Ford. Easy-to-understand icons for performing save, submit, data edit, and zoom functions encourage users to maintain their own data. Users can also extend their viewing capabilities by zooming in on a room with Volo™View and reviewing the symbols and details of the room’s telecom equipment. AutoCAD Design Center is used to maintain the telecom drawings, while FM Web Central is used to publish these drawings to an easily accessible Web environment. The Property and Accounting department is also using ARCHIBUS to document all campus building space as it begins to phase out existing legacy systems.

Next Steps

Ford is currently developing customized methods for the university’s Environmental Health & Safety Department to update Hazardous Materials locations using an Access® interface that links directly into ARCHIBUS. He is also leading a migration initiative from Sybase to Oracle to ensure that all the university’s technologies communicate via a common database. In addition, he is working with the school’s housing department, which will eventually extend access to certain telecommunications details to students.

According to Ford, intuitive tools were key to making this conversion project a success. “I just give people simple tools to manage their own data,” he says. “If I can make life easier for them, I’m their best friend.”