



GoAnywhere Director Case Study



GO ANYWHERE™
automated data movement for the enterprise

Industry: Education/Scientific Research

Company: University of Cincinnati

University of Cincinnati takes GoAnywhere™ Director to the Extreme

A Managed File Transfer solution, such as GoAnywhere™ Director, is typically not a check-list item for weather gathering expeditions, but it's what Andrew Rettig and Dr. Richard Beck took on their trip to Barrow, Alaska.

A New Approach

Weather data gathering in the remote areas of Alaska is traditionally a manual process with stations monitored from nearby towns or airports. Real-time weather stations are limited by either the length of wire connecting them to a console or the feasible travel distance for regular readings. The goal of the University of Cincinnati project was to construct and monitor remote, unmanned weather gathering sites in near real-time, using standard equipment – thousands of miles away.

Planning for this experiment began in 2000 with a grant from the National Science Foundation for developing a robust standards-based, automated science data system. The physical testing and construction began in 2007, before moving the equipment to Barrow Alaska in the spring of 2009.

The standards based approach led Dr. Beck and his research team to find “off-the-shelf” solutions that would not only withstand the weather in northern Alaska, but also complete the task of sending that data back for analysis at the University. Linoma Software’s



Daily Snapshot:

Files Processed: 5,616

File Types: SQL, XML, Excel

Total Transfers: 144

Reporting Frequency:
10 minutes

MFT Solution:
GoAnywhere Director

GoAnywhere Director was the secure managed file transfer solution selected to translate the data feeds from the servers at the Barrow Alaska Research Center (BARC) to the University.

Determining the data collection methodology and how to use the data were the easy parts. The team decided to connect the digital weather stations and cameras to 700MHz WipLL (wireless broadband) radio transmitters and capture the information on servers at the BARC. The analysis would

determine a baseline and any new climate patterns for an area not regularly monitored with that level of detail. The issue was how to compile all that information together and securely transmit it back to the University. Rettig found GoAnywhere through an Internet search and called on Linoma Software to help solve their file management challenges.

Powerful Simplicity

“The powerful simplicity of GoAnywhere is what influenced my decision,” says Rettig. “It had a straightforward user interface, provided many options for secure FTP and ultimately provided the XML parsing features we needed to work with our SQL databases.”

GoAnywhere was the link used to retrieve and translate the required data, before sending it from the BARC back to the University. The transmissions included the meteorological readings from 14 weather stations and the still images taken by the monitoring cameras. The GoAnywhere software provided all the time-stamp requirements and had the ability to restart a transmission if there was a “hiccup” in the connection, which is a common problem for Internet traffic in remote locations, especially over high latency satellite links.

The project, “to use standard equipment and thereby reducing costs for scientific data collection in remote locations was a complete success,” affirms Dr. Beck. “We plan to use the same architecture and GoAnywhere elsewhere for future projects. The only issue we have to fight now is not with the software or hardware, but with expensive government contractors trying to get their hands on this grant money when we already have a proven, cost-effective, working system.”

About Andrew Rettig

Andrew is a Graduate Student in the Department of Geography at the University of Cincinnati. His thesis work includes developing and implementing a prototype for standardizing sensor networks for scalability and extensibility. To accomplish these goals, Rettig is using an approach pioneered by NASA – integrating established technologies to create cyber-information networks. Rettig’s experience with GIS data integration and other Business Intelligence applications, compliments his current internship with the Cincinnati GIS for their WebGIS implementation projects.

About Dr. Richard Beck

Dr. Beck is an Assistant Research Professor in the Geography Department at the University of Cincinnati. His research is focused on developing tools based on Geographic Information Science applied to physical geography. These tools include integrated space-based wireless networks, information architectures for monitoring climate



“The powerful simplicity of GoAnywhere is what influenced my decision. It had a straightforward user interface, provided many options for secure FTP and ultimately provided the XML parsing features we needed to work with our SQL databases.”

Andrew Rettig

change, regional satellite image networks, automated ground truth systems and GPS-aware Internet browsers. Applications of these tools include hyperspectral remote sensing, geologic carbon sequestration and Arctic climate change studies. Among many accomplishments using technology to achieve scientific goals at lower costs, like the Barrow Alaska project, Dr. Beck helped locate hide-outs in Afghanistan using rock and geographical formation data from satellites. Dr. Beck recently worked with NASA to develop wireless capabilities for robotic and human geological data gathering on the Martian landscape.



About Linoma Software

Founded in 1994, Linoma Software provides innovative technologies – consistently meeting evolving data transmission, translation, compression, and encryption needs. Linoma Software has a diverse install base of over 3,000 customers around the world including corporations, non-profit organizations and government entities. With its dedication to research, development and superior customer service, Linoma Software is recognized as a leader in software development.

Customer Support

The success of Linoma Software is largely due to our customer-centric approach to the markets we serve. Providing the highest level of customer support is our number one priority. We are able to efficiently respond to any issues or questions through phone, email and live online assistance.

Contact Us

Linoma Software
1409 Silver Street
Ashland, Nebraska 68003
402.944.4242
800.949.4696
www.linomasoftware.com
email: sales@linomasoftware.com