Located in the heart of historic Louisiana, the Ascension Parish GIS Department had to overcome old, substandard wiring to make the most of their extensive geographical information system database. WideBand Professional Series equipment helped them to map out a solution for faster, error-free transmissions.

### Ascension Parish GIS Department

#### Situation

Ascension Parish in Louisiana is located in the heart of plantation country. With a population of 73,500 and growing, Ascension Parish covers approximately 300 square miles that span the Mississippi River. It is home to quaint towns surrounded by sprawling sugar cane fields and beautiful cypress swamplands.

Divided by the Mississippi River, Ascension Parish's two major geographical components have very different demographic and economic profiles. These differences are mirrored in the parishes eastern and western "capitals" -- Gonzales and Donaldsonville.

Gonzales, located on the eastern bank of the Mississippi River, emerged as a regional governmental center and economic hub in the late twentieth century. It is the largest municipality in the parish with a population of approximately 8,700. Rich in history and tradition, diverse in its ethnic background, Gonzales also holds the distinction of the title of "Jambalaya Capital of the World."

#### Opportunity

Located in Gonzales within the Ascension Parish Government is the Geographic Information System (GIS) Department. The GIS department serves the parish government, parish residents and the public.

Using Global Positioning System (GPS) data collected from satellites and other geographic information, the GIS department has developed the most accurate base maps of the parish. The GIS database stores information in the form of data layers that can be included or excluded as needed. This allows the GIS department greater flexibility when they analyze data or create detailed customized maps. Determining which data layers to include depends on the applications. For example, some parish government departments use the maps for projects such as maintaining roads, bridges and ditches.

Within a GIS database, detailed information about each map feature including data such as land parcel owner information, utility information, road or bridge data and other relevant information are stored. All attributes within those databases can be accessed, analyzed or illustrated through GIS.

According to Ascension Parish GIS Technology Manager Randy Osborne, pertinent information can be accessed by a click of a mouse. "If you click on a bridge on the map that is linked to the data base, it will contain maintenance information," Osborne
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said, "In the future, the links will have photos of the sites. The more accurate your data is, the more useful it becomes."

Understanding the power of accurate data, the GIS department has also made the detailed information available to the community by providing free digital map data over the Internet.

Because the Ascension Parish GIS Department continually expands their database to produce dynamic maps in a variety of formats, the extensive files began to have a significant draw back - the transfer time was extremely "painful." In addition, Gonzales' historic environment was working against the GIS department. "We are locked into old buildings where we can't change the wiring," noted Osborne. "I wanted network equipment that could overcome the old, sub-standard wiring."

WideBand Solution

In the fall of 2002, Osborne found the equipment he was looking for when he attended COMDEX in Las Vegas, NV. As he toured the exhibition, he happened upon the WideBand booth where he met representatives from WideBand Corporation.

WideBand is a pioneer in developing Gigabit Ethernet products that run over standard Category 5 wiring. The WideBand Professional Series is designed to deliver error-free transmissions over substandard wiring. The impressive capabilities of the Professional Series equipment were demonstrated at COMDEX by streaming video over a "network" consisting of Category 5, Category 3 pierced by a nail and even barbed wire.

The error-free transmission of the demo impressed Osborne. He saw equipment that would help him overcome his problem of inferior wiring without the expense of rewiring. He immediately purchased a WideBand Professional Series 16-port Gigabit Managed Switch and NICs.

As people discover the benefits of detailed and dynamic mapping, the demands on the GIS department continue to grow and so does their database. Osborne and his team continue to upgrade network equipment to keep up with those demands.

Since their first experience with WideBand Professional Series equipment, Ascension Parish has purchased an additional 16-port Gigabit Switch and NICs. Because WideBand Professional Series equipment is standard-based, it easily integrates with the existing equipment in the Ascension Parish network making life a little easier for a very busy Osborne.

"The equipment works flawlessly – even over old, substandard wiring. Every-thing we plug in gets a big blue light – which means gigabit speed. We see that blue light and smile."

– Randy Osborne, GIS Technology Manager

Results

When he got back to Louisiana, he installed the WideBand Professional Series equipment into the GIS department network. The results were all that Osborne could ask for: "The equipment works flawlessly – even over old, substandard wiring. Every-thing we plug in gets a big blue light – which means gigabit speed. We see that blue light and smile."

WideBand Corporation is the leading manufacturer of Gigabit Ethernet products that work over existing cables. The WideBand Professional Series are manufactured in the United States to strict standards of quality assurance. More information on WideBand Corporation and its products is available at wband.com.