ASP Solution Improves
Patient Care in Rural Texas

East Texas contains some of the most rural sections of the United States, and some of the oldest phone systems, too. It is also the region where East Texas Radiology Consultants provides 24 x 7 emergency service to three and sometimes more hospitals, covering more than several thousand square miles. For years, Dr. Harold Smitson and his associates have used standard teleradiology to cover this territory. Over the past 6 months, the old communication infrastructure has been replaced with the Internet, using BRIT's ASP offering called the eRadFiles. The new system provides improved reliability and speed, allowing the technologists to send more images and leave sooner, while the radiologists provide better readings, faster. "The system provides improved patient care while reducing costs", says Dr. Smitson.

*Dr. Harold Smitson of
East Texas Radiology Consultants*

The basic components of the system are film digitizers and viewers at each hospital, a server in Dallas and additional viewers at the radiologists' homes; all interconnected via the Internet. By using T-1 lines installed with money from the Texas Infrastructure Fund at the hospitals, and cable modems at radiologists' homes, faster, more reliable connections were provided to all sites. Using the Internet, each site can take advantage of the technology available to it at the time and then upgrade, as newer technology becomes available.

"Using modems," says Dr. Smitson, "we were limited in what the technologist could send us. With noisy phone lines, the connection could drop and would need to be restarted. Often times, the technologists would have to stay at the hospital an hour while the transmission completed and the radiologist determined if more images needed to be sent. The technologist also had to know where the radiologist was located, where we were that day, or who was covering that night. Now, we just have them send everything to a central server, and once the transmission starts, we know it will complete, so they can go home. By having BRIT Systems run the server for us, there is no additional support required by us. The patient receives a higher level of care faster, and the department manager has lower costs. The ability to use the Internet in East Texas has dramatically improved my ability to serve this area."

The state of Texas Infrastructure Fund has paid for the implementation of T-1 line access from the rural hospitals into their parent hospital, The East Texas Medical Center. Once at the central hospitals, the exams are routed onto the Internet via BRIT's server in Dallas. By using such existing connections, teleradiology can quickly and reliably be implemented, with very little on-going expenses, such as the long distance charges that used to be incurred. Such connections were installed from hospitals in Fairfield, Athens, and Grand Saline, TX, to The East Texas Medical Center in Tyler, TX. Now, Dr. Smitson and Dr. Clark, Dr. Smitson's associate, can consult and cover each other during the day. At night, both doctors can take advantage of their cable modems at home to provide fast emergency coverage.

Hospitals with existing Internet connections can quickly be added to this system. "A hospital that we normally don't support in rural Texas lost their radiologist and needed support until a new doctor could be recruited to the area. In the meantime, I added that hospital to my circuit and within a few days, installed an old digitizer at that site and used their Internet connection to send exams into my system. I could also cover other locations from there by pulling exams. If we had to wait until a telephone circuit could be installed to provide this support, the hospital would have been suffering for weeks. " Michele Fisher, President of BRIT Systems, adds that "often times when we ask for new circuits in this part of Texas, we are told that there aren't any more."

Security is always a concern when using the Internet, and security can be a complicated issue for administrators. Now that HIPAA has established security guidelines, the administrators are more at ease with taking advantage of the Internet. And in rural Texas, this allows The East Texas Radiology Consultants to improve patient care.

For more information contact BRIT Systems at 800/230-PACS or visit www.brit.com.

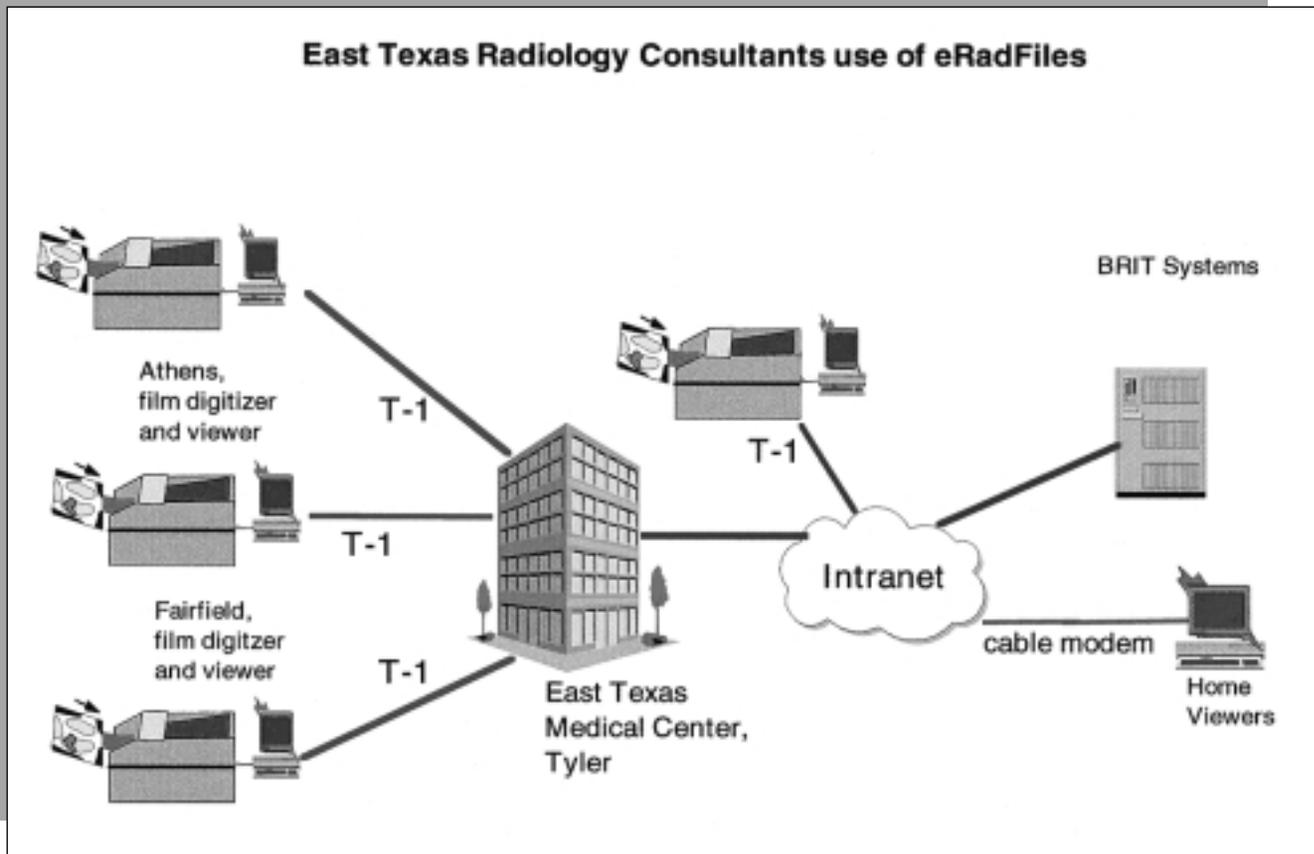### East Texas Radiology Consultants use of eRadFiles

*Diagram shows the flow of information from East Texas Radiology
Consultants to and from BRIT Systems and their clients.*