Background
Founded in 1915, Geisinger Health System (Danville, PA) is a physician-led, integrated health care system dedicated to patient care, education, research, and community service that spans 40 counties in central and northeastern Pennsylvania and serves approximately two million people. Geisinger is comprised of three regional medical centers, a 650-member group practice, a not-for-profit health insurance company and the Center for Health Research. The organization’s vision is rooted in founder Abigail Geisinger’s goal to bring quality healthcare to the residents of Pennsylvania and is summarized in the slogan “Heal, Teach, Discover, Serve.” Geisinger is committed to educating the next generation of caregivers and to providing lifelong learning to its approximately 11,000 employees. To meet the collaboration needs of its employees, Geisinger uses Novell GroupWise. Seventeen GroupWise POs provide the organization with a reliable and secure email system, which is crucial for entities belonging to the highly regulated healthcare industry.

Mission-Critical Role of GroupWise at Geisinger
Geisinger has been GroupWise since the early 1990s. At the beginning, no electronic retention policies were initially designed or implemented. GroupWise was partially responsible, since the system was very reliable in handling the organization’s growing message store in stride. As GroupWise use continued to grow, the risks of system failure and data corruption increased. Regularly scheduled maintenance became a challenge since the databases were so large that the process would take as long as two days, depriving the email system of its high availability.

The Challenges of Regulatory Compliance
In 2006, the situation changed dramatically as Geisinger’s Legal Services department expressed concern with the growing email system and the combined facts of increasing email usage and insufficient comprehensive coordinated and formal policies on electronic records retention and retrieval. HIPAA regulations and guidelines were a reality that had to be addressed. The greatest challenge for any healthcare system today is safeguarding patient information and protecting confidential records across the information system, in which email plays a mission-critical role. To meet the compliance requirements of the healthcare industry from a messaging perspective, an updated email retention system addressing the needs for electronic legal discovery and content management had to be put in place.
The Document Management Retention policy that applied to paper records at Geisinger needed to be implemented within the email system and for other electronically stored documents. Other issues and challenges that had to be addressed to keep up-to-date with current legislation and industry regulations were ediscovery and content management, as well as internal audits. As discussions on these matters evolved, it became apparent that Geisinger needed an enterprise-wide archiving and eDiscovery system.

**Looking for an Integrated Solution**

As Geisinger began looking at possible email archiving solutions, its first approach was to use internal systems already in place. A few months’ research of possible scenarios showed that an internally developed system was not going to meet all archiving requirements. Besides a storage solution, the organization needed capabilities for legal discovery and content management of electronic records to ensure that Geisinger would protect its obligations in cases of litigation without incurring the prohibitive costs of legal discovery.

Geisinger spent about a year evaluating different systems for email retention and intelligent storage that would enhance the technology, compliance, and business needs of the organization. Considerable time was spent reviewing the hardware backend. The total archiving and storage solution they chose was Messaging Architects’ M+Archive integration with Assureon from Nexsan Technologies. Geisinger selected the Assureon system for its ability to handle small message files more efficiently than traditional systems. An additional benefit was M+Archive’s full integration with it. Finally, Geisinger needed archiving software that could flexibly address the needs of different individuals and departments based on different roles and message types. The M+Archive-Assureon solution featured this granularity.

**Solution Architecture & System Components**

- 6 M+Archive servers running version 3
- 2 Assureon Systems - each with a processing node with the software installed and pre-configured
- Nexsan SataBeast with 14 TB of RAID Storage

**Cost and Business Benefits**

The new email retention policy will soon be operational at Geisinger: email will be retained following the organization’s electronic document management retention policy. Two years of email messages will be stored on the live GroupWise system, after which they will be migrated and retained for another five years within the M+Archive system to meet a total seven-year retention period. Exceptions to these guidelines will be applied based on individual roles, departments, legal hold, or message types.

With its soon-to-be deployed Email Retention and eDiscovery solution, Geisinger will accomplish the following results:

- Stable enterprise-wide archive solution
- Improved legal discovery & regulatory compliance
- Content management & policy enforcement
- Increased security & privacy of personal information by encrypting information within the archive
- Business continuance in case of disaster
- Eliminated risk of lost records
- Fast search and retrieval of archived records
- Improve email system performance and availability
- Optimized storage utilization
- Faster backups for decreased system downtime

Following the M+Archive roll-out, the Geisinger GroupWise system will be offloaded of 13+ years of messages, allowing the organization to regain its expensive SAN storage and resulting in a healthier, leaner, and more efficient GroupWise system.