

# NATIONAL ELECTORAL INSTITUTE OF MEXICO



Mexican National Electoral Institute safely preserves monitored content from more than 2,300 TV and radio channels with 150 reliable and stable XenData Archive Systems

"INE faced an unprecedented challenge, because around the world, there was no such large project where all political campaigns on each TV and radio station in the country were monitored. With this project INE is at the world's forefront." – Rene Miranda Jaimes, General Manager of the IT Services Division at INE

CIO, May 2009

The National Electoral Institute of Mexico (INE) must ensure that all political parties are given fair and equal time and representation from the hundreds of television and radio stations broadcasting throughout Mexico. Consequently, INE needed to monitor and record all of the country's television channels.

After an intensive vetting process, INE chose leading integrators, Excelencia en Comunicaciones y Tecnología and Grupo Tecno to design and deliver a completely self-contained solution based on Volicon and XenData systems for remote monitoring and archiving across 150 facilities.

XenData LTO Archives use a straight forward NAS architecture to provide INE with stable and reliable systems that prevent data alteration. They easily integrate with third-party monitoring software to reduce the inherent complexity of a country-wide system where most sites operate in an unattended mode.



# THE CHALLENGE

## Monitoring and archiving all broadcasting stations in Mexico

There was no similar project that involved monitoring all broadcasting in such a large country with a large number of geographically dispersed TV stations. All participants had to join forces to implement a country-wide system where different technologies were successfully integrated in 150 unattended sites. In addition, the system had to be installed and operational in time for Mexico's elections held on July 5, 2009.

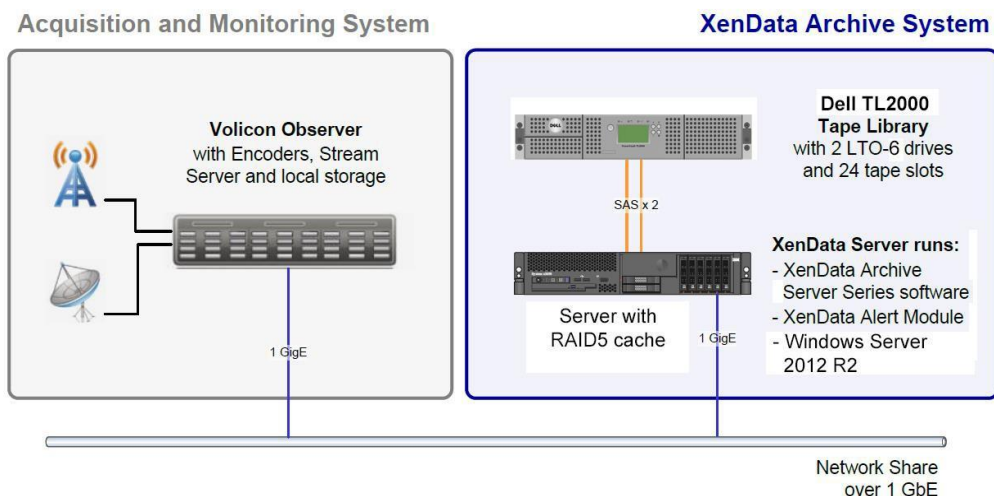
Monitored content from 24 hour broadcasting from more than 2,300 TV and radio channels had to be archived. There was a requirement to be able to instantly access content archived over the prior year. Also, older content had to be retained.

To accomplish its mission, INE must guarantee the integrity of the archived material while maintaining high availability of the content.



# THE SOLUTION

## 150 LTO Archive Systems with a straightforward NAS architecture



The following components were installed at each of the 150 new facilities:

- **Volicon Observer** for content acquisition and monitoring.
- **XenData Archive Series** software for archiving all monitored video to RAID and LTO-6 cartridges. The XenData software runs on a Windows Server 2012 R2 server and manages a Dell PowerVault TL2000 tape library. Volicon Observer archives encoded content to the XenData Archive using a standard Windows network protocol (CIFS).
- **Custom software was developed by Excelencia.** When inconsistent content is detected, it is logged by the Volicon Observer system, which is then assessed by an Excelencia software program. This compares time of playout of the logged content with the designated playout times, generating specialized reports for INE that highlight and identifies programs at variance with the expected material.



## THE RESULT

INE chose a dependable partner and benefited from the reliability, data-protection and simplicity of XenData LTO Archives

Working with XenData, INE has:

**Monitored content immediately available** – Prior to the new system, INE used VHS tapes for monitoring and identifying inconsistent content, a manually intensive and costly process. With the new system, driven by XenData’s archiving software, content is available immediately.

**High data protection and availability** – XenData Server software implements comprehensive file version control. Deleted files and old file versions may be easily restored from LTO.

**Reliable and stable system** – Given many of INE’s facilities are located in remote parts of Mexico, each of the 150 facilities was required to operate in an unattended mode. XenData digital video archive software ensures continuous archiving operations, even in case of any problem with the robotic LTO library; and it will automatically recover after the problem is resolved. This means the solution is

resilient to any problem with the LTO cartridges or robotic library hardware, ranging from running out of LTO tapes to a complete library failure.

**Straightforward integration that simplified implementation** - The major suppliers and integration team were fully committed to delivering the country-wide system which was delivered on time and within budget. It was critically important to be able to deliver high quality archiving capabilities quickly and flawlessly, in a short period of time. Given XenData digital archiving software is built on IT standards, XenData software installation could deliver seamless integration with high compatibility and scalability for the INE project.



## THE FUTURE

Philosophy: take advantage of new functionality but maintain the system architecture

The XenData LTO archives have been successfully working as part of the INE monitoring system for six years. During 2016, the LTO hardware was upgraded to LTO-6, the server hardware was renewed and the operating system was upgraded to Windows Server 2012 R2. The simple architecture has proven itself. XenData has continuously maintained and improved the capabilities of its software. This allows users like INE to take advantage of the improvements with evolutionary upgrades.



"Excelencia was pleased to collaborate with XenData. We only had a few months to design and implement this country-wide system, so it was vital for us to work with partners that we could trust and were capable of delivering

the required components on such a large scale, both quickly and cost-effectively. XenData enabled us to do exactly this." - Jorge Castaneda, President at Excelencia



Instituto Nacional Electoral  
<https://www.ine.mx/>



XenData  
<https://xendata.com/>