Solution Summary

At A Glance
Organizations:
- Korean Broadcasting System (KBS)
  Website: [www.kbs.co.kr](http://www.kbs.co.kr)
- Malgn Technology Co. Ltd.
  Website: [www.malgn.com](http://www.malgn.com)

Location:
- South Korea

Industry:
- Broadcast

Project Overview:
Malgn Technology created a mobile archiving/converting center for KBS who brought the action of Pope Francis’s visit to millions of Koreans online and on television.

The PROMISE Solution
- PROMISE VTrak A-Class shared SAN appliance and VTrak x10 RAID subsystems

Benefits
- VTrak A-Class was very easy and fast to set up and configure - saved Malgn and KBS valuable time
- The solution delivered reliable and consistent performance
- VTrak A-Class paired perfectly with Keyflow Media Asset Management solution
- VTrak solutions were integral to creating a mobile archiving/converting center that will be replicated for major events in the future

Pope Francis’s Landmark Visit to South Korea
In August, 2014, Pope Francis made his first visit to Asia, which was also the first papal visit to South Korea in 25 years. South Korea has a growing Catholic population who were eager to follow the Pope throughout his five day visit. The major events that highlighted the Pope’s trip to South Korea included helping celebrate the 6th Asia Youth Day, holding Mass for peace and reconciliation, meeting with South Korean president Park Geun-hye and much more.

Making it possible for South Koreans to follow this historic trip online and on television was Korean Broadcasting System (KBS), the national broadcaster of South Korea and one of the country’s biggest television networks who were responsible for operating the broadcasts. In order to broadcast all of the non-stop action throughout the event, KBS partnered with Malgn Technology, one of the country’s most experienced companies in building SAN-based shared storage systems for media production.

The mission for KBS and Malgn Technology was to successfully create and run a mobile archiving/converting center which would be deployed in the conference room at the Lotte Hotel in the heart of the action in Seoul.
Malgn Technology took the lead on setting up the solution on-site at the Lotte Hotel which included storage systems from PROMISE Technology, a global leader in the storage industry who develops high-performance solutions optimized for the media and entertainment market. PROMISE’s solutions include the VTrak A-Class, a shared SAN storage appliance for rich media workflows that brings resounding broadcast success to the world’s most creative organizations, and VTrak RAID subsystems which are the only fibre channel storage products qualified by Apple for use on OS X and Xsan.

VTrak x10 RAID subsystems were used in this project for ingest and editing and a VTrak A-Class was used for archiving and real time converting - including streaming online.

Set Up at Lotte Hotel
Malgn Technology and KBS chose PROMISE because the Korean broadcaster had been using VTrak subsystems since 2010 and currently has more than 60 units installed at their headquarters. With KBS familiar and very satisfied with VTrak after years of service, it was the natural choice for this hugely important project. VTrak had proven to be reliable and high performing and even served as the backbone for KBS’s broadcast of major events throughout the years, including the G20 Summit in 2010 and the Nuclear Security Summit in 2012.

Originally, KBS had considered only using Xsan with the VTrak x10, but based on Malgn Technology’s recommendation, they changed to VTrak A-Class since the event was so important they could not risk any failure. They needed A-Class since clients can mount on both the Xsan and A-Class, so even if Xsan failed they still would be able to access the content.

Malgn Technology had initially planned to have the whole project installed and running in two days, however, thanks to the A-Class’s ease of installation, they were able to complete the set up and configuration of all of their gear in just six hours.
“VTrak A-Class was really a lot simpler to install, set up and configure than we had ever imagined and that made the rest of work so much easier,” said Mr. Joon Seon, General Manager, Digital Media Team, Malgn Technology. “Within a very short time we were up and running with no problems at all. It was the perfect solution for the mobile archiving/converting center we designed.”

**How It’s Done**

Footage captured of the Pope’s journey through South Korea was ingested and edited on VTrak x10 with Xsan and then archived on A-Class. For off moments when the Pope was unavailable, KBS would play a highlights clip that would showcase the key moments of his visit. The highlights clips were also provided to foreign media who could purchase the content for international broadcasts and news programs.

The actual footage that was broadcasted was from the VTrak A-Class in full HD 1080p. A key piece to the project was Malgn Technology’s Media Asset Management (MAM) solution – Keyflow. Keyflow transcoded the high-resolution content from the A-Class in real-time to H.264 for internet streaming, which allowed KBS to reach a much wider audience since the tech savvy people of South Korea could watch the events on their phones. This was hugely important since one of the major events of the visit was a parade which took the Pope through Seoul on the way to the president’s house. Over 1,000,000 people lined the streets for the event, many watching the parade move through the city to their location thanks to the broadcasts on their phone from the service provided by KBS.

Additionally, since all data in the A-Class was unstructured video, Keyflow enabled the team to know where the files were for foreign broadcasters who would go through the MAM solution to easily find what they needed since the solution completely tracked all of the content.

**VTrak Benefits**

VTrak RAID subsystems and A-Class played a massive role in enabling Malgn Technology
and KBS to create a mobile archiving/converting center as it performed impeccably throughout the event. Plus, VTrak paired perfectly with Keyflow which opened the door to KBS to realize new revenue streams.

“It was wonderful to combine our Keyflow MAM solution with VTrak A-Class as it provided another resource that helped make our customer’s business more efficient and allowed them to more easily sell their content to international media,” said Mr. Steve Shim, Vice President, Malign Technology. “The mobile archiving/converting center proved to be a huge success. It was really exciting to help create this solution for our customer which opens the possibilities for many new business opportunities.”

The VTrak solution, in particular the A-Class, proved to be very easy and fast to set up. Plus, A-Class was significantly simpler to configure compared to Xsan which saved Malign Technology a massive amount of time. This extra time allowed Malign Technology to focus on the specifics of the complicated project instead of wrestling with getting the hardware set up at the hotel.

A-Class was not only easy to set up and configure, but it proved to deliver outstanding performance throughout the event which enabled KBS to stream footage online and to television viewers. The performance left Malign Technology and KBS very satisfied with how the storage solution delivered for such a massive event.

Big Plans for the Future
The story of the mobile archiving/converting center does not end here! The center that Malign Technology designed for KBS with VTrak proved to be such a success that it is already being replicated for major events such as the International Telecommunication Union conference, the event held by the United Nations specialized agency for information and communication technologies in Busan, South Korea. Plus, with numerous huge events coming up in South Korea, including the 2018 Winter Olympics, KBS plans to continue to use this ‘best practice’ moving forward. That means the next time a major event is brought to you online or on television in South Korea, you can be assured that VTrak was there working hard in the background to bring you all of the excitement!