For this large scale international project, NTT Communications has provide us with outstanding efficiencies both in the project delivery and the infrastructure scalability. NTT Communications solution provide an infrastructure as a service, flexible and cloud-based that could support the views of thousands of people to the website results.

Miquel Comas Martí, Director of Systems Engineering, Scytl

Background

Scytl is the global leader in secure election management and electronic voting solutions. Specializing in election modernization technologies, Scytl offers the first end-to-end election management and voting platform, providing the highest security and transparency standards currently available. Scytl has capitalized on its more than 18 years of research to develop election-specific cryptographic security technology protected by more than 40 international patents and patent applications, positioning Scytl as the company with the largest patent portfolio of the industry. Scytl’s solutions have been successfully used in over 35 countries across the globe over the last 10 years, including Canada, the United States, Mexico, Peru, France, Norway, Switzerland, Bosnia-Herzegovina, the UAE, India, Iceland and Australia among others.

Objectives

Scytl was the company in charge of implementing the Election Night Reporting system during the 2014 European Parliament Elections held from May 22nd to May 25th. The aim was to publish the 2014 European Parliamentary Election results from 28 countries of the European Union in 24 languages in real-time. With over 4.7 million visits on May 26th alone, collecting results from over 150 million Europeans eligible to vote, across the 28 member states, 751 electoral seats managed and more than 275 global media outlets leveraging the data and election results widget, this has proven the largest multinational electoral event of its kind.

Challenges

For this large scale international project, it was essential to prove outstanding efficiencies both in the project delivery and the infrastructure scalability. The Results Website for the European Elections 2014 needed to be hosted in a secure data center environment. The server system that run the national and regional electronic online voting applications for Scytl’s customers around the globe needs to be highly secure and redundancy mechanisms are required to ensure its availability.

Solution

To implement the Election Night Reporting solution for the European Parliament Elections, Scytl trusted NTT Communications to provide an infrastructure as a service, flexible and cloud-based solution that could support the views of thousands of people to the website results offering a 100% availability for which has become one of the biggest and unprecedented electoral processes.
The result of the close collaboration between both companies means that NTT Communications is currently working on the development of future projects with similar characteristics, such as a project for the Ministry of National Education of France.

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The Results Website application was deployed in the data center in Barcelona and acceleration technologies and dynamic caching (Content Delivery Network solution from NTT Communications) were deployed in order to optimize the webpage performance and improve the response time applications. Disaster Recovery infrastructure, which allowed the efficient replication of the main infrastructure were set up to be used in case of a potential failure of the Barcelona data center.

The NTT Communications cloud capability allows these projects to be implemented in different locations in the world for temporary periods, thanks to having a flexible delivery model and at the same time are highly secure and adaptable to high critical projects.

**Benefit**

One of the main benefits from the collaboration between NTT Communications and Scytl in this project was the fact that Scytl’s solution infrastructure and virtual machines were supervised and monitored 24/7 by NTT Communications during the full election process and beyond. Following the agreed upon support and monitoring requirements, NTT Communications’ monitoring service provided the highest standards of support, enabling procedures in case of any potential issue, with immediate notification frameworks in case of actions being required for further resolution.

With an election of this scale, it was of key strategic importance and added value for Scytl to work with NTT Communications who ensured the network bandwidth at all times, even with high peaks of connections during the election. As Scytl works with governments worldwide, each of which require different administrative levels for global data centers, it is easy for Scytl to host its virtual machines using NTT services as they work in global and international environments. Along these lines, NTT provided clouds/data centers that allowed for the required high levels of capacity and scalability.