



## “De Warmste Week”

**Challenge:** “De Warmste Week”, a charity event from the **VRT / Studio Brussel** and the **King Baudouin Foundation**, required infrastructure with the capacity to absorb exponential **increases in users** registering for and participating in a week-long **national charity event**.

**Solution:** **ClouDar** designed a solution that would **scale** in line with the use of the application – going from a **traditional MSP platform** to complete migration to **AWS**, with **test environments, continuous integration and monitoring**.

**Result:** The solution allowed the **VRT** to make maximum use of the **scalability, utility billing and technological innovation** of **AWS**, ensuring **high-availability and optimum performance** across the board both during the week-long charity campaign and during the preceding sign up period at a **significant cost saving** over the previous solution.

### Customer Profile

The **Vlaamse Radio- en Televisieomroeporganisatie** (Flemish Radio and Television Broadcasting Organization), or **VRT**, is the national public-service broadcaster for the Flemish Region and Community of Belgium.

Studio Brussel is a radio brand from the **VRT**, they organise in conjunction with the support of King Baudouin Foundation an annual event called “**De Warmste Week**” (The Warmest Week).

- ◆ This event takes place during the week before Christmas, load begins to grow on the application from when registration begins and peaks during the week itself.
- ◆ During the event presenters from the radio station present from various outdoor locations across Belgium.
- ◆ Listeners could request songs by donating money to charity via the website while also promoting a charity of their choice.

### AWS Services :

- Amazon EC2
- AWS Elastic Beanstalk
- AWS Cloudformation
- AWS Identity and Access Management
- AWS Certificate Manager
- Amazon Cloudfront
- Amazon EC2 Auto Scaling
- Amazon S3
- Amazon EC2 Elastic Load Balancer
- Amazon VPC
- Amazon Cloudwatch
- AWS Cloudtrail

### AWS Technical partners :

- Cloudcheckr©
- Cloudbees©
- Site24x7©
- GitHub©

### ClouDar Services :

- Managed Service offering
- DevOps Consultancy

**“Through their knowledge and dedication, ClouDar helped us migrate our on-premise infrastructure into the AWS Cloud faster than initially hoped”**

### Guy Lemmens

Head of Operations and QA  
VRT

**ClouDar bvba**  
Business Park King Square  
Veldkant 33A  
2550 Kontich  
+32 (0)3 450 80 30

www.clouDar.be  
info@clouDar.be  
IBAN BE84 3631 4004  
0859  
BIC BBRUBEBB  
BTW BE0564.763.890



## The Challenge

The **VRT** had a need for Infrastructure to run the applications for "De Warmste Week".

Infrastructure was required that could support this annual project at an **acceptable cost**, while **ensuring high-availability** due to the public nature and political importance of the project.

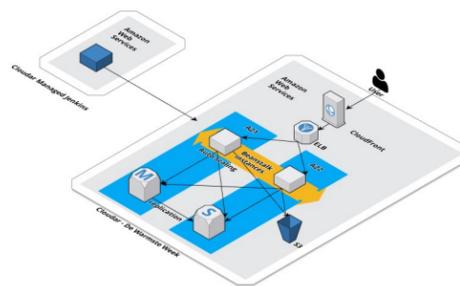
As the event occurs annually the infrastructure should be provisioned in a **reproducible manner** that can be **scaled down** when the charity campaign is not active.

The solution needs to be **continuously monitored** and allow for the development team to **deploy at any time**, without intervention or assistance from an operations team.

Having already chosen **AWS**, the **VRT** required a partner that was familiar with **AWS best practices** and **DevOps** methodologies to design an infrastructure capable of running their application.

## The Solution

The solution designed by **Cloudar** for "De Warmste Week" was developed with **High-Availability** and **cost** in mind, maximising the use of Amazon managed services where possible:



- ◆ **AWS Elastic Beanstalk** managed **Amazon EC2 Auto Scaling Group**, spread across 2 **Availability Zones** for **scalability** and **maximum fault tolerance**.
- ◆ **Amazon ELB** is used to balance traffic across the instances.
- ◆ **Amazon RDS** Backend, spread across **multiple availability zones** for high-availability.
- ◆ **Amazon S3** object storage for static files.
- ◆ **Amazon Cloudfront** for edge caching, to reduce overall load on the system by caching where appropriate.
- ◆ **AWS Cloudtrail** to monitor the IAM actions taking place on the account.

We also made use of a number of AWS technical partner solutions:

- ◆ **Cloudcheckr**® was used to ensure the setup complied with **AWS best practises** and to ensure ongoing compliance once the solution was in production.
- ◆ This infrastructure was managed using **AWS Cloudformation**, both code and infrastructure were deployed on **AWS** using **Jenkins Pipelines** making use of **CloudBees**® **Jenkins plugins**. The code was stored privately on the **GitHub** platform.
- ◆ **Site24x7**® was used in conjunction with **AWS Cloudwatch** to ensure **optimal performance** across all environments.

## The Result

- ◆ The use of automation allowed for repeatable deployments of both infrastructure and code, which encouraged fast iterations in both the development and operations aspects of the project.
- ◆ Infrastructure as code provided us with a nice opportunity to create re-useable AWS CloudFormation templates, that can be used by both our DevOps Consultants and Managed Service teams.
- ◆ The use of managed services from AWS decreased the amount of heavy lifting required for the project to be completed, and allowed the customer to take advantage of the cost savings associated with infrastructure with utility billing.
- ◆ Thanks to the use of Elastic infrastructure components, the solution was able to scale to meet demand where needed during the week long national charity campaign.

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