



Client Case Study : Healthline - MNT

Healthline Media is currently the biggest portfolio holder of health information websites. On a mission to be the most trusted ally to users in the pursuit of health and well being, Healthline has three different brands that cater to different user groups:

1. Healthline.com, the company's primary website where users can find generic health-related information
2. MedicalNewsToday.com which is a more fact and science-based website that provides users with the latest medical and health news
3. Greatist.com, an in vogue and informal website designed to target a slightly younger segment of the audience.

In 2016, Healthline Media bolstered its digital health reach to over 61 Million by acquiring MedicalNewsToday.com and sister website MediLexicon.

healthline

Company: Healthline Media

Industry: Healthcare Media

Mission: To be the most trusted ally to users in the pursuit of health and well being

<https://www.healthline.com/>

<https://www.medicalnewstoday.com/>

<https://greatist.com>

healthline



Shifting from Linode to AWS

In order to streamline and simplify the process of managing the cloud infrastructure for multiple websites, Healthline’s plan was to consolidate all their cloud infrastructure belonging to different websites under a single umbrella - Amazon Web Services (AWS).

Pierre Grandin, the Lead Infrastructure Engineer at Healthline, shared that since the technical stack that MedicalNewsToday.com was running on was not something built by Healthline’s team, the company’s primary objective was to make the necessary changes to ensure that the stack fitted their approach from an infrastructure standpoint.

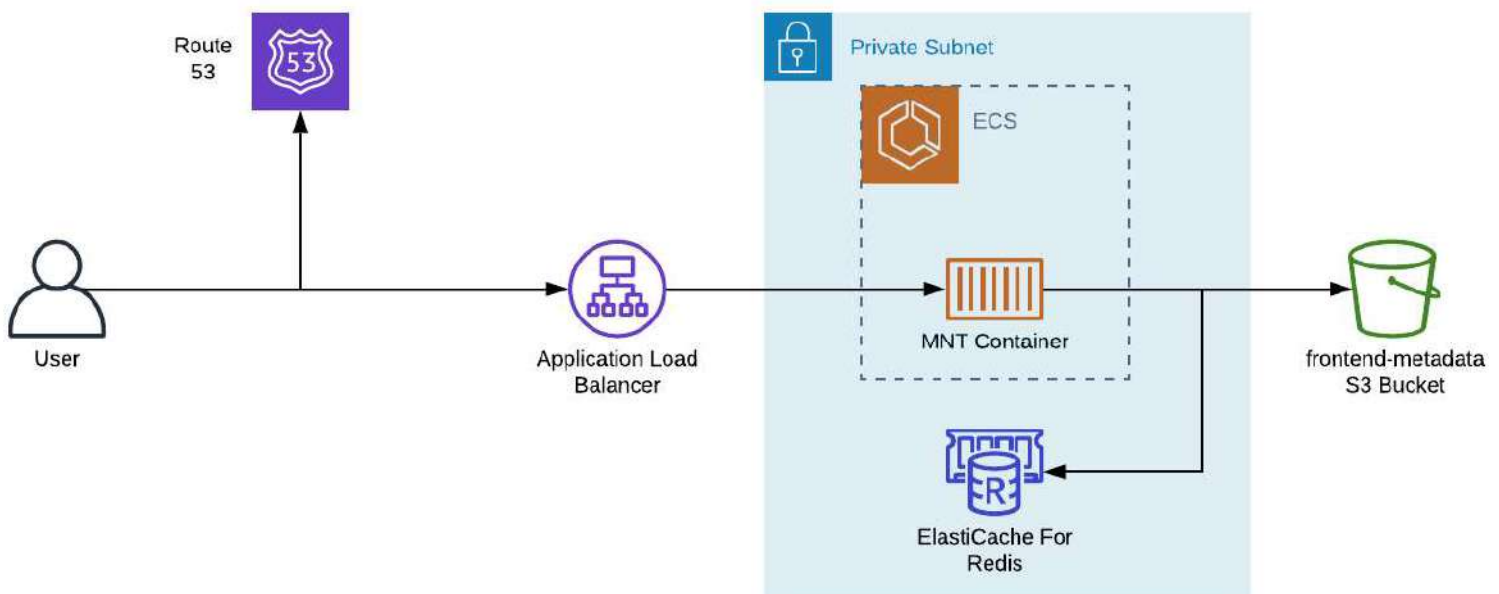
The challenge involved shifting Medical News Today’s infrastructure from Linode to AWS without compromising user experience.

Healthline was also looking to change MedicalNewsToday’s content distribution network (CDN). KeyCDN, the website’s previous CDN was proving to be expensive. As a result, the company decided to opt for Amazon CloudFront which better suited their evolving needs.

“We take the issue of response time very seriously. We have to. Because the response times in various regions are paramount to maintaining our Google ranks. So we absolutely had to make sure that this shift happens seamlessly and that we are getting performance at least equivalent to what we had with KeyCDN.”

Pierre Grandin

Having recognized TrackIt’s expertise in AWS and specifically DevOps, Pierre and his team sought TrackIt’s help to make the transition. The project involved shifting infrastructure from Linode to AWS, containerizing software, and upgrading the caching system.



Caching Layer with ElastiCache

Healthline and TrackIt encountered challenges with the caching architecture while working on the containerization. The previous caching layer that MedicalNewsToday.com had was pulling objects from the Content Management System (CMS), transforming them, and then storing them on each web server's local hard disk drives. Data was loaded into local cache memory but it was essentially running on individual and isolated bare-metal servers. Despite performing adequately, scalability was limited.

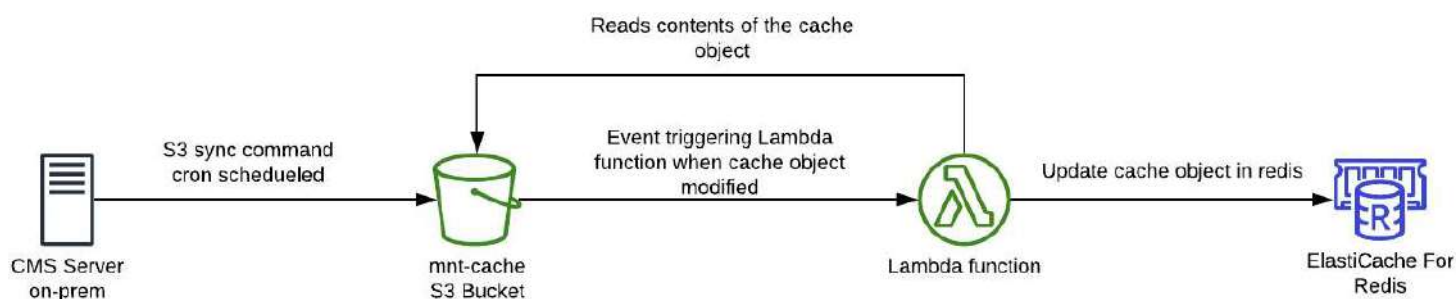
“The challenge was that each and every web-server had to load these objects' memory. So performance was good, but scalability was bad. So instead we decided to switch to a Redis-based approach.”

Pierre Grandin

The new caching approach takes advantage of Amazon ElastiCache - an AWS version of Redis - and allows the Healthline team to push web page content to an S3 bucket. The push action seamlessly triggers a lambda function that first transforms the data and then stores the result in Redis, making the data readily accessible by all containers.

“What's important to note is that all the steps in the caching process happen seamlessly. All we need to do now is to trigger the export from the CMS and the result is that all the assets are in Redis and accessible directly by the containers. No need to synchronize anymore! Whenever my team starts a new container, we don't need to worry about the caching layer, it's already there. Whereas before, when we were running on bare-metal, we had to put a cache of all of the assets locally, load it into memory, and make sure that it was kept in sync. The new caching layer with Amazon ElastiCache is definitely making the platform more elastic. If we need to scale out, we just need to add containers and we don't need to worry about the caching layer.”

Pierre Grandin



Scalability, Automation, and Cost Savings

Pierre mentions three big wins from this project:

1. The caching layer that helps them scale faster. Leveraging Amazon ElastiCache has helped Healthline in creating a more performant platform that's easy to maintain.

2. The containerization that allows Healthline to facilitate the implementation of infrastructure as code. Healthline is now able to deploy their infrastructure via Terraform whereas they had to use bare-metal servers before.

3. The cost savings from:

a. The containerization which allows for more efficient use of resources and a reduction in maintenance costs.

b. The switch from KeyCDN to Amazon CloudFront.

AWS Related Expertise: "A Game-Changer"

When asked about his experience with TrackIt, Pierre shared that he was "very impressed with Ludovic Francois' relationship with AWS." Pierre further elaborated that Ludovic's "knowledge of how things work at AWS" often proves to be a game-changer in projects.

I'm really impressed by how well-connected [Ludovic Francois] is with people at AWS. And whenever we face an AWS-related problem, Ludo and his team can solve it. And I think that's a game-changer.

Pierre Grandin,
Lead Infrastructure Engineer,
Healthline Media

Why TrackIt

What are 3 characteristics of TrackIt's team that stood out to you?

"First is the TrackIt team's AWS-related expertise, this one's a "no brainer".

Secondly, they are very available. Whenever we have a question, we get a response very quickly from them, which is nice. The third thing which I've really appreciated about their work is the fact that they don't give up. They figure things out."

Pierre Grandin



Client's Challenge(s):

- Shifting Infrastructure from Linode and KeyCDN to AWS
- Bare-metal Caching System that hindered scalability
- Expensive CDN

Solution:

Containerization and Automation of Infrastructure
Caching Layer: Amazon ElastiCache
Amazon CloudFront

Results:

- Successful Shift from Linode and KeyCDN to AWS
- Containerization and Automation
- Enhanced Scalability with New Caching Layer
- Cost Savings From Automation and Switching to a New CDN (Amazon CloudFront)

