

CASE STUDY

HAVANA VIP

ClickIT
SMART TECHNOLOGIES

Havana VIP Tours, Travel & Events is a well known website for travel booking to Havana, Cuba.



Who is havanaVIPtours.com?

Havana VIP Tours, Travel & Events is a well known website for travel booking to Havana, Cuba. It has a big amount of customers, primarily from North America, but also, from Europe and South America.

ClickIT Smart Technologies helped them to significantly improve their overall operative processes. Nowadays, havanaVIPtours.com is a highly optimized and secure site. It is able to manage a big amount of user requests with excellent performance levels and with a very low attack rate, due to its first security level.

To achieve them, our solution process was based on core principles:

- Make infrastructure easy to manage.
- Improve user experience on website.
- Clean change management process.
- Continuous feedback from customer.
- Implement cost effective cloud solutions.
- Capacity for scaling up resources as needed.
- Capacity for recovering from disaster.



Requirements

1. Improve performance on server and website by:
 - 1.1 Creating an operating environment on AWS Cloud as new hosting service.
 - 1.2 Implementing a LEMP stack for cloud infrastructure instead of a LAMP stack.
 - 1.3 Applying ClickIT's performance model and Google PageSpeed recommendations on server and WordPress.
2. Add security on server and website by applying ClickIT's hardening model along with security best practices for cloud environments.
3. Make cloud environment capable for disaster recovery by implementing AWS snapshots and storing them on S3.

Technologies



AMAZON EC2



WORDPRESS



Autoptimize



The Process:

1 Implement the AWS Cloud as the new hosting site.

AWS certainly is the top provider of cloud services in the market since it counts with a widespread service portfolio. Among its services, we can find Elastic Auto Scaling which gave us the possibility of integrating Laravel Forge services. Also S3 and RDS result very useful for storing static content and managing database, correspondingly. That's why we proposed AWS services as the new hosting solution to Havana VIP Tours.

- I. Optimize PHP and Nginx metrics for supporting big loads.
- II. Add Gzip compression on Nginx.
- III. Tables optimization on MySQL in order to simplify the overall query process.
- IV. Configure caching for headers.
- V. Optimize images at server level.
- VI. Optimize images at WordPress level using an Autooptimize plugin.
- VII. Cancel all unnecessary services.

2 Implement a LEMP stack for cloud infrastructure

Implement a LEMP stack for cloud infrastructure

3 Apply ClickIT's performance model and Google PageSpeed recommendations on server and WordPress

Since we have a big experience on providing high performance to our customers, we developed a well proofed checklist - with the best practices on the market - to ensure our clients they're achieving specific goals.

Furthermore, we opt for following recommendations provided by Pagespeed, in order to make their website compliant with best internet standards.

We implemented this set of optimization practices for cloud infrastructure and website:

4 Add security on server and website by applying ClickIT's hardening model along with security best practices for cloud environments.

For security we implemented the next items:

- I. Secure SSH access
- II. Secure those ports vulnerable to attacks
- III. Secure root access.
- IV. Configure permissions according to top security levels.
- V. Install firewalls, antivirus and malware removal tools.
- VI. Configure AWS Security Groups according to user permissions and needs.

5 Implement AWS snapshots for disaster recovery.

AWS snapshots are copies of the server conditions at a determined moment. These copies can be stored either on the server itself or on AWS S3, and it can be restored in case the server crashes down. By making snapshots, we ensure to always have the most actual version of server features in case of emergency. For this site, we scheduled snapshots per week and granted a time of retention no major than one week

Info Extra

- To increase the cloud infrastructure capacities (CPU, RAM, disk) for attending high levels of demand.
- Create a new cloud environment for the website. Implement the best services stack for the new cloud infrastructure.
- To apply best performance/security practices on their cloud infrastructure and WordPress to comply with worldwide standards.
- Implement Google PageSpeed best practices for optimizing website.
- Have an effective disaster recovery approach for cloud infrastructure using periodic backups.



The results

Havana VIP Tours, Travel & Events is undeniably experiencing fast growth with their new cloud environment. They relied on ClickIT and now they have the best practices implemented on havanaVIP-tours.com. Here are some of the changes their site gained:

- I. Google PageSpeed scores raised from **60%** to **100%** either on mobile and desktop
- II. Website load time decreased **3** seconds, which is reflected in the boost of customers' visits.
- III. Page size decreased **8 MB**, which contributed a lot to improve the overall site's load time.
- IV. Website's requests for resources and services decreased in **35%**

About us:

ClickIT is a leading interactive development agency that implements “open source” tools and Cloud solutions to deliver high-value web and mobile application development for Startups and SMB business. We are Based in Saltillo, Mexico that implements AWS managed services, DevOps, and high-quality development to transform your online business. Our continuous expertise makes companies be successful following our rapid development, agile processes and superior solutions.



Security

Hardening and malware removal. Ask for a security assessment, ethical hacking and penetration testing.



Development

Web and Mobile Development for Ecommerce sites, Startups, Mobile and SaaS Applications.



Migrations

Migrate your application to the Cloud, or move your site to the hosting that suits you best.



DevOps

Continuous integration and Accelerate you Development productivity whit IT automation.



Optimization

Accelerate your application and CMS using caching layers, CDN technologies and tuning your LEMP services.



Cloud Computing


Integrate your online business to the cloud today. Get the benefits that cloud computing can give you.


Our Partners:





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