



## Kalidea CE sets up a load balancer in front of its virtualized servers to achieve 100% availability

At the recommendation of Adista, its hosting service provider, Kalidea CE, the number one service provider for works committees and employees, optimized the availability and application performance of its architecture with an Exceiance ALOHA load balancer. Objective: online stores available 99.99% of the time, especially during peak end-of-year periods.

Partnership with :



### Project at a glance

**Customer :**

Kalidea CE

**Vertical Industry :**

Services for works committees and employees

**Location :**

Boulogne-Billancourt, France

**Customer needs :**

- Guarantee, for the 4 million employees that receive Kalidea CE's services, 99.99% availability of works committees' online stores
- Absorb load spikes on its websites during peak periods, without resorting to temporary infrastructure modifications
- Have a reliable, scalable and easy to administer load balancing tool

**Solution :**

ALOHA Load Balancer Rack Duo

### Comprehensive solutions for works committees, serving 4 million beneficiaries

Since its founding in 2000, Kalidea CE (previously known as Canal CE) has offered solutions to facilitate the role of works committees' members and promote their actions among employees. Kalidea CE currently supports 5,000 works committees with 50 to 35,000 members and has more than 4 million beneficiaries.

Its offer includes specific management tools – management of cultural and social activities (CSA) and works committee accounting – as well as websites to share information with employees and online sales platforms for their negotiated price offers. Kalidea CE has gradually expanded its services to any business that wants to provide its employees, or its sales network, with access to the largest marketplace for culture and entertainment tickets as well as everyday purchases at discount prices (80,000 offers).

### A hosted infrastructure

Since its founding, Kalidea CE has provided its customers with remote accessible tools (now called SaaS, called ASP at the time). For works committee members' everyday tasks, the CSA and accounting management solutions are based on TSE infrastructure; their load on the servers is balanced using Microsoft Terminal Services Session Broker. *"For the management software, the load is balanced based on the number of active sessions. Activity was increasing, but there was no seasonal activity spike, so the native mode load balancer provided by Microsoft was adequate,"* states Philippe De Guis, Kalidea CE Technical Manager.

In contrast, the infrastructure of its Web portals (used by 4 million beneficiaries) needed to be completely redesigned to be able to support end-of-year activity spikes (up to 1 million visits per month from October to December to purchase Christmas gifts or sell off unused remainders). This redesign was especially needed because Kalidea CE was launching new services. In addition to the more than 900 works committee websites and marketplace platform, a social shopping website – Tribalista – went live in November 2010.

At the recommendation of Adista – Kalidea CE's long-standing hosting service provider and facilities manager – Kalidea CE chose a 3-node cluster Hyper-V virtualized architecture (increasing to 6 nodes in June 2012) hosted on 2 remote sites. Designed to be scalable, this architecture was able to be sized to end-of-year load spike needs, at the risk of being underused the rest of the time. «*The Adista teams gave us good advice,*» continues Philippe De Guis, «*and steered us towards an application load balancer.*» The ALOHA load balancer met the functional needs of the specifications, was easy to administer, reliable, scalable and offered a better price for services ratio; it was quickly selected as the load balancer for all of Kalidea CE's B2B2C websites.

### High availability and linear load increase

After several days of parameter optimization, the ALOHA Rack Duo (2 load balancers in a cluster in the same hardware box), began operating in September 2011 to balance the load between the two Adista hosting sites. Rolled out at the beginning of the year's busiest period for Kalidea CE, the entire infrastructure quickly demonstrated its effectiveness, with service availability guaranteed 99.99% of the time. «*We refined our balancing algorithms based on service level agreements (SLA) that we signed with our customers,*» states Philippe De Guis.

Additionally, since rolling out the ALOHA load balancer, the server load, which has always been linear, has never exceeded 60%. Two additional servers, which were scheduled to support the 2011 end-of-year load, were ultimately not needed. The simple and intuitive administration interface and the built-in traffic monitoring tool can anticipate the increased load on servers, in order to schedule future investments. Kalidea CE teams are extremely pleased with the increased security (protection against denial-of-service attacks) and user-friendliness for customers (session persistence) provided by the load balancing solution. They are so pleased that a new ALOHA cluster will soon join the first as soon as the marketplace is redesigned.

## Project Overview

### Summary

Kalidea CE's business is highly seasonal and experiences increased volume during the last three months of the year; Kalidea CE selected ALOHA as the load balancer for its online stores for employees that receive its services. End-of-year load spikes are now absorbed without any temporary increase in Web infrastructure and its websites have 99.99% guaranteed availability.

### Challenges

- Streamline human and technical resources, around a Hyper-V cluster architecture, managed by Kalidea CE's long-standing IT partner (RMI Informatique, Adista Group)
- Guarantee high application availability (99.99% SLA)
- Absorb load spikes during peak periods (up to 1 million visits per month from October to December)
- Have a simple and comprehensive load balancing and traffic monitoring tool

### Keys benefits

- Compliance with service level agreements
- Improved quality of customer service without adding infrastructure
- Linear load increase, to 70% maximum, on Web front-end servers
- Intelligent load balancing based on customer SLAs, thanks to the choice of multiple algorithms
- Increased application security (prevention of denial-of-service attacks)
- Anticipation of changes in server loads using the monitoring tool



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