caucho®

Nssam achieves operational reliability
by migrating from Tomcat to Resin

"After 2 years with Resin Pro in production, Nssam has achieved a 99.99% uptime and now operates with simplistic operational scalability"

"We saved 20% of our cost and are very satisfied with the performance of the Resin load balancer and the combination of reliable Resin WAS"

Nssam Technical Supervision Director – Ho-joong, Kim

Solution
Resin Pro

Industry
IT Services Law Firm

Product
Resin Professional WEB/WAS
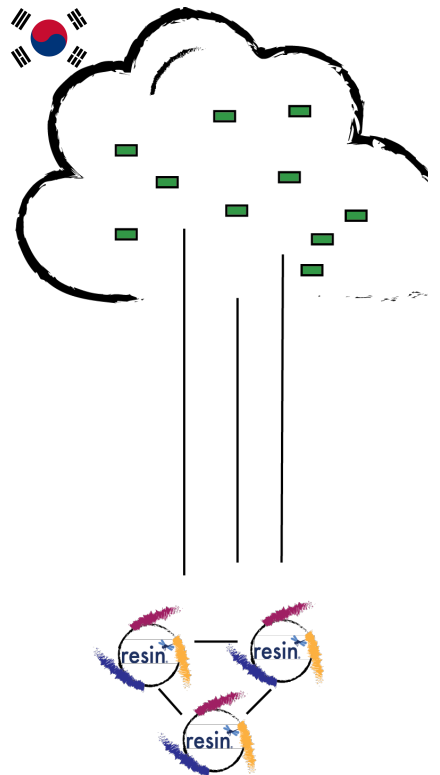
Country
South Korea

Summary

Nssam Services provides enterprise resource planning to legal firms in Korea.

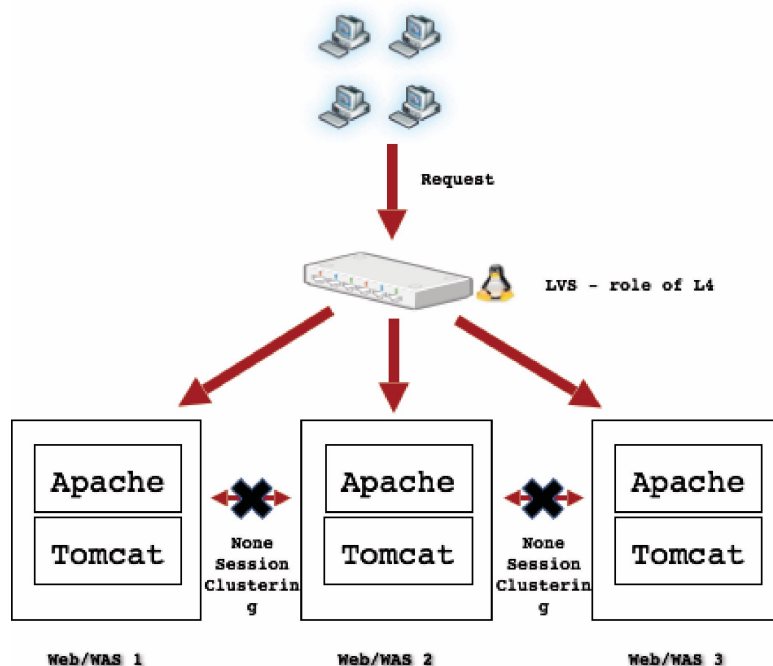Initially the software system was built with familiarity in mind:

- Linux virtual servers
- hardware load balancer
- web services running in an Apache-Tomcat container

After operating with this configuration for 4-5 years, Nssam found themselves constantly debugging their infrastructure instead of focusing on their application. When memory related performance and stability degradations began to result in multiple restarts per day, Nssam began investigating a move to Resin Pro.

Background

Many ASP(Monthly billing services) businesses opened in 2012 to serve ERP in legal firms on the web. They started with Linux Virtual Servers, an L4 switch for load-balancing in the cloud and web services running in Apache-Tomcat servlet containers.

As more and more customers continued to sign up, load increased, straining system resources to the point of multiple restarts throughout the day.

Environment
OS: Windows 2008 64bit
DBMS: Mysql

Status   (Time at 09:00-18:00)
Daily users : about 1,000
Daily request: about 200,000
Daily average TPS: 10~15

Major symptoms

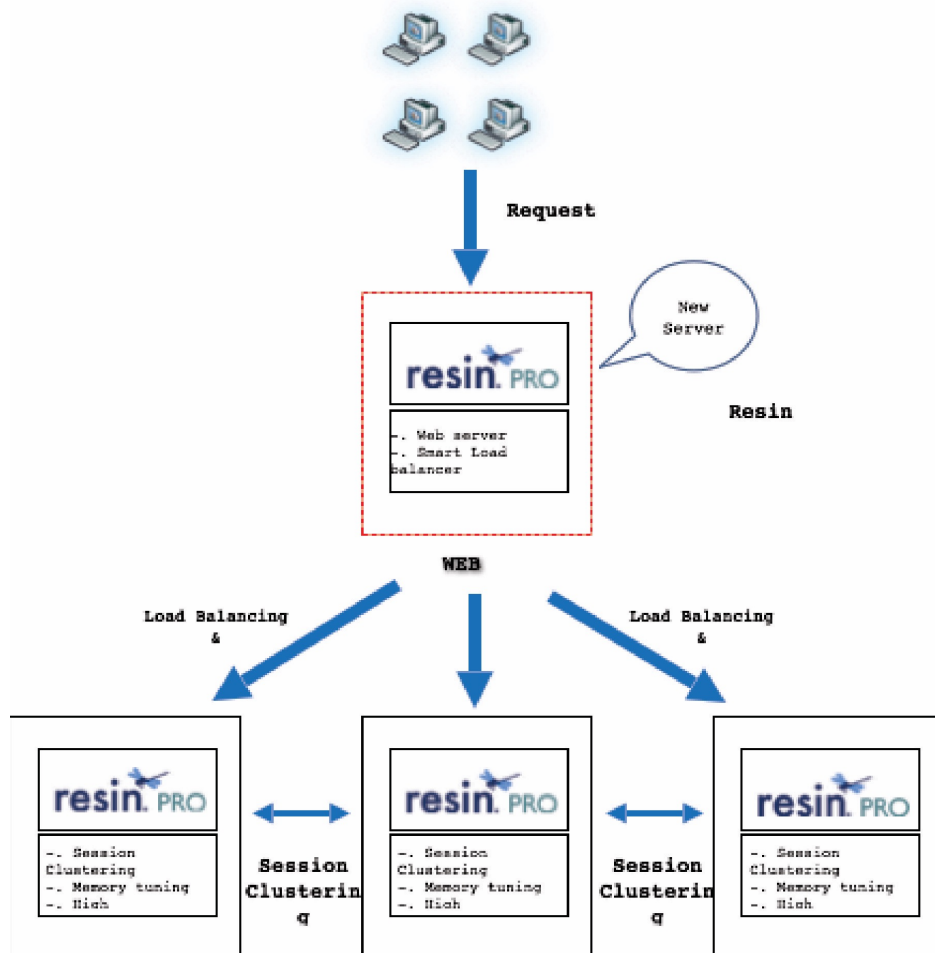Nssam experienced the following problems with Tomcat – all of which were solved by migrating to Resin:

× Intermittent slow in web services: very little operational visibility into root cause analysis
× An unknown cause of down of Apache Tomcat: averaging 2 restarts / day
× Intermittent connection not possible between LVS(Linux Virtual Server) and Apache

> Immediately after testing & deploying Resin, Nssam was able to use Resin's dynamic scaling and clustering capabilities to eliminate the downtime without major code alterations
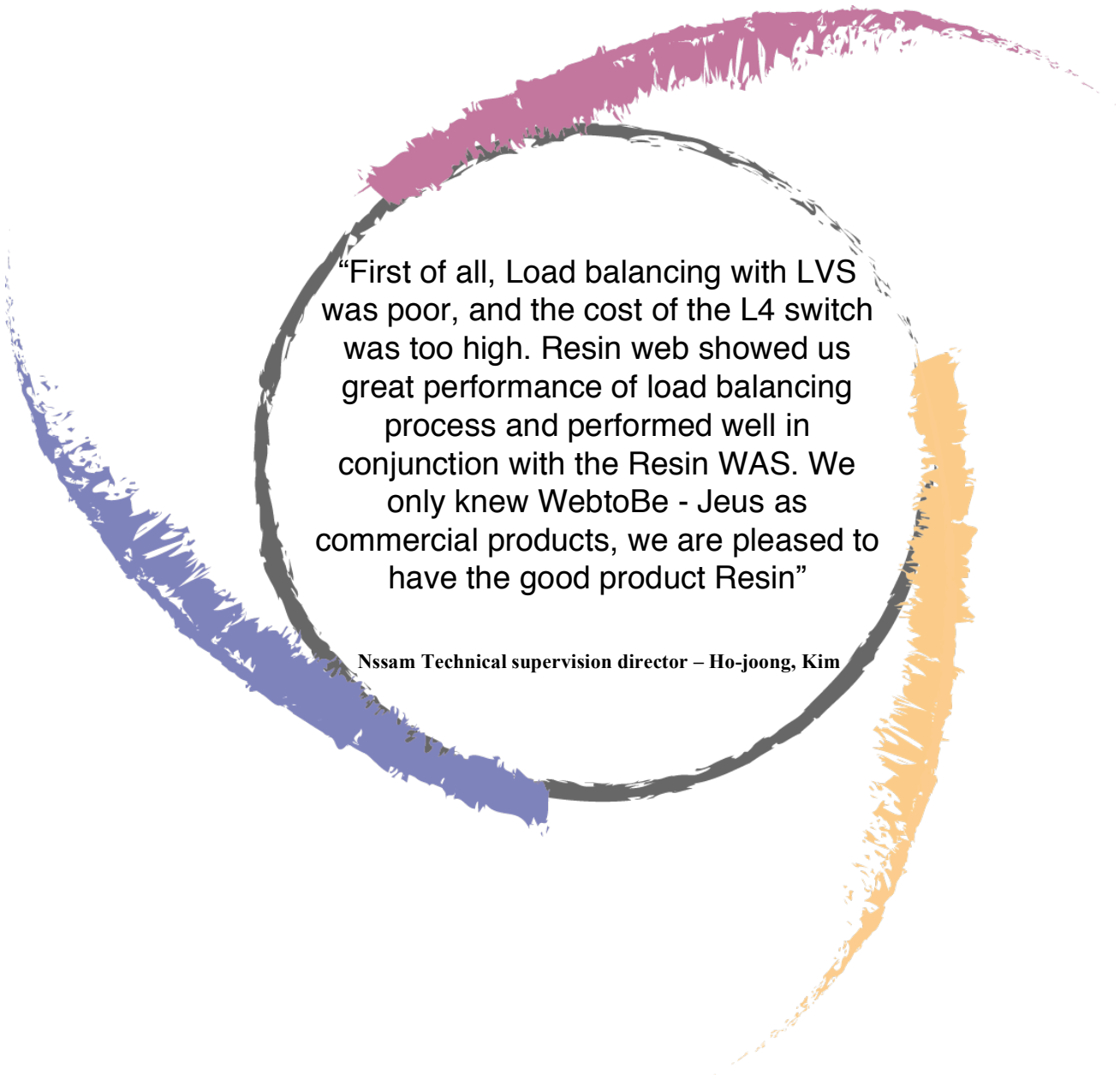
Support & Solution

Xest Information Technology conducted migration tests in January 2017 for Nssam's web applications. In order to avoid possible application code refactoring in the future, Nssam wanted to remain vendor independent as much as possible. Therefore, they tested a default Resin installation on their Linux machines.

Not only was Nssam able to consolidate software savings, but Resin's software load balancer was more efficient than the hardware they had purchased, allowing them to simplify their production a step further and consolidate costs.

Nssam purchased Resin and has been operating it in production since February 2017, with high application availability and an average cost savings of 20% over their previous infrastructure.

Resin is able to provide insight into applications without any added code configuration due to its integrated watchdog and health system. While the watchdog system tracks the Resin process to ensure the service is always available, the internal health system is able to gather snapshots, thread dumps, and provide anomaly meter detection for root cause analysis. Nssam engineers continue to use the health system to rework internal application code, maintaining fast always-available services for their clients.

"First of all, Load balancing with LVS was poor, and the cost of the L4 switch was too high. Resin web showed us great performance of load balancing process and performed well in conjunction with the Resin WAS. We only knew WebtoBe - Jeus as commercial products, we are pleased to have the good product Resin"

Nssam Technical supervision director – Ho-joong, Kim

About Caucho Technology

Millions of sites worldwide successfully use Resin as the fastest and most reliable Java EE integrated solution for web applications. For almost twenty years, Caucho Resin has become recognized for high performance, security and reliability with 99.99% uptime reported by the majority of our customers, many of them Fortune 1000 companies and governments who have mission critical performance and security requirements. Caucho was founded in 1998 and is based in San Diego, California. For more information please visit www.caucho.com.

Contact:

USA
Alexandra Garmon, Senior VP and Director of Sales (858) 456-0300 or garmon@caucho.com

Korea
Resin 서버 국내 독점공급 (Korea Exclusive Distributor)
임항순 팀장/(주)제스트정보기술
Mobile:010-3189-0110, Office:02-558-5918
ihs@xest.kr l http://www.xest.kr