



A global manufacturer's seamless cloud migration with no downtime, no disruption.

Teamwork between Singtel and Calsonic Kansei during a massive global server migration to a managed virtual private cloud was the foundation of a successful project and the continuation of a strong long-term relationship. The two dedicated teams achieved the migration of 90 global servers that needed to be accessed by 12,500 Calsonic Kansei staff, suppliers and customers at all times during the exercise, without any downtime, or noticeable interference to users.

Executive Summary

Company name

Calsonic Kansei Corporation

Industry

Manufacturer of automotive parts

Customer base

12,500 application users

Business challenges

- Migrate 90 servers for global applications without any disruption to third-party or internal users.
- Schedule short migration windows for each server over three months, one by one.
- Dual "layer 2" access to legacy and new servers to be maintained throughout the migration to avoid mission critical data loss.
- Servers to continue running vital applications throughout migration.

Singtel solution

- Singtel Managed Virtual Private Cloud (enabled by VMware)

Business value

- More secure platform with more flexibility for new project requirements.
- Storage IOPS (Input Output per second) improved by more than 40%.
- Product provides additional disk storage to handle the memory swap space.
- With this design, Calsonic Kansei can easily allocate the resource pool.
- Adding unscheduled resources is easier, faster - and possible.

Future Plans

Calsonic Kansei plans to migrate from its on-premise systems to cloud services during the renewal of its various business systems. Calsonic Kansei is expanding their global businesses and plans to work with Singtel as part of their ecosystem to support them for their Infocomm Technology needs.

Calsonic Kansei

Business Challenges

Calsonic Kansei operates a global network across the world by having its global headquarters in Japan and its management operation in the Americas, Europe, China and Asia. In addition, there are development operations in Japan, United States, Mexico, UK, France, China, Thailand and India, and 79 sites throughout the world, from which products can be supplied to all customers in an optimal manner. More than 20,000 employees of the company are striving to provide appealing products to customers with great teamwork across national boundaries.

It began the migration of its critical servers to Singapore with Singtel to protect against natural disasters such as earthquakes, and the company was also facing limitations in its old data centres. Yet it was nervous about upgrading its service given the critical nature of the global business applications on the servers.

Calsonic Kansei's IT Infrastructure Team Leader, Tatsuyuki Arai, says server availability and functionality were make-or-break factors in selecting a managed cloud service provider.

"We were looking for a very capable and reliable platform. Even on Sunday in Japan, the server needs to be up and running and able to provide support to regions when necessary."

Not only that, Calsonic Kansei wanted this new level of reliability during the migration. This meant the provider would have to provide access to both platforms at the same time while the migration was going on, a reduction in scheduled maintenance and a guarantee that there would be no down time.

Looking for a provider that could achieve multiple, critical objectives

Calsonic Kansei needed to keep providing services to its global employees and customers. At the same time, it was looking for a provider that could keep maintenance windows to a minimum.

Calsonic Kansei had more than 90 servers to migrate, which in total would take around 96 hours. Because of critical business applications, the company needed to migrate them one by one, Mr Arai says. "Some of the applications were

“ We were nervous about upgrading our service given the critical nature of the traditional old business applications on the servers, but Singtel Cloud team made it all possible for us.

Mr Tatsuyuki Arai, IT Infrastructure Team Leader,
Calsonic Kansei

running across servers, so that's why we needed to have access to both platforms," he says.

Singtel Managed Cloud's customer service mission is to put themselves in their client's shoes all the time. Calsonic Kansei is an automobile parts manufacturer which has a lot of service suppliers and migrating 90 virtual machines was a huge challenge. What would their biggest concern be? Ensuring that their customers would be able to use the platform and not know that a migration was happening in the background.

That was the goal – and that was what was achieved for Calsonic Kansei.



Proof of concept

For years, Calsonic Kansei had felt constrained because it had 12 virtual data centres in the same location but no ability to easily pool the resource. That was now possible with one managed virtual data centre (SMVPC). "Previously we had a divided virtual data centre ... it is now very easy to manage the spare resources," Mr. Arai says.

Singtel offered to do a proof of concept trial for the

migration which showed Calsonic Kansei it was possible to have uninterrupted access during the migration. It also waived one-time costs, while maintaining the same recurring charges. This opex model also suited the Calsonic Kansei.

The secret of a great migration is teamwork

Great things happen when teams begin to work well together. You can't help things like language difficulties, the "Singlish" issue for instance, but you can produce a solution when people come together.

One of the few things that stood in the way of a successful migration was, quite unexpectedly, Singaporean-accented English. "Singlish," which is often spoken in a fast, staccato fashion, was sometimes difficult for Japanese project managers at the global automotive giant to understand. Mr Arai laughs about it now, because it was a defining moment in the forging of a good relationship between the two companies.

“ Even if we might migrate five servers one Sunday and the other five the following Sunday, it's complicated because all ten servers need to be accessible to the customers at the time of migration, and the customers shouldn't know something is going on in the background. ”

Mr Tatsuyuki Arai, IT Infrastructure Team Leader, Calsonic Kansei

The weekly meetings being held between Calsonic Kansei and Singtel were critical as the face-to-face communications, while written documentation from Singtel kept everyone informed about what was happening with the migration. "Singtel always prepared a good meeting document every week, so it was easy for us to keep up with developments," Mr. Arai says. "Behind the scenes, Singtel's cloud team in Singapore and Calsonic Kansei's Japan team were having weekly conference call as well. The relationship was very strong at all level," Mr Arai says.

The migration done, Calsonic Kansei notice benefits straight away

After migrating to the upgraded SMVPC, Calsonic Kansei

immediately noticed several benefits. With tech refresh to SMVPC, storage IOPS (Input Output per second) is improved by more than 40%. Also – the game changer – pooled resource access was available, taking 12 virtual data centres down to one. Changes had become very simple to make. "It is now very easy to manage the spare resource," Mr Arai says.



The allocated memory overhead was reduced to zero. "In the new platform when we need 8GB memory we just simply send an order off to Singtel for 8GB memory," Mr Arai says. "Previously we ordered 10GB memory to consider the overhead so this simplifies our resource planning very much."

“ The allocated memory overhead was reduced to zero. ”

Mr Tatsuyuki Arai, IT Infrastructure Team Leader, Calsonic Kansei

Conclusion

SMVPC solution has proven to be a great success for Calsonic Kansei. Not only did the migration run smoothly whilst allowing dual access to the old and new systems, there has since been no downtime and the maintenance windows have been reduced. Moreover, Calsonic Kansei is very happy with the improvement in service and the ability to switch to an all opex billing model. Mr. Arai says Singtel was very responsive and communicated well on any issues. "I'm very happy with the service from Singtel," he says. "The Singtel team was very, very professional and attentive to Calsonic Kansei."

"What I liked about Singtel's service was they were able to innovate as we discussed our needs and come up with a solution that was tailored to us."

About Singtel

Singtel is Asia's leading communications and ICT solutions group, providing a portfolio of services from next-generation communication, technology services to infotainment to both consumers and businesses. For consumers, Singtel delivers a complete and integrated suite of services, including mobile, broadband and TV. For businesses, Singtel offers a complementary array of workforce mobility solutions, data hosting, cloud, network infrastructure, analytics and cyber-security capabilities. The Group has presence in Asia, Australia and Africa and reaches about 640 million mobile customers in 22 countries. Its infrastructure and technology services for businesses span 21 countries, with more than 428 direct points of presence in 360 cities.

Awards

Asia Communication Awards

Best Enterprise Service - Connectivity as a Service (2013)

Best Cloud Service (2011 & 2012)

Project of the Year - G-Cloud (2014)

Cloud & DevOps Awards 2016

Best Cloud Computing Adoption Project (G-Cloud)

Computerworld SG Readers' Choice Awards

Best Data Centre and Hosting Services Provider
(2007 & 2009 - 2013)

Best Managed Connectivity Services Provider
(2006 - 2013)

Computerworld Singapore Customer Care Award

Cloud Services (2012 - 2013)

Frost & Sullivan Asia Pacific ICT Awards

Telecom Cloud Service Provider of the Year (2012, 2016)

Frost & Sullivan Best Practices Award 2017

Singapore Managed Cloud Service Provider of the Year

IDC MarketScape in Asia Pacific 2013

A Leader for Datacenter and Hosted Cloud Services

NetworkWorld Asia Readers' Choice Product Excellence Awards (2013)

Managed Infrastructure Services
Cloud Infrastructure Provider

Telco Cloud Forum Awards 2016

Telco Cloud of the Year