

Online Game Provider Transforms Computing



IAHGames streamlines IT with Cisco Unified Computing System (UCS); reducing overheads by up to 70 percent and boosting market responsiveness

EXECUTIVE SUMMARY

Customer Name: IAHGames

Industry: Computer Gaming

Location: Singapore

Number of Employees: 100

Challenge

- Reduce operating costs and hardware sprawl
- Simplify management of game servers
- Ensure availability of hosted games

Solution

- Cisco Unified Computing System
- Cisco UCS C-Series Servers
- Cisco UCS B-Series Servers

Results

- Reduce IT manpower costs by 60 percent
- Lower power consumption and rack space costs by 60 - 70 percent
- Support current customer base without disruption
- Provide on-demand computing capacity for business expansion

Infocomm Asia Holdings (IAHGames) is a leading provider of popular online games such as EA SPORTS™ FIFA Online 2, Granado Espada, Dragonica, Grand Theft Auto IV™, and the Bioshock® series. Based in Singapore, the company relies on its data center to host games regionally for users in countries such as Brunei, Indonesia, Malaysia, Philippines, Thailand, Vietnam, Australia, and New Zealand.

Since its founding in 2005, the company has had a goal of becoming a premiere online game provider in Southeast Asia. Supporting this vision, it set up a regional online gaming hub, providing popular Massively Multi-Player Online Role-Playing Games (MMORPGs) to attract more users and grow its business.

Challenge

Previously, IAHGames' technology foundation comprised up to 300 physical servers supporting its gaming and core operations such as email, finance, and human resource functions. This massive setup proved costly and time consuming to maintain.

Whenever a new game was launched, the company needed to purchase and physically configure new servers. This was a major hurdle requiring dedicated IT personnel and consumed valuable rack space at an alarming rate. To continue delivering reliable and responsive online games to an expanding gaming community, IAHGames thus needed to upgrade its IT infrastructure. It was looking for something more robust, less maintenance intensive, and more efficient.



“I think the Cisco UCS 5108 Blade Server Chassis and B2001M1 blades are extremely reliable – one of the things I was initially worried about was the hardware. But Cisco’s hardware is well designed, and very suitable for us in this deployment. Compared to other vendors where we saw issues after only three months, Cisco UCS servers have been installed for six to nine months, and we haven’t seen a single hardware alert light blinking.”

Linus Yong, Chief Technology Officer,
IAHGames

Solution

What IAHGames needed was a virtualized infrastructure to support a private gaming cloud. With plans to grow its portfolio of games from 10 to 30 in the near future, IAHGames required an infrastructure that could dynamically scale whenever the need arose. Cisco approached IAHGames with the Cisco Unified Computing System (UCS) as a solution to consolidate the company’s sprawling infrastructure. After a thorough selection process involving competing vendors, IAHGames chose Cisco UCS to enable more flexibility into its previously rigid infrastructure—thereby unleashing the untapped capacity to support rapid gaming growth.

“Many different vendors were considered for our implementation, and Cisco has a great advantage over the others due to its non-reliance to legacy products. From our experience, other vendors required legacy hardware in order to function, and this resulted in management problems later on. Cisco however, provides a cohesive environment, with one single point of control and configuration. That is what prompted us to go to them,” says Linus Yong, Chief Technology Officer of IAHGames.

With the help from Cisco engineers, IAHGames deployed the Cisco UCS solution that incorporated virtualization from VMware and storage from EMC—together with Cisco UCS blade and rack mount servers. Three Cisco UCS 5108 Blade Server Chassis accommodating a maximum of 24 B200M1 blades provide dynamic computing capacity for new games or to support more users. Two more Cisco UCS C210 Rack Mount Servers support the company’s core applications for finance and human resources. “We managed to maximize our hardware usage through virtualization, running almost six virtual hosts from one physical machine. If we wanted to, we could even create as many as 20 virtual hosts on a single physical server. This gives us the opportunity to achieve tremendous cost savings from consolidation,” says Yong.



“We evaluated a lot of virtualization vendors for this entry into the cloud. In the industry, Cisco’s Unified Computing System is the key—it is designed from the ground up specifically for virtualization and the cloud environment, making it the best choice for our infrastructure.”

Linus Yong, Chief Technology Officer,
IAHGames



Cisco was the sole contact during the implementation, providing IAHGames with a smooth, hassle-free transition to a virtualized environment. “It was a relatively smooth migration. When our older physical servers proved difficult to virtualize, Cisco was still able to smoothly integrate these legacy equipment into our new infrastructure. The entire implementation required a month of setup, and about three months for software migration,” says Yong.

Results

Improved Cost Savings

After successfully implementing a converged infrastructure, IAHGames experienced immediate cost savings from:

- **Equipment consolidation:** With Cisco UCS, IAHGames saw a reduction of physical servers from 300 to 30. Each physical server can now run about six virtual instances, with the capability of creating a maximum of 20 virtual machines per physical server. “We definitely saw an immediate improvement in terms of cost savings. We used to have 300 physical servers with 10 IT administrators, a 1 to 30 ratio. Today we are running more than 300 virtual machines compressed into 20 to 30 physical servers – requiring only three IT administrators,” says Yong.
- **Lower overheads:** The transition from physical machines into virtual ones has helped IAHGames harness the full potential of their previously under-utilized infrastructure. The company has managed to reap an immediate 60 to 70 percent in operational savings from less rack space used and reduced power requirements.
- **Manpower efficiency:** IAHGames no longer requires dedicated IT manpower to configure servers and storage whenever user volume grows or a new game is launched. This has resulted in IT staff decreasing from 10 to 3 and manpower savings of up to 60 percent as monthly outlay for salaries fell from S\$40,000 to S\$12,000 (US\$32,000 to US\$9,700).

PRODUCT LIST

Data Center

- [Cisco Unified Computing System](#)
- [Cisco UCS C-Series Rack Mount Servers](#)
- [Cisco UCS B-Series Blade Servers](#)

Simplified Management

The UCS Manager provides a consolidated view of the platform for easier management. This has allowed IAHGames to reduce server profile setup and configuration time, resulting in faster game deployment. After the implementation, the setup time for deploying new games has been reduced from one week to three days. "With a consolidated view of our infrastructure provided by the UCS Manager, we are always aware of how much resources we have and can boost capacity to support those games that are experiencing unexpectedly large user volumes," says Yong.

Dynamic Scalability

By easily creating more virtual machines on a single physical host, IAHGames can deliver on-demand computing whenever it is faced with rising market demand. This will allow it to meet its goal of delivering 30 online gaming titles without incurring hefty infrastructure investments or requiring extensive IT support. Yong says, "In the online gaming industry, it is very difficult to predict when peak usage will occur or how much strain it will place on our systems, but the Cisco UCS System gives us the confidence to meet dynamic demands with its reliability and flexibility."

Next Steps

In the long term, IAHGames expects significant reduction in energy consumption and space requirements. To expand further, IAHGames is planning to build new game clusters in its regional offices to support more on-demand gaming, and it will be working closely with Cisco for those projects.

For More Information

For more information on Infocomm Asia Holdings Games, visit: www.iahgames.com



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