

Case Study

# Gaming Data Centre Solution

FS Helps a Game Data Centre Network Expansion with 10G-100G Bandwidth Upgrade

FS provides a three-tier data centre network to meet the needs of customer network scalability and 100G high-bandwidth upgrading while minimising business interruptions through MLAG redundant networking.



## FS Helps a Game Data Centre Network Expansion with 10G-100G Bandwidth Upgrade

### Country

 United Kingdom

### Industry

 Game

### Network Type

 Data Centres

### Solutions

 Internet Data Centre

- Build three-tier architecture, upgrade the access layer upstream to a maximum speed of 40G, and converge to the core layer using a full 100G switch dual-redundant architecture to achieve network bandwidth upgrade. Help customers achieve the best game experience.
- FS provides customised solutions and POC testing, with smart warehouses for same-day shipping, 24/7 technical support, and spare parts to ensure fast response.

## Key Stats

- By deploying 30+ FS switches in the game data centre, customers can support 500+ PC terminals to run simultaneously, realising the smooth operation of game data transmission and processing.
- Choose network equipment with higher cost performance, and conduct corresponding tests in the laboratory according to the customer's on-site network equipment to ensure that all equipment and accessories are compatible with the customer's equipment.

## Highlights

- Switches run on the unified PicOS®, which provides a consistent CLI for feature deployment.
- Switches can be managed via the AmpCon™ management platform for remote and zero-touch configuration.
- Broadcom chip-based switches provide powerful data processing capabilities, and deliver a smooth and buffer-free gaming experience.
- MLAG ensures stable and reliable network operations, keeping gaming services uninterrupted.
- Upgrading 10G to 100G networks can increase network speed and bandwidth. This can help in faster data transfer, reducing latency and improving overall performance.



### Overview

As an electronic game developer and publisher, the game development company is mainly responsible for developing and publishing computer games, and has published more than 200 games since 2003. Now this company has established a long-term cooperative relationship with FS.

The client's existing network can no longer support the current normal operation of the business, and needs to seek an upgrading network solution to achieve a more efficient and productive business with better performance, reliability, and security.

### Challenges

The current network access layer bandwidth is limited, with a maximum speed of only 10G, which cannot meet the current business needs. When the business peaks, the network will experience severe packet loss or even interruption.

With the expansion of the network scale, the connection between devices becomes complex, leading to a chaotic overall network topology. If the network is broken, troubleshooting will become extremely complex.

The customer's renovation plan has cost limitations and requires each node's equipment to reduce prices as much as possible while meeting demand. At the same time, it is hoped that the new equipment will be compatible with the HW-compatible modules and cables currently in use to ensure future compatibility.

Customers have high requirements for network security and hope to solve network failures promptly in the future to reduce the economic losses caused by failures.

### Solutions

The game company's collaboration journey with FS began in 2023 when the network team identified a need to upgrade the switching capabilities in its data centre network. Gaming data centre was experiencing challenges with network speed and performance, and maintaining and upgrading the legacy switches was becoming increasingly labour-intensive and costly.

At the core and aggregation layers, the N8560-32C and N8550-32C switches with 32x 100G ports are used to provide higher speed and bandwidth, reduce latency, and improve overall performance.

At the access layer, S5860-48XMG and S5860-24MG-U with Multi-Gig Ethernet and 2.5G Multi-Gig Ethernet ports support higher connection speeds than the Gigabit Ethernet ports previously used by most devices.

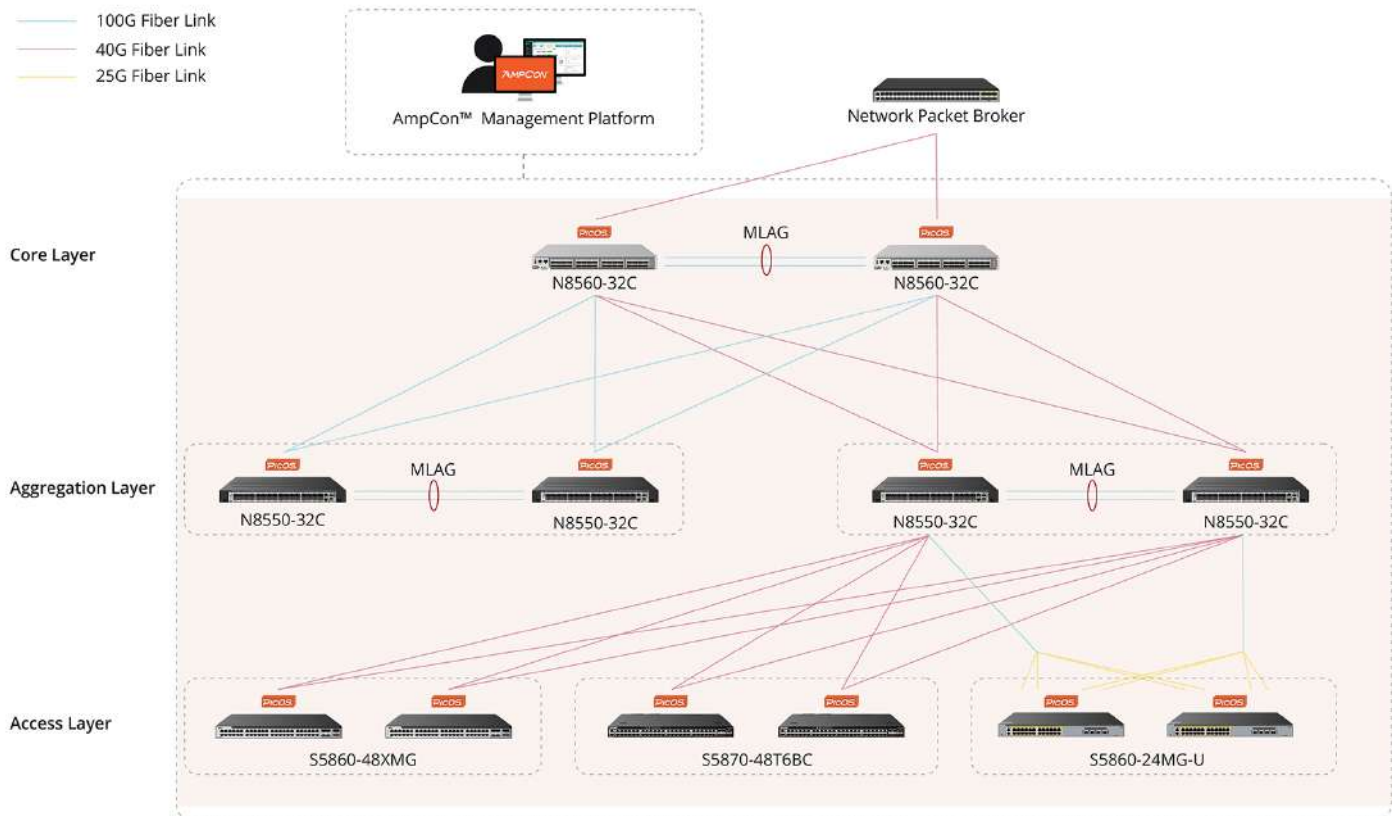
The Game development company has also taken advantage of PicOS® switches and AmpCon™ unified management platform to build high-performance gaming data centre solutions, enabling remote deployment and automated management. It delivers a high-performance, easy-to-manage, and secure network, simplifying operations and reducing overall OPEX.

Finally, the customer's original Huawei-compatible modules can be easily configured via the FS Airmodule Smart Cloud to ensure compatibility with multi-brand equipment. So it doesn't need to purchase extra modules, and helps to save budget costs.

### Results

Since adopting FS solutions, the game development company has realised faster network and cost savings. From 10G to 100G upgrade, which leads to a more efficient and productive business, with better performance, reliability, and security. With AmpCon™ Management Platform, the data centre network can be scaled or updated easily and securely from anywhere with automated provisioning and policy enforcement to save hours of manual labour.

Thanks for the solution and thanks for the quote. Also, the change to the "core" switch makes a lot of sense, especially saving so much! Interesting to see a switch that can handle 100G or 40G ports on 32 ports. I look forward to working together again. - From a company representative





## **Australia**

Address: 57-59 Edison Rd, Dandenong South, VIC 3175, Australia

Tel: +61 3 9693 3488

Email: AU@fs.com

**For more information, welcome to visit [www.fs.com](http://www.fs.com)**

Copyright 2009-2024 FS.COM PTY LTD All Rights Reserved.