Multiplay selects Arista as networking foundation for innovative game server orchestration technology to help publishers deliver a scalable, high performance and cost efficient online gaming experience

**Highlights**

**Challenge**
As the industry leader in online gaming infrastructure, Multiplay’s new game server orchestration platform needed a networking platform able to offer performance and low latency along with open integration capabilities.

**Solutions**
- Arista 7050X Switches
- Arista EOS®

**Results**
- Access to underline EOS allowed deeper levels of automation integration
- Upgrade roadmap from 10Gbps to 100Gbps using same core architecture
- Higher density solution with lower power consumption using open standards for future projects
- “phenomenal” technical support

For over 20 years, games publishers have supported millions of gamers around the world using servers and tools from Multiplay. For the next generation, Multiplay has developed a revolutionary hybrid cloud orchestration platform that benefits from Arista networking technology to rapidly provision both physical and cloud based servers to ensure that capacity always meets demand while keeping costs as low as possible.
Project Background
For many video gamers, the name Multiplay will bring back fond memories of glorious online victories and painful defeats. The company has been a pioneer in the provision of online gaming infrastructure and a host to some of the first LAN parties such as Insomnia and Stratlan that brought virtual groups together into the real world.

When founder Craig Fletcher started the concept in 1997, the company grew quickly establishing itself as the server provider of choice for fans of Minecraft, Battlefield, and the CounterStrike series of games. Today, Multiplay supports the most popular multiplayer games and has established relationships working directly with some of the biggest names in the gaming and tech industry including Respawn, Tripwire, Ready At Dawn, Bohemia Interactive, EA, Facepunch, Rocketwerks, Hi Rez Studios and many more.

Challenge
The latest development is Multiplay’s hybrid cloud orchestration platform that helps publishers to cost effectively provision and scale multiplayer environments to meet peaks and troughs in demand while delivering the best possible gamer experience.

As Tom Penrose, team lead for systems at Multiplay says, “Spending £50 on a brand new game and not being able to get online is just an awful experience for players and publishers are recognising that this type of situation is going to damage their brands.”

“However, setting up and running potentially hundreds of game servers so that everything is in place on game launch day is a major CAPEX expenditure and risk, It’s sometimes hard to gauge demand for a new title and where it’s going to be coming from across the globe” says Penrose, “Games also evolve with new patches and mods that push and pull player numbers – even time of day is a critical factor.”

As a company that has spent 20 years working in the area of multiplayer infrastructure, Multiplay has built a number of tools to help provision and manage servers; both for itself and third party customers. The culmination of its development work is its hybrid cloud orchestration platform. The system is used to provision game servers across either its estate of bare metal servers co-located at data centres across the world or to spin up virtual servers in private clouds. The system is highly automated and dynamic allowing servers to be brought online during periods of demand and then released back into the pool as demand ebb.

The orchestration platform ties into player matching systems maintained by publishers as well as the underlying networking infrastructure to make sure that connectivity and security is optimised for each gaming title as well as matching gamers to the server with the lowest latency.

The system was built against a specification from a major games company and is considered by the industry as a real innovation. “The networking element is pretty important and when we started working on the project, we knew what we wanted” explains Penrose.
Solution
As a deeply technical company, the development process for its orchestration platform endeavours to bring as much intelligence and automation as close to the network as possible, “We looked at the options and there was limited possibility of building automation into many of the networking solutions we considered” says Penrose, “It was only Arista that had the performance and the low latency we needed, but just as importantly for us, it’s effectively Linux on a switch which allows us to really optimise every aspect of our network infrastructure and bake in the automation features that are essential for the service.”

“The other thing we liked about Arista was the support” adds Penrose, “We are doing some quite interesting and technical challenging things with the Arista switches and when we needed to speak to an Arista tech support, we would actually get an expert, not just somebody reading from a script – that was phenomenal.”

As part of a major data centre refresh to coincide with the new orchestration software, Multiplay has deployed Arista 7050X 10/40GbE switches with wire speed layer 2/3/4 performance combined with low latency at co-located data centres in London, Amsterdam, Frankfurt and Stockholm.
Conclusion

With the new platform deployed and the orchestration service now welcoming a new crop of AAA games in time for the Christmas rush; Multiplay are well positioned to deliver games servers in the most efficient way, helping both publishers and gamers gain the best experience.

The decision to use Arista was based on technical merit and has been a major success. Multiplay is now looking to the future which in Penrose’s view will ultimately mean at some point moving to 100Gbps Arista networking. “The other aspect we really appreciated was the progressive attitude towards firmware and releasing updates to fix issues or add features,” says Penrose, “We are passionate about what we do and we get the sense that Arista is also passionate about technology which makes for a good fit.”

About Multiplay

Multiplay is a gaming services company specialising in events management, esports and digital services. Delivering quality event productions and entertaining gaming experiences, Multiplay has been responsible for everything from instore product launches, through to professional esports tournaments and record breaking attendance festivals. Its digital service providers specialise in hosting game servers for large-scale multiplayer titles, offering a single API gateway to a global network of bare metal along with the leading cloud network providers. Multiplay is a wholly-owned subsidiary of GAME Digital Plc. For more information, visit www.multiplay.com