



Industry Profile: Akamai

By Melissa Cogavin, Managing Editor, SCTE

Pavel Despot, Senior Product Manager and Natalie Billingham, EMEA MD and SVP Sales, talked to Broadband Journal about their recent new direction and why it makes such sense for their customers.



**Pavel Despot,
Senior Product Manager**



**Natalie Billingham,
EMEA MD and SVP Sales**

Akamai Technologies provides web and Internet security services. Their Intelligent Edge Platform is one of the world's largest distributed computing platforms and their recent acquisition of Linode last year for a cool \$900m signalled a new direction for the company. They have announced they will be opening 13 new data centres in 2023.

Akamai have also revealed plans to introduce a new concept designed to bring basic compute capabilities into hard-to-reach locations. To that end the company has also agreed a strategic investment partnership with global deployment

network (GDN) Macrometa, to help enterprise developers build, deploy, and run programmes across edge and cloud.

Taking a new direction into data centres came as a surprise to the industry when it was announced last year, but neither Natalie nor Pavel feel it should have been. "In many ways, it's sort of a logical progression," said Natalie. We've been around for 24 years; we felt this was a natural evolution for our business, and was driven in part by our customer base pushing us in this direction."

Were there other imperatives? "We've solved challenges with delivery with our CDM business. We've secured the internet and gone behind the firewall, and then it was a case of, 'Well, what's the next big challenge?' Some of our customers felt that this was something - given our ability to scale and build these very resilient networks, enterprise-grade solutions - where we could potentially add value." Pavel added, "Our customers use Amazon, they use Google. Some of our customers have been using over seven clouds for a single application, but before this none were ours. It made sense to grab pieces of the workloads."

Akamai's strategy

Acquiring Linode was not simply a matter of bolting on an existing business and taking it out to market. The data centres industry is a bewildering, highly complex and international web of commercial arrangements, media, data protection and legislation, millions of servers fused in the cloud to keep our data accessible. It is anything but a one-size-fits-all environment. While they responded to their clients' demands, rolling out this new development required sensitivity, consideration and given the price tag, not a launch you want to mess up.

Natalie went into more detail. "Akamai customers who want to build or run or secure and deliver all with one provider and may have workloads that they want to do that. They may want to have a multi-cloud approach, or they've got new workloads that they're either bringing from on-prem (on the premises) or creating. They like that development culture and they want something that's affordable and scalable and reliable. We felt it best to start with what we know and who we know; try and solve problems for those organisations, then we'll be able to scale and expand that."

Pavel felt that "It isn't an easy market lift. We're one of the only ones that dropped a billion dollars on a company." With great power comes great responsibility. Back to webs again.

He went on. "We are going to the folks that initially had some of these pain points, these egress pain points, these distribution pain points. If you look at it even two years ago, Apple came to us to help them build a custom private relay, it's called, and that's what we spawned off this thing to say, "Hey, wait. Look, there's use cases here that our distribution and our approach is really useful for."

Pavel is convinced that the media and gaming and the high-tech market that Akamai will be targeting most successfully. Pitched right, he feels that at least in these markets the response is likely to be, "Oh yeah, I get it. This is the benefit. I'm cutting my costs. I'm reducing re-buffers."

What's the USP?

"My view is that we're uniquely placed in acquiring Linode," Natalie said, adding that "there are very few organisations that bring together some of the benefits of the alternative clouds, ease of use, developer friendliness, enterprise grade-scale, that level of security. I don't think there is another cloud that sits in so many top right quadrants, in terms of web application security or app and API security."

As far as capacity goes, what are the opportunities for a new entrant to the market in 2023? "Bear in mind the majority of the workloads still aren't even on the cloud. A Snowflake report recently announced that only 25% of workloads are there."

"We talk so much about the cloud that we assume that everything and everyone and everything is in it, and actually there's lots of room for lots of different players with particular benefits to add value, and we think we have a very distinct place where we'll play ours."

One of the main benefits for customers is its one-stop-shop approach. The marriage of Linode to Akamai offers CDN (content delivery network), WAF (web application firewalls), VM (virtual machine) in-house, whereas competitors have to outsource those add-ons.

Pavel said, "Even if you look at some of the big providers, Amazon is the one that's closest to say, "Yes, we have all these pieces," but their difference is they can get you all these pieces, they don't own all these pieces. It's not an integrated bot management solution. It's a bot management solution that you buy from a vendor through their marketplace and license it."

Another positive aspect is the security a one-stop-shop provides. "Some high-profile companies' websites have been knocked over recently by bot attacks which make it hard for people to do their business," Natalie explained. "There are very few organisations that are doing both of those things that don't compete with the companies that they're providing for."

Many of Akamai's relationships are with live sports, gaming and streaming organisations, with particular needs in terms of live score updates and so on. Here they feel their data centre capabilities will come into their own. "For things like scores, if you want to run scoring or little applications at the Edge where latency is really important to get that information really quickly," said Natalie, "by combining the Edge network that we've had ever since Akamai was set up, and then with compute capabilities we'll be able to build the next generation of media and sporting applications on Akamai."

Pavel agreed that these particular clients are "compute and egress heavy, but transcoding as a technical issue isn't difficult. It's more about getting the content out to everyone, that's the big technical challenge. Just transcoding, like making the video smaller or bigger, we've all done that."



The same applies to gaming. “The gaming companies need some place to run their services. They need a lot of locations in which to run it because proximity needs to be close. Those are where, if you look at the 30-ish data centres that we’re looking to launch this year, and the 40-ish distributed sites, that lets us address those particular needs of performance really close to the user of capacity and, at the same time, one of the biggest bugbears for the cloud hyperscalers, for the customers, is egress.”

“So, going back to our heritage in performance and distribution, it makes sense that those are the first few verticals, but I also see some high-tech and eCommerce coming around when we start moving that same distribution and load balancing in the API market.”

Sustainability and data centres

In a previous issue we covered the grave impact data centres are having on the environment, with some uplifting initiatives in place, but a stubborn culture lingers, hindering progress.

There is also an insatiable appetite for data, more handsets becoming more affordable with every issue of Broadband Journal we produce seemingly, 5G access more available and developing nations finding innovative ways to equip citizens with the internet for the first time. Where does this end? With this recent announcement, Akamai are keen to stress their sustainability commitment.

“This is central to how Akamai are going about our platform delivery and also building our cloud compute, because sustainability is at the heart of it,” Natalie said. “When will it level off? I don’t know. I’ve been in data centres even before Akamai for a long time, and it continues to keep growing. There’s a proliferation of data centres and the need for more.”

She continued, “We are looking at things like server efficiency, power efficiency, how can we get more out of the space that we have, the racks and the power within a given data centre. We have published five sustainability goals by 2030. We want to be on 100% renewable energy through our global operations, and I can tell you in Europe now we’re on 80% renewable energy.

The crystal ball

At Broadband Journal ‘what does the future hold’ is a big thing. Big, because while everyone is in agreement on what the pressure points are now, nobody can predict beyond the next 12-24 months with any confidence, amid the chaos of environmental crisis, war, a pandemic, a cost of living crisis and geopolitical instability. Pavel had a crack at it.

“Everyone’s getting squeezed everywhere. People are reevaluating what services they’re using, why they’re using them, and how they’re using them. I’d say in five years we’ll definitely see more and more providers. The number of either clouds or technologies that are involved in a certain application

is going to continue to grow, making operations for all of us a big pain. Just judging by the number of things that the people here are launching, there's like five or six new providers for any number of applications. That becomes a challenge when you're trying to manage these workloads; there are disparate technologies that one group selects."

Natalie felt customers are becoming more discerning with experience, that initially it all had to be in the cloud and then they've realised, "Actually, that's costing us more. I don't need all of those workloads to the cloud," and they're starting to reevaluate."

Pavel and Natalie agree that organisations are really going through that process en masse currently; some of it they want in the cloud but the economics don't work for it all to be there. That's actually where Akamai will play an important role. Some of it people will want to keep on-prem, and some workloads they'll want to do in other ways.

Sustainability came up again, and predictions around streaming in 'echo-mode', using a slightly lower bandwidth. "Because it's less resource intensive, and you give people that choice. A lot of organisations are thinking about how they can build sustainability and what they're doing on the internet together. So I think we'll see more of that."

Broadband's spidey sense tells us Akamai know exactly what they're doing with their expansion into data centres. In this area, even though the future is uncertain, timing is everything and they seem to have timed this well, assessed the marketing, ensured their customers are on board, and they are smartly anticipating trends which should work to their advantage.



For more information, visit www.akamai.com



TRIAx

connecting the future



Ethernet over Coax

Unleash the power of existing coax cables

- All the values of a 1 gigabit network with none of the costs of new cabling (use existing coax cables)
- No TV signal interference
- No disruption, quick, discreet installation
- Utilize the in-house coax networks for your FTTB/H rollout possibilities like IPTV, casting and gaming



Discover more at triax.com/eoc



beyond tomorrow






Building the Future-Ready 5G and FTTX Networks



Optical Fibre



Optical Fibre Cables



Speciality Cables



Optical Interconnect Kits

Sterlite Technologies Limited

stl.tech