

TRAFFIC MANAGEMENT TAKES CENTRAL STAGE

Bytemobile has launched a new product line, the T3100 Adaptive Traffic Manager, which it is marketing as an integrated solution to enable operators to gain access to real time intelligence on network conditions and user experiences, and take traffic management decisions accordingly.

By collapsing DPI, load balancing, caching and optimisation capabilities into one element, Bytemobile says it is creating a new class of network component. The idea is that operators have a way to react to live events, and ensure the user experience, as data traffic volumes increase in next generation mobile networks. By doing so, they could also create new monetisation opportunities. Bytemobile sees 4G/LTE as the inflection point for the introduction of these solutions, and says that the need for traffic management solutions has caught the big equipment manufacturers on the hop.

Keith Dyer spoke to Ronny Haraldsvik, Vice President, Global Marketing, and Jeff Sanderson, Senior Director of Product Marketing (Adaptive Traffic Management), Bytemobile. They explained the thinking behind the design and development of the T3100 series, what operator needs it meets, and how they expect the competition to react.

What is the T3100 about, how is it different from your current Unison optimisation approach?

Jeff Sanderson:

We are taking what we do today and making sure that we are moving forward with the evolution of mobile networks — to try and manage the capacity crunch by creating a more holistic approach to the traffic management problem.

Traffic management for operators tends to be a pretty fragmented approach today. They're doing some specific DPI at certain points in the network, either standalone or integrated into components like the GGSN, and they create an enforcement point for being able to control the logical pipe a subscriber can get access to in terms of throughput and so forth. We typically

sit behind that and optimise the content.

Where we differentiate that we inspect the content, and that allows us to understand and manipulate the content, largely to deliver a better user experience. The benefits of that, and the main focus of the value proposition, is the amount of data it reduces in the downstream network, creating a less congested network where more users can get on and enjoy the data services.

Ronny Haraldsvik:

By leveraging the insight of being able to see everything that's going on, we can bring that together into one platform that no-one else can do. So sitting at that Layer6-7 level gives us a unique advantage.

It's a lot easier to go down the OSI stack than it is to go back up again, so we have a unique situation where the DPI people and the GGSN guys are at L2-3-4-5, but they do very little with the content. They can see what the packet is and where it's headed and that's it, they don't follow the flow, etc. They're trying to go up the stack now, and looking at "how do we do optimisation, what else can we do?" But rather than inserting more network elements into the architecture we're collapsing them and bringing them together.

What are the benefits of that collapsed, integrated approach?

Jeff Sanderson:

What we don't do today in Unison is extend our field of vision to look at all the applications; so as a subscriber on your laptop connected to the mobile internet you probably have other multiple applications open at the same time as you're watching a video.

So by opening up our field of vision we can make assessments based on network conditions plus all the other applications you are using. So we can start to make wiser judgements on how we can deliver a better UE to you.

So for example we could put some level of restriction on downloading an attachment to your PC, to give a bit of a boost to a real time application such as video. The way we do it is to

monitor real time analytics on the platform, track a user and get a view in real time of how much stalling there is, how quick a page is downloading in reference to other benchmarks, and come up with an index. Based on that running index we then apply traffic management policy in a real adaptive fashion.

Because we control each and every packet of each and every flow we are able to do it adaptively during the session.

The benefit of what we do from an operator perspective is that they have a far better paradigm of being able to tariff. This is a contentious area. Today their segmentation paradigms are pretty basic, and mostly volume based. Moving forward they could break out of that model.

We have seen a number of vendors putting together a policy-optimisation-traffic management portfolio, whether that's coming at it through acquisition, like Amdocs and Bridgewater, or through partnership as with Vantrix and Ericsson, or Juniper and Openwave.

Ronny Haraldsvik:

The shift in traffic, where it's headed, over the past 12 months completely took NEPs by surprise. They have standard elements, yet lo and behold these non-standard elements are now taking control of traffic, and helping operators mitigate the effects of this onslaught of traffic. No-one has this fully – Cisco has DPI and they are saying anything can be done on the GGSN. We know better and operators know better. That's why we see these announcements that are more or less trying to cobble together the GGSN with some optimisation and portfolio stuff. It's not taking a holistic view of traffic management, it's a reaction.

This all related to what's going on in the network, where the traffic pattern has shifted and operators need more intelligence and insight. I would not be surprised if a month from now another adaptive traffic management solution is announced.

Read the full interview at: mobileurope.co.uk/news/news-analysis/8911.