Since the advent of utility computing models of the late 1990s identifying 'pools' of resources including servers, storage, clients and networking, we have seen workloads chasing bottlenecks. As server and storage price/performance improvements are better understood, many infrastructure managers are turning their attention to the network. As we identified in an earlier discussion, the issues of network hypervising are akin, but also radically different from both server and storage ones, not least because there has to be a physical connection between all compute, storage and client nodes in an organisation's infrastructure. As in the storage area there are a number of vendors looking to manage networking from multiple vendor sources in a single piece of software, although few of these approaches can be considered as hypervising yet.

One such vendor is Riverbed, with its range of WAN optimisation technologies marketed as tools to speed up application performance and reduce bandwidth utilisation. Its product range includes:

1. Steelheads, encompassing dedicated WAN optimisation appliances to all-in-one branch office box;
2. Granite, enabling consolidation of storage infrastructure such as Windows file servers and storage arrays from branch offices back to the data center without inhibiting branch application performance;
3. Cascade, integrating network assessment and acceleration solution
4. Whitewater cloud storage gateways, eliminating tape and improving DR readiness
5. Stingray, controlling, optimising, and securing services online users receive by inspecting, transforming, prioritizing, and routing application traffic.

The company posted total revenue of $726 million for the year ending 31 December 2011, representing growth of 32%. Of this, $225 million came from support and services.

24 x 7 support for all customers
Riverbed markets four support plans; Silver, Gold, GoldPlus and Platinum. All support plans entitle customers to 24 x 7 support provided by its follow-the-sun centres. Riverbed's products lend themselves to 'calling home' and have built-in alert capabilities; customers

choose whether to manage alerts in the first instance internally or to go direct to Riverbed's centres. The difference between plans rests on hardware replacement cover.

In addition to support services, Riverbed also offers [professional services](#) that include consulting, training and certification. Specific packages such as health checks, jumpstarts, network assessments, design and on-site residents are available through [partners](#) or Riverbed.

Aggregators have different needs
We first reviewed Riverbed in [our analysis of BT's Connect portfolio refresh](#). BT's network monitoring intelligence and reporting capabilities include acceleration services that carry capability to reduce data redundancy with Riverbed's virtualisation tools. Aggregators like BT will combine Riverbed's technology with a number of other technologies and services for its customers' convenience. It is therefore natural for BT to handle first and second level calls and escalating to Riverbed if and when problems have been specifically isolated. In relationships with aggregators, Riverbed has learnt that much of the heavy lifting happens before the launch of an integrated services, when engineering and consulting capabilities need to be available for service design.

Image credit: [Catching up by D. Bjorn](#)