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Computer-based share traders have a new best friend

By [David Heath](#)

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When it comes to computer-driven share trading, every nanosecond counts, which is why traders focus on the stock exchanges with the fastest internal systems and buy the quickest network switches they can find. Arista Networks has entered this fray with what they claim to be the lowest latency network switch in the market.

Computer-based share trading, sometimes known as algorithmic (or 'algo') trading relies on computer-controlled trading, with little or no human intervention. These systems track all manner of data (weather conditions, civil unrest, commodities prices etc) and attempt to determine the effect on various company's share prices.

The tales of chasing the tiniest edge in this form of share trading are legion. Traders look for the network circuits that have the fewest hops to the trading exchanges, they seek the fastest channels available - in fact there are sub-sea cables designed and implemented to offer the lowest possible latency, exclusively for traders.

Within their own organisations, they want the least possible impediment to executing trades.

On the other side, these traders only want to deal with stock exchanges that provide high-speed trading. Leading this pack in the Asia-Pacific region are Australia's ASX (when they move to the new data centre in February), India's NSL (in Mumbai) and TSE (Tokyo). Conversely, there are other exchanges that have such poor performance that computer based traders will never use them.

Others, such Singapore's SGX, have specifically recognised the issue of trading latency and are planning upgrades to address that specific problem.

Leading the foray into this field is [Arista Networks](#) who have what they claim to be is the lowest latency switch on the market. Costing around 500 nano seconds (a tiny amount of time) between the first bit of a packet entering the switch to the first bit exiting, this device gets traders as close

as possible to their favourite exchanges. Of course the traders' systems have their own overheads - as little as 3 micro seconds but often much more.

Time is money, as they say!

The author met with Arista representatives in Phuket as a guest of NetEvents