

Wednesday, June 27, 2007

3456 Ports?

I've received some mails from my readers that asked the same question. Why the hell do you build an 3456 port IB switch? The answer is simple: Because we have to build one. Look, how IB networks are build today. You take some big fat IB switches (288 Ports Voltaires for example) for your core network and you take dozens of smaller ones and the network starts to get really complex.

Example: Without the new switch and our Constallation blades an implementation of an 3456 node cluster is a beast. You can calculate roundabout 300 switches and over 6000 IB cables. With the both new systems from Sun, things are different: One switch, 1152 cables. Both developments (the switch and the ultra dense blades enable Sun to build such large cluster in a much more efficient way. They start to get more manageable and the implementation time decreases. Magnitudes less switch power supplies to feed, less weight (hey, don't laugh, think about 5000 long cables less. And an IB cable isn't such a lightweight wire like the twisted pair Ethernet cable).

To build large clusters in an efficient way, we had to change some things. From my view, the Sun Constallation System is the important step to leave all this handcrafted cluster systems behind and to industrialize the implementation of such large scale systems.

Posted by Joerg Moellenkamp in English at 20:55