

Arista's 7100 series switches deployed in IBM's iDataPlex system allow unprecedented server node density, scalability, reduced power and cost, and simplified network management for Web, HPC, financial, and cloud computing applications.

Today's Web 2.0, HPC, and financial customers are looking for ever increasing computing node density and are faced with escalating costs due to space, power, and cooling. Ever larger networks pose increased challenge in reliability, where a faulty switch can bring down significant portion of network, and management. With increased number of compute nodes in the network switch port-to-port latency becomes more critical and so is the ability to support various interconnect standards to connect to legacy equipment.

IBM addresses the needs of large-scale data centers with iDataPlex platform by providing flexible design, up to 5x compute density increase, up to 40% power efficiency improvement, dramatically reduced cooling/air conditioning costs, and simplified management with front access cabling.

In order to provide unprecedented computing node density, iDataPlex needs a switching solution that provides the needed performance, scale up to 84 nodes per rack, meets mechanical and airflow restrictions, and be highly reliable.

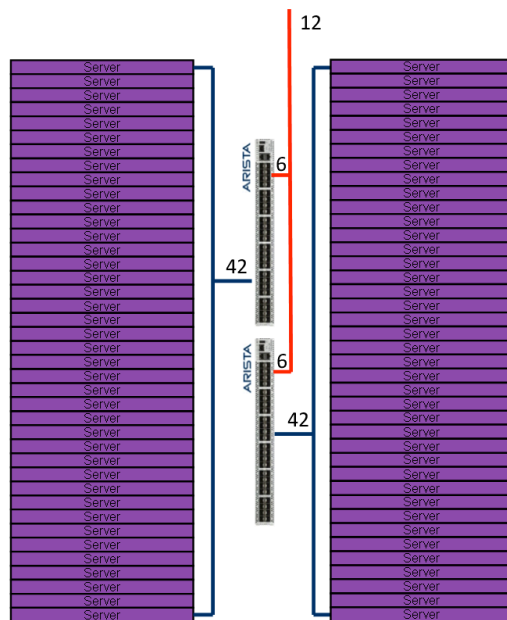


Figure 1: 84 Server Rack using two 7148SX Switches

Arista 7100 series switches provide the industry highest non-blocking 10G port density with maximum of 48 10G ports. This minimizes the number of switches required per iDataPlex rack thus reducing cost, number of uplinks required, and simplifying management. 7100 series switches are mechanically compliant with iDataPlex configurations. Front-to-rear airflow (also available in rear-to-front airflow configuration) removes the need for special air baffles and allows switch to be deployed in both horizontal and vertical slots. Redundant hot-swappable power supplies and fans increase MTBF – especially important with higher density switches, where a switch failure can take large number of compute nodes down.

Arista 7100 series switches provide maximum flexibility to the user with 1RU form factor, high port density, choice of power efficient and low latency SFP+ or 10GbaseT interfaces. Arista switches lead industry in price/performance and using 10GbaseCR passive coppers interconnect cables (up to 5m) within rack connectivity where majority of links are further reduces cost and power.

With sub 1uS switching latency 7124S, 7148S, and 7148SX provide ideal switching platform for latency-critical customers while 7120T-48S and 7140T-8S are suited for customers looking for 10GbaseT interfaces. All switches have SFP+ uplinks supporting SR/LR/LRM optics.

Arista EOS is a highly modular software design based on a unique multi-process state sharing architecture that completely separates networking state from the processing itself. This enables fault recovery and incremental software updates on a fine-grain process basis without affecting the state of the system. Arista EOS provides extremely robust and reliable data center communication services while delivering security, stability, openness, modularity and extensibility. This unique combination offers the opportunity to significantly improve the functionality and evolution of next generation data centers.

iDataPlex, when configured with Arista 7100 series switches, sets a benchmark in node density, scalability, and the total cost of ownership.

About Arista

The Arista 7100 Series of datacenter Ethernet switches feature the industry's highest density 10 Gigabit Ethernet switching solution and the first with an extensible modular network operating system. With breakthrough price-performance, the Arista 7100 Series enables 10 Gigabit Ethernet to be deployed throughout the data center, which can significantly improve server utilization and data center power efficiency.

Arista's high throughput, low latency switches, featuring SFP+ or 10GbaseT interfaced and the proprietary EOS architecture, are the most advanced and reliable 10Gb Ethernet switches in the industry today. For more information, visit <http://www.aristanetworks.com>