APPENDIX D

Competitive Landscape

While comprehensive analysis of Cisco's competition is beyond the scope of this document, it is worth quickly mentioning what the competitive landscape looks like. It is also worth noting that MSDC customers are themselves looking into building their own devices based on merchant silicon.

Dell/Force10

Dell/Force10 (formerly just "Force10") has made its name with high-density gigE and 10G switches. Primary MSDC focal points from within their portfolio are:

- Z-Series Core Switches, such as the Z9000. Cheap 128x non-blocking 10G ports. Leaf and Spine.
- E-Series Virtualized Core Switching, such as the E600i. 224x non-blocking 10G ports. Spine.
- The C300 Chassis-based Switch. Glorified Leaf, such as an "end of row" Leaf.

Arista

Arista has traditionally been very focused on 3 things: low-footprint/high-density 10G chassis, ultra low-latency, and modular software. Strengths they bring to the table are:

- 7500. 192x linerate 10G.
- EOS Network Operating System. Complete separation of networking state and route & packet processing. Extensible and customizable.
- 7150S. 64x 10G linerate ports. SDN-aware.

Juniper

Juniper made its splash into the industry with their M-series, pure routers, and their unified Network Operating System, JUNOS. They have traditionally held a large portion of the Service Provider segment, but have since branched out into MSDCs, namely with their proprietary Q-Fabric. The primary competitive concerns they bring are:

- Q-Fabric. 6000x 10G ports:
  - QFabric Scenario 1 - QFX3500 standalone mode as an ethernet switch
  - QFabric Scenario 2 - QFX3600 standalone mode as an ethernet switch

  - QFabric Scenario 3 - QFX3600 and QFX3500 standalone mode as an ethernet switches in a solution
  - QFabric Scenario 4 - QFX3000M QFinterconnect node plus QFX3100 QFdirector), QFX3500 QFnode and EX4200 (needed for management) as a "real mini-QFabric solution
  - QFabric Scenario 5 - QFX3008 QFinterconnect node plus QFX3100 QFdirector), QFX3500 QFnode and EX4200 (needed for management) as a "real QFabric solution
- Incremental Scalability.
- JUNOS. There is a lot of momentum behind the JUNOS religion.
- Programmable buffers, albeit deep buffers.

Brocade

Brocade, formerly Foundry Networks, has long been among market leaders in the density battle. Their VCS/VDX family of switches are the foundation of their datacenter switching fabric portfolio. For example:

- VDX 8770-8, 384x 10G ports.
- 15RU.
- Focusing on flatter “Ethernet fabrics”.
- Virtual Cluster Switching (VCS), similar to Juniper’s Q-Fabric. “Self-healing” and resilient fabrics.

HP

Not to be left out of the large datacenter fabric market, HP has rolled out their 5900 series switch which provides a low-cost, 64x 10G low-latency ToR platform that competes directly with Cisco’s Nexus 3064.