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- [6] M. Al-Fares, A. Loukissas, and A. Vahdat. A Scalable, Commodity Data Center Network Architecture. In *SIGCOMM*, 2008.
- [7] M. Al-Fares, S. Radhakrishnan, B. Raghavan, N. Huang, and A. Vahdat. Hedera: Dynamic Flow Scheduling for Data Center Networks. In *NSDI*, 2010.
- [8] M. Balakrishnan, K. Birman, A. Phanishayee, and S. Pleisch. Ricochet: Lateral Error Correction for Time-Critical Multicast. In *NSDI*, 2007.
- [9] Y. Cai, L. Wei, H. Ou, Y. Arya, and S. Jethwani. Protocol Independent Multicast Equal-Cost Multipath (ECMP) Redirect. RFC 6754, 2012.
- [10] B. Cain, S. Deering, I. Kouvelas, B. Fenner, and A. Thyagarajan. Internet Group Management Protocol, Version 3. RFC 3376, 2002.
- [11] C. Diot, B. Neil, L. Bryan, H. Kassem, and D. Balensiefen. Deployment issues for the IP multicast service and architecture. *IEEE Network*, 14:78–88, 2000.
- [12] B. Fenner, M. Handley, H. Holbrook, and I. Kouvelas. Protocol Independent Multicast - Sparse Mode (PIM-SM): Protocol Specification (Revised). RFC 4601, 2006.
- [13] S. Floyd, V. Jacobson, C.-G. Liu, S. McCanne, and L. Zhang. A Reliable Multicast Framework for Light-Weight Sessions and Application Level Framing. *Trans. Networking*, 5(6):784–803, Dec. 1997.
- [14] P. Gill, J. Navendu, and N. Nagappan. Understanding Network Failures in Data Centers: Measurement, Analysis, and Implications. In *SIGCOMM*, 2011.
- [15] A. Greenberg, J. R. Hamilton, N. Jain, S. Kandular, C. Kim, P. Lahiri, D. A. Maltz, P. Patel, and S. Sengupta. VL2: A Scalable and Flexible Data Center Network. In *SIGCOMM*, 2009.
- [16] C. Guo, G. Lu, D. Li, H. Wu, X. Zhang, Y. Shi, C. Tian, Y. Zhang, and S. Lu. BCube: a High Performance, Server-centric Network Architecture for Modular Data Centers. In *SIGCOMM*, 2009.
- [17] M. Handley, I. Kouvelas, T. Speakman, and L. Vicisano. Bidirectional Protocol Independent Multicast (BIDIR-PIM). RFC 5015, 2007.
- [18] H. Holbrook and B. Cain. Source-Specific Multicast for IP. RFC 4607, 2006.
- [19] IBM WebSphere. [www-01.ibm.com/software/webservers/appserv/was/](http://www-01.ibm.com/software/webservers/appserv/was/).
- [20] S. Jain, A. Kumar, S. Mandal, J. Ong, L. Poutievski, A. Singh, S. Venkata, J. Wanderer, J. Zhou, M. Zhu, J. Zolla, U. Hölzle, S. Stuart, and A. Vahdat. B4: Experience with a Globally-Deployed Software Defined Wan. In *SIGCOMM*, 2013.
- [21] P. Jokela, A. Zahemszky, C. E. Rothenberg, S. Arianfar, and P. Nikander. LIPSIN: Line Speed Publish/Subscribe Inter-Networking. In *SIGCOMM*, 2009.
- [22] P. Judge and M. Ammar. Security Issues and Solutions in Multicast Content Distribution: A Survey. *IEEE Network*, 17:30–36, 2003.
- [23] D. Karger, E. Lehman, F. Leighton, M. Levine, D. Lewin, and R. Panigrahy. Consistent hashing and random trees: Distributed caching protocols for relieving hot spots on the World Wide Web. In *STOC*, 1997.
- [24] T. Koponen, M. Casado, N. Gude, J. Stribling, L. Poutevski, M. Zhu, R. Ramanathan, Y. Iwata, H. Inoue, T. Hama, and S. Shenker. Onix: A Distributed Control Platform for Large-scale Production Networks. In *OSDI*, 2010.
- [25] D. Li, Y. Li, J. Wu, S. Yu, and J. Yu. ESM: Efficient and Scalable Data Center Multicast Routing. *Trans. Networking*, 20(3):944–955, 2012.
- [26] V. Liu, D. Halperin, A. Krishnamurthy, and T. Anderson. F10: A Fault-Tolerant Engineered Network. In *NSDI*, 2013.
- [27] M. Mahalingam, D. Dutt, K. Duda, P. Agarwal, L. Kreger, T. Sridhar, M. Bursell, and C. Wright. VXLAN: A Framework for Overlaying Virtualized Layer 2 Networks over Layer 3 Networks. IETF Internet-Draft, May 2013.
- [28] M. L. Massie, B. N. Chun, and D. E. Culler. The Ganglia Distributed Monitoring System: Design, Implementation, and Experience. *Parallel Computing*, 30:817–840, 2004.
- [29] R. N. Mysore, A. Pamboris, N. Farrington, N. Huang, P. Miri, S. Radhakrishnan, V. Subramanya, and A. Vahdat. PortLand: A Scalable Fault-Tolerant Layer 2 Data Center Network Fabric. In *SIGCOMM*, 2009.
- [30] D. Newman. 10 Gig access switches: Not just packet-pushers anymore. *Network World*, 25(12), Mar. 2008.
- [31] Object Management Group. Data Distribution Service. <http://portals.omg.org/dds/>.
- [32] Open Networking Foundation. [www.opennetworking.org](http://www.opennetworking.org).
- [33] Oracle Coherence. <http://coherence.oracle.com/display/COH35UG/Network+Protocols>.
- [34] I. Pepelnjak. FIB update challenges in OpenFlow networks. [blog.ioshints.info/2012/01/fib-update-challenges-in-openflow.html](http://blog.ioshints.info/2012/01/fib-update-challenges-in-openflow.html), Jan. 2012.
- [35] S. Ratnasamy, A. Ermolinskiy, and S. Shenker. Revisiting IP Multicast. In *SIGCOMM*, 2006.
- [36] S. Sen, D. Shue, S. Ihm, and M. J. Freedman. Scalable, Optimal Flow Routing in Datacenters via Local Link Balancing. In *CoNEXT*, 2013.
- [37] J.-Y. Shin, B. Wong, and E. G. Sirer. Small-World Datacenters. In *SOCC*, 2011.
- [38] A. Singla, C.-Y. Hong, L. Popa, and P. B. Godfrey. Jellyfish: Networking Data Centers Randomly. In *NSDI*, 2012.
- [39] M. Sridharan, A. Greenberg, Y. Wang, P. Garg, N. Venkataramiah, K. Duda, I. Ganga, G. Lin, M. Pearson, P. Thaler, and C. Tumuluri. NVGRE: Network Virtualization using Generic Routing Encapsulation. IETF Internet-Draft, Aug. 2013.
- [40] Y. Tock, N. Naaman, A. Harpaz, and G. Gershinsky. Hierarchical Clustering of Message Flows in a Multicast Data Dissemination System. In *IASTED PDCS*, 2005.
- [41] A. Tootoonchian, S. Gorbunov, Y. Ganjali, M. Casado, and R. Sherwood. On Controller Performance in Software-Defined Networks. In *HotICE*, 2012.
- [42] Y. Vigfusson. Personal communication, 2013.
- [43] Y. Vigfusson, H. Abu-Libdeh, M. Balakrishnan, K. Birman, R. Burgess, G. Chockler, H. Li, and Y. Tock. Dr. Multicast: Rx for Data Center Communication Scalability. In *EuroSys*, 2010.
- [44] J. Widmer and M. Handley. Extending Equation-based Congestion Control to Multicast Applications. In *SIGCOMM*, 2001.