

[Cisco](#) > [Inside Cisco IOS Software Architecture](#) > [7. The Cisco Gigabit Switch Router: 12000](#) > **Summary**

[See All Titles](#)

[< BACK](#)

[Make Note](#) | [Bookmark](#)

[CONTINUE >](#)

Summary

This chapter examined the most important architectural elements of the 12000, which are radically different from any of the shared memory or bus-based Cisco architectures. By using a crossbar switching fabric, the Cisco 12000 provides very large amounts of bandwidth and scalability. Further, the 12000 uses virtual output queues to eliminate Head of Line Blocking within the switching fabric.

Most switching on a Cisco 12000 is distributed to the Line Cards; in some cases, a dedicated ASIC actually switches packets. DCEF is the only switching mode available.

Last updated on 12/5/2001
Inside Cisco IOS Software Architecture, © 2002 Cisco Press

[< BACK](#)

[Make Note](#) | [Bookmark](#)

[CONTINUE >](#)



[About Us](#) | [Advertise On InformIT](#) | [Contact Us](#) | [Legal Notice](#) | [Privacy Policy](#)



© 2001 Pearson Education, Inc. InformIT Division. All rights reserved. 201 West 103rd Street, Indianapolis, IN 46290