

Local Switching for Cisco Catalyst 3750-E Series Switches

Ramesh: Hello, everyone. I'm Ramesh Bijor, Product Marketing Manager for Network Systems at Cisco. Thanks for tuning in to this edition of the LAN Switching Update. This session is one in a series of monthly LAN Switching podcasts where we talk about business and deployment considerations in focused 5- to 10-minute topics.

Today's session will be the local switching capability included in the latest stacking architecture for the new Catalyst 3750-E Series Switches.

With me today is J. F. Vincent, Cisco Product Manager for the new Catalyst 3750-E Series.

Welcome, J. F.

JF: Thanks, Ramesh. Glad to be here.

Ramesh: J. F., let's talk about this new feature delivered by Catalyst 3750-E: the local switching. So, tell me, what is local switching?

JF: It's one of the new hardware features that we have on the 3750-E Series. Basically, all traffic that comes in and out the same switch is handled by a special hardware ASIC so that that traffic never touches the second ring.

Ramesh: So, because of this, the local switching results in faster stack performance?

JF: Absolutely. Not only that. This new ASIC beefs up the performance of the switch, but it also decreases the traffic on the ring. This means that not only we have double the stack ring throughput with StackWise Plus, but since the local switching minimizes the utilization of that stack ring, the throughput improvement perceived on the stack ring is more than double the past performances.

Ramesh: How does local switching help improve the network performance?

JF: All ports can pass traffic at line rate. The new ASIC is able to handle more traffic than the port configuration allows, meaning that even with 48 Gig ports and 2 10 Gig uplinks blasting at full rate, the new switching fabric has room to spare. So, providing you with true line-rate, nonblocking performances.

Ramesh: How do you accomplish this feature?

JF: As I mentioned earlier, there is a new additional backplane switching ASIC on the E Series, which makes forwarding decisions on unicast and multicast frames, to allow the switch to achieve wire-rate performances.

Ramesh: What does local switching do for application performance?

JF: One word: speed! You basically get line-rate performances and improve the capacity and bandwidth on your stack. This is the nonflying equivalent of an SR71 Blackbird.

Ramesh: What are the business benefits of local switching?

JF: Optimization for 10 Gig traffic; wire-rate throughput and increased forwarding capacity; basically, improved network performance and productivity.

Ramesh: Is it possible to have a mixed stack of 3750-E that supports local switching and 3750?

JF: Absolutely. You know, the Catalyst 3750-E Series is first and foremost a Catalyst 3750. So, both of them use the same stacking cable and can be used in the same stack. You can create a stack of 3750-E or simply add a 3750-E to your existing 3750 stack. This protects our customers' investment in existing 3750 Switches.

Ramesh: As always, this is great information, J. F. It sounds like there are some real advantages to using the Catalyst 3750-E Switches. Are there any materials we can read or watch to get more information?

JF: Yes. We have materials that address both tech and business benefits. We also have a great flash video. All of that is available online at <http://www.cisco.com/go/3750-E>.

Ramesh: Thanks, J. F. Well, that wraps it up for today. Thanks for listening, everyone. Stay tuned for another session on the latest in switching news.



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