Cisco Catalyst 3560-E Fixed Aggregation Switches

Vivian: Hello, everyone. I'm Vivian Clark, from Network Systems Marketing at Cisco. Thanks for tuning in to this edition of our online LAN switching update.

Today's session will cover the Catalyst 3560E-12D and the Catalyst 3560E-12SD, the latest additions to our Catalyst fixed switching family; how they address your pain points; and hence why these new switches are important to you.

With me today is Madhu Reddy, Product Manager from the Desktop Switching Business Unit.

Welcome, Madhu!

Madhu: Thanks, Vivian, glad to be here.

Vivian: The Cisco Catalyst 3750-E and 3560-E Series Switches were introduced in early 2007. Tell us about these switches.

Madhu: Sure. The Cisco Catalyst 3750-E and 3560-E Series Switches are an enterprise-class line of fixed wiring closet and aggregation switches. These switches facilitate the deployment of high-performance converged applications. The "pay-as-you-grow" model with StackWise Plus in Cisco Catalyst 3750-E Series helps to minimize the total cost of ownership.

Vivian: That's great, Madhu. And you're adding two new products to this family, right?

Madhu: Yes. Two new switching products were introduced in January of 2008. These two products are:

- The Catalyst 3560E-12D, with 12 10 Gig X2 ports, and
- The Catalyst 3560E-12SD, with 12 1 Gig SFP ports and 2 10 Gig X2 uplink ports

Besides the two new switches, we also introduced an innovative enhanced Power over Ethernet (or ePoE) solution, which scales beyond 15.4W per port on the Catalyst 3750-E and 3560-E Series Switches.

Vivian: Madhu, where do these switches belong in the network?

Madhu: Very good question. The Catalyst 3560E-12D is a 10GE aggregation switch for the Catalyst 3560-E and 3750-E Series Switches, and the Catalyst 3560E-12SD is a 1GE aggregation switch for the Catalyst 3560, 3750, and 2960 Series Switches. Both these switches come in a compact 1RU form factor and are ideal for the space- and power-constrained environments such as wiring closets. They also support the TwinGig module for mixed 1GE and 10GE deployments.

Vivian: How do you position these switches with respect to other Cisco aggregation switch offerings?

Madhu: Well, first, it is very important to understand that the Catalyst 3560E-12D and 3560E-12SD offer a complementary aggregation solution to other modular Cisco switching solutions, such as the Catalyst 4500 and the Catalyst 6500 Series. The sweet spot of the Catalyst 3560E-12D and 3560E-12SD is the aggregation deployment where there are space and power constraints or where 1Gig and 10Gig networks must coexist.

Vivian: Let's talk about the major concerns of the aggregation layer:

- High availability
- Network traffic management
- Ease of management

How does Cisco address the customer needs in the aggregation layer through these switches?

Madhu: Let's walk through each area one by one.

First, network uptime is enhanced with dual hot-swappable power supplies and four redundant field-replaceable fans in the Catalyst 3560E-12D and 3560E-12SD. Users can choose from any combination of AC and DC power supplies. Also, applications enjoy high availability due to dynamic Layer 3 capabilities such as OSPF, BGP, and EIGRP and also due to the presence of dual uplinks.

Also, Virtual Route Forwarding Lite, or VRF Lite, enables two or more VPNs with overlapping IP addresses to coexist. The IP Services feature set is required for these capabilities.

Second, QoS features in these switches include L2 to L4 classification, policing, traffic shaping, and advanced congestion control. This enables effective management of real-time voice, video, and data traffic.

Third, Generic On-Line Diagnostics, or GOLD, checks the health of hardware components and verifies proper operation of the system data and control plane at run time.

And like the other Catalyst 3560E Series Switches, the Catalyst 3560E-12D and 3560E-12SD can be managed using CiscoWorks LMS, Cisco Network Assistant, and Smartports macros.

Vivian: Madhu, you mentioned earlier about "mixed 1GE and 10GE deployments." Would you please elaborate?

Madhu: Sure. The TwinGig Converter module essentially converts a 10 Gigabit Ethernet X2 interface into two 1 Gigabit Ethernet Small Form-Factor Pluggable (SFP) ports. This way, customers can initially use the switch with 1 Gigabit Ethernet uplinks and later upgrade to 10 Gigabit Ethernet uplinks as business demands change, without having to upgrade the whole access layer. This 1 Gig to 10 Gig upgrade can be done literally in 10 seconds at no additional cost!

Vivian: Great! Just to summarize and make sure that I get all the benefits.

First, the Cisco Catalyst 3650E-12D and 3650E-12SD add new aggregation solutions that are highly available and easy to manage to our total switching portfolio.

Second, these switches enable customers to easily implement or upgrade to the 10 Gigabit Ethernet uplinks as their businesses grow, providing greater operational flexibility and further

reducing the total cost of ownership.

Madhu: You got it, Vivian!

Vivian: Thanks for sharing all this information with us, Madhu. Is there a Website that we can visit to learn further?

Madhu: Yes, you can find out more about the business benefits and technology behind our offering at: http://www.cisco.com/go/switching.

Vivian: Well, that wraps it up for today. Thanks for listening.