

## Cisco Catalyst 3750-E Series Switches

**Andy:** Hi, Sam.

**Sam:** Hey, Andy.

**Andy:** How are you.

**Sam:** Oh, great, how are you doing?

**Andy:** So, tell me, what are doing in Cannes?

**Sam:** Oh well, I'm actually here for a very special event.

**Andy:** Film festival, magic festival? What other kind of stars are you hanging out with here?

**Sam:** Well, you're partially right! It's not the film festival, and we don't have a lot of stars here, we have just one star. It's the Cisco Catalyst 3750-E Series from Cisco!

**Andy:** Oh wait a minute, 3750, I have a few of those, there's nothing new about 3750, is there?

**Sam:** Well, you haven't seen a 3750-E, not one like this.

**Andy:** Ok, go ahead and show me.

**Sam:** Well, just look behind me at what it can do.

**Andy:** Wall of phone, IP telephony, TelePresence, what are we looking at?

**Sam:** Well, this is not Cisco's TelePresence Solution. What we're doing here is trying to show 48 Cisco color IP phones all being powered through the Cisco 3750-E Catalyst switch.

**Andy:** So, one switch is powering all these phones.

**Sam:** Yes, we're using the latest PoE technology Power over Ethernet to deliver 15.4 watts on every single port of the new Catalyst 3750-E switch.

**Andy:** Ok.

**Sam:** Isn't that impressive?

**Andy:** Yes, you're getting my attention. What else do you have here?

**Sam:** Well, that's just the tip of the iceberg. We know that our customers are concerned with investment protection. So, we've designed the new 3750-E to be backward compatible with the existing 3750 family. As a matter of fact, it uses the same StackWise cables as the existing 3750s.

**Andy:** So, I can take this new switch, and stack it with my existing 3750s?

**Sam:** Absolutely, we've upgraded the backplane capacity and we've made it backward compatible to give our customers that investment protection.

**Andy:** Ok, now you're getting somewhere. What else?

**Sam:** Well, if you really want to know more, let me bring in the expert from Cisco. Hi Kevin.

**Kevin:** Hey Sam.

**Sam:** Hi this is Andy. Can you tell him a bit more about the 3750s?

**Kevin:** Good to meet you, Andy.

**Andy:** Hey Kevin.

**Kevin:** Sure, so Sam has done a great job in talking about investment protection and Power over Ethernet, but I'd still like to mention a couple of other features. First of all, these are 10 Gigabit Ethernet switches. So, here down below, we have a switch with 48 10/100/1000 Ethernet access ports and two 10 Gigabit Ethernet uplinks.

**Andy:** 10 Gigabit, that sounds a little expensive, Kevin.

**Kevin:** Well, I understand your concern, but the great thing about these switches is that we've included two, what we call, Cisco TwinGig converter modules. These enable you to convert those 10 Gigabit Ethernet uplink into dual 1 Gigabit Ethernet uplink. That way you can deploy 1 Gigabit Ethernet today and then as your needs change over time, you can convert to 10 Gigabit Ethernet as and when you need to.

**Andy:** Ok, that sounds like a great story. Can you show me how that works?

**Kevin:** Sure can. You have a switch here with 48 10/100/1000 Ethernet access ports and in the top slot here, top X2 10 Gigabit Ethernet slot, I have a 1 Gigabit Ethernet SFP. And to change it to 10 Gigabit Ethernet, I simply pull out that 1 Gigabit Ethernet SFP, I remove the Cisco TwinGig converter module, and I insert a 10 Gigabit Ethernet optic module. There, now we have 10 Gigabit Ethernet in that uplink. We like to call that our 10-second, 10 Gigabit Ethernet upgrade.

**Andy:** Ok, that's believable, but how does that 10 Gig interface effect performance of the switch, or does it?

**Kevin:** That's a great question, Andy. As I mentioned, we have 48 10/100/1000 ports, plus two 10 Gigabit Ethernet uplinks, that's a total of 68 Gigabit per seconds performance; it's all wire speed. And I'd also like to point out another feature of these new switches. We've introduced a new redundant power system 2300. The redundant power system provides power protection to the switch in case the internal power supply of the switch fails or it can also be used in case a power supply sourced switch fails, the RPS can then provide power and you have seamless operation. I can demonstrate that here, by shutting off power to the switch. So, here I've shut off power to the switch. You can actually see that the LED here is start blinking showing that its own power supply is no longer providing power. In fact, the RPS light here is blinking, showing that it is providing power to the switch. The great thing about this RPS, is that if power resumes, suppose you replace the power supply with the good power supply if the power supply itself has failed, or simply in this case, if the power source comes back online, it takes a moment, but the internal power supply of the switch returns, you can see we have a green light here, and then the green light on the RPS stops blinking it went into standby mode, ready to protect the switch if and when the power supply of the switch stops.

**Andy:** So, if I understand you correctly, what the 3750 does is it helps me with investment protection in two separate ways: the first one, is that it allows me to take my existing 3750s and stack them with the new switches.

**Kevin:** That's exactly right, Andy.

**Andy:** Ok, and the second way would be that I'm able to take this 10 Gig, 10-Second upgrade; I'm able to take 1 Gig port and convert them to 10 Gig, when I'm ready.

**Kevin:** That's also correct. And it's a great way, with these new switches to add 10 Gigabit Ethernet to an existing stack of 3750 series switches.

**Andy:** Ok, and I would imagine that the training that my employees have on the existing 3750, this box runs very similarly.

**Kevin:** That's exactly, right. And another keypoint again, is the PoE, it provides 48 ports of PoE, so that's 15.4 watts on every port.

**Andy:** Well, Kevin, I think I found the star of the show, here, so no need to look for any film stars in Cannes today.

**Kevin:** Exactly!

**Andy:** Thank you very much.

**Kevin:** Thanks a lot, Andy!



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