

## Software Activation and Licensing

**Andy:** Hello, everyone. I'm Andy Gremett, Product Marketing Manager in Network Systems at Cisco. Thanks for tuning in to this edition of our online 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 cover software activation for the new Catalyst 3750-E and 3560-E Series Switches.

Joining us remotely today is one of Cisco's product managers for the Catalyst desktop switches, Scott Lennartz. Welcome, Scott.

**Scott:** Thanks, Andy. Glad to be here.

**Andy:** So, Scott, software activation and the IOS image that ships on the switch has changed for the new E Series Switches, hasn't it?

**Scott:** Yes, Andy, you're right. We now ship one universal image with every switch. This universal image contains all software features, unlike the past, where we had different image types for different feature sets.

Today, in terms of which features are enabled when customers receive their new switch, the software feature set they ordered will be activated in the factory and ready to use out of the box.

When customers want to upgrade to a different feature set, they purchase a PAK, or product activation key, which then generates a license file. Installing the license file activates the feature set of their choice.

**Andy:** Have the feature sets changed, or are they still IP Base, IP Services, and Advanced IP Services?

**Scott:** The feature sets are the same as before and include IP Base, which includes Layer 2 forwarding and basic L3 routing with EIGRP stub. Then there's IP Services, which has IP Base included, plus advanced Layer 3 routing such as OSPF and multicast routing. And finally, there's Advanced IP Services, which includes everything in IP Services and also IPv6 routing.

And it is important to remember that IOS versions can be upgraded without affecting the current license.

**Andy:** What are the benefits of moving to this new licensing scheme?

**Scott:** Licensing can remove the need for audits, which can be expensive and require extra manpower. If you use Cisco's License Manager, you can maintain an up-to-date inventory of the IOS versions and feature sets running on your switches. This information can be really helpful if you need to replace a switch or do a networkwide upgrade. So there are definitely some advantages to the new licensing approach.

**Andy:** How do I go about upgrading the software feature set, and will licensing change the current process?

**Scott:** The upgrade process has changed, but there are four basic steps to upgrading your software license. First, purchase a product activation key for the type of license you want. Second, you submit that key and the switch's unique device identifier (UDI) to Cisco's online license portal. The license portal will return to you a license that you install on the switch, and then you reboot the switch to enable the new feature set.

**Andy:** If I have to ship the switch back for repair, how can I make sure that the replacement switch will have the correct software license?

**Scott:** There are a couple of things to keep in mind regarding RMAs and license transfer. Whether you get a replacement switch or use a spare, you need to make sure it has the license you want. If the replacement switch doesn't have the license you need, you'll need to transfer the license from the old unit to the replacement. There's several pieces of information you need to transfer a license.

First, you need to have a valid service contract number with Cisco. Second, you need to have information regarding the switch you want to return, specifically the product identifier, which is the model of the switch, and the serial number of the switch, and then you need that same information for the new replacement. Again, the product identifier or model and the serial number of the replacement switch.

You can find the product ID and serial number information printed on the back of each switch. Cisco also has network management solutions to maintain this inventory information electronically.

**Andy:** This is great information. So, regarding the license file, where is it stored, can I view it, and actually, will I need to view it?

**Scott:** The license file is stored in a special area of the flash memory to protect against accidental deletion. You can use the CLI to install, view, and remove software licenses. You can also use SNMP-based network management tools to do the same thing. If you have a large network, the Cisco License Manager can discover and manage licenses for up to 8000 switches. The Cisco License Manager can be used standalone or integrated with CiscoWorks.

**Andy:** If I have stack of 3750-Es, do I need to use the same level of license on every switch?

**Scott:** While it is possible to operate a stack with mixed licenses, by using the same level of license on each switch in the stack, you ensure that failover and image management work as designed. So, it is highly recommended to use the same license across the stack.

**Andy:** So, which switches does the software activation process apply to?

**Scott:** This process applies to the Catalyst 3750-E and 3560-E switches.

**Andy:** This is great. Thanks for talking to us about this new way of licensing software. Scott, are there documents that I can read to get more information on this?

**Scott:** Yes, we have materials that address both technical issues and business benefits. Go to <http://www.cisco.com/go/3750-E>.

**Andy:** Thank you, Scott. Well, that wraps it up for today. If you would like to provide comments about this session or submit ideas for upcoming episodes, please go to <http://www.cisco.com/go/switching> and then just find the podcast URL. Thanks for listening, everyone. Stay tuned for another session on the latest in switching news.

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