Cisco Software Activation: Channel Partners Guidelines for Managing Software Activation

Cisco® IOS® Software is covered by a right-to-use license, with each license conferring the right to use Cisco IOS Software on a single device. Traditionally Cisco has not tracked licenses or provided activation processes for its software – usage automatically constitutes acceptance of the license agreement and validates the license for the customer. Cisco IOS Software licenses are nontransferable between end users.

A new approach to software activation makes it easier for Cisco channel partners to offer trials of new features, simplify software upgrades and feature deployment, and reduce software inventories. The new approach is initially being implemented on Cisco Catalyst® 3750-E and 3560-E Switches and Cisco 860 and 880 Integrated Services Routers and is designed to fit in with channel partners’ existing business processes. By starting with new products, partners will be able to integrate the new software activation model into their processes. This document provides an overview of new software activation guidelines, as well as an explanation of several new processes.

Overview

Customers are requesting easier ways to track their software systems, add service features, and upgrade images. Helping customers manage these tasks often requires channel partners to stock large inventories of software packages and perform onsite visits to install new capabilities.

With the new software activation model, each network device type has a universal Cisco IOS Software image already installed. The universal image contains all software features available for the device and the software version – all in one binary. A software activation license, preinstalled in the device, activates specific functionality that the customer orders. Each software activation license is unique to a specific device and functions only with that device.

Software activation licenses remain active for the duration of the Cisco IOS Software right-to-use license. If the software license is perpetual, the software activation license key will never expire. For a Cisco IOS Software feature set license, a new software activation license key is needed only when upgrading to new feature sets. For example, advancing a device from the IP Base feature set to IP Services requires a new software activation license. However, simply upgrading software images for maintenance purposes, from 12.2(35)SE to 12.2(45)SE for example, does not require a new license. When Cisco IOS Software is booted, it examines the software activation license key installed on the device and activates the appropriate feature set.

Increase Upsell with Simpler Trials

With software activation, channel partners can greatly simplify equipment trials by obtaining trial licenses from the Cisco.com portal. Customers can try the system or new features for 60 days using the temporary license.
Simplify New Feature and Software Upgrade Purchases
Software activation license keys activate new features, eliminating the need for channel partners to perform multiple site visits or deliver multiple equipment configurations.

Customers Can Pay as They Grow
Channel partners can minimize or eliminate site visits when upgrading customers’ software to activate new features and capabilities. For example, Cisco Unified Communications 500 Series for Small Business with support for 8 Cisco IP Phones can be upgraded to support 16 Cisco IP Phones by installing a new software activation license key, which can be sent using e-mail to the customer or applied remotely over the Internet.

Reduce Upgrade Inventory
Software activation keys for most products can be delivered instantly, using e-mail. eDelivery eliminates the need for channel partners to stock software upgrades, reducing inventory costs.

Increased Customer Engagement
The new Cisco software activation process encourages customers to work with the channel partner to purchase and activate software before it is downloaded and used. Channel partners have an opportunity to offer additional services.

Channel Partner Processes and Software Activation Workflows
Ordering
When ordering new devices, channel partners specify which feature sets to make available on each system. For new device purchases, Cisco manufacturing preinstalls the appropriate software activation license keys, based on the order. When ordering software feature upgrades, Cisco ships a proof-of-purchase token called a Product Authorization Key (PAK). A PAK provides the right-to-use license but is not activated on a specific device. Customers can receive PAKs electronically, through eDelivery, or through physical paper delivery, either directly through the mail or from the channel partner. After receiving the PAK, the customer or channel partner redeems it and activates a unique software activation license key on a specific device. The license key activation process can be performed in minutes online at Cisco.com or automated with optional Cisco License Manager software.

With PAK eDelivery, which will be available in June 2008, channel partners do not need to keep upgrades in their inventories. They simply order PAKs when customers need them. Partners can easily track all of their electronically delivered PAKs through the Cisco.com portal, making it easier to determine which customers have specific devices and feature sets for future up-selling opportunities. Partners can also encourage customers to try new functionality using evaluation licenses and later convert them to permanent licenses.

Fulfillment
When a customer wants to purchase a new system or new capabilities for a device through a channel partner, there are two fulfillment models: customer activation or partner activation.

Customer Activation
The channel partner provides the PAK to the customer, and the customer uses the PAK to obtain the software activation license key using the device’s built-in “call home” capability, the Cisco.com portal, or the Cisco License Manager software. Cisco License Manager is a free application that
can be quickly downloaded from Cisco.com and used to accelerate license deployment, monitor license activations and inventory, and easily obtain new licenses. Cisco License Manager is not required for software activation, but it can simplify activation for large installations containing many licensed devices. With the customer activation model, PAKs can be stocked by the channel partner in inventory or ordered and obtained when the customer order arrives.

Partner Activation
The channel partner orders the device or software and receives one or more PAKs. Based on their business models, channel partners may choose to add value by redeeming the PAKs and activating specific license keys on customer-ordered devices. After redeeming a PAK, the channel partner can either:

- Burn the software activation license key on CD or DVD media and ship it with the hardware to the customer, without opening and powering on the device.
- Install the software activation license key on the device before shipping it to the customer.

For cases where only upgrades are purchased and no new device is ordered, the channel partner can:

- Redeem the PAK from the Cisco.com portal and install the software activation license key remotely on the customer’s system through a secure VPN connection
- E-mail the license to the customer, who can install it on the device

Multitier Distribution
Channel partners can choose from several stocking strategies, depending on which strategy best complements their businesses for distributing Cisco products:

- Distribution partners may stock a set of devices with supported feature sets installed. For example, they can stock two kinds of Cisco 860 Integrated Services Routers, one with an Advanced Security license installed and another with Advanced IP Services. Based on the channel order, they can ship the appropriate device with the software activation license key preinstalled.
- Distribution partners may stock devices with the Cisco IOS Software IP Base license installed and stock software upgrade PAKs separately. Upgrade PAKs can then be applied to, or shipped with, basic devices as necessary.
- Channel partners may also use the fulfillment methods described above.

Replacing a Device Using Return Materials Authorization
Since unique software activation license keys are physically stored on each device, those keys must be logically transferred from a defective device and physically reactivated on the replacement device – a process called “rehosting.” Channel partners that provide RMA replacement devices must also now rehost the license. Cisco has created a simple, online process for partners to transfer or rehost licenses of a defective device:

1. Determine the product ID and serial number of the device to be returned and the replacement device.
2. Go to the license portal at Cisco.com and enter these numbers and, optionally, an RMA number into the “Register for an RMA a License” tool at [http://www.cisco.com/go/license](http://www.cisco.com/go/license).
3. The license portal automatically determines the licenses associated with the defective device and issues new software activation license keys for the replacement device.

4. The partner simply installs the new key or keys on the replacement device when replacing hardware located on a customer’s premises.

Channel maintenance providers can choose from several rehosting models. They can:

- Obtain the RMA replacement licenses before going to the customer premises. In this case, the channel partner must obtain the failed device’s product ID and serial number in advance, possibly by requesting the information when the trouble ticket is opened.

- If the product ID and serial number of the failed device is unavailable until the site visit, the partner may obtain the replacement software activation license key through the Cisco.com portal while onsite. An Internet connection is required to use this method.

- If the product ID and serial number are unavailable or no Internet connectivity is available onsite, the channel partner can still enable the required feature sets by activating the temporary license built into all Cisco IOS Software images. The partner has 60 days to obtain the permanent software activation license key and install it on the replacement device. When the 60-day period expires, the device will continue to operate normally until rebooted. After the reboot, the device will default to the original functionality before the temporary license was activated. For unusual circumstances, the Cisco Technical Assistance Center (TAC) can provide an extension license for longer trials.

**Note:** Cisco License Manager can be used to track temporary licenses. Customers can also track their licenses with network management systems using syslog or Simple Network Management Protocol (SNMP).

**Simplifying Asset Management with Cisco License Manager**

An important element of the new Cisco software-licensing model is improved asset management using Cisco License Manager. In addition to the license information, Cisco License Manager captures the feature part number ID, license features, and license quantities, and records them for future tracking. As partners deploy new licenses for customers, they can choose which feature sets to activate simply by selecting checkboxes that Cisco License Manager uses to describe which feature sets are authorized for activation on each relevant network device. For example, a PAK may contain 10 items, but the customer only wants to deploy two now. The partner can do this with a single click and install two feature set upgrades. Cisco License Manager will update its inventory to reflect the two feature sets that have been activated, as well as the eight that have not.

Cisco License Manager works in the following way:

- With a single click, Cisco License Manager identifies devices on the network by IP address, automatically locating each and establishing a secure connection with the license agent on each device.

- Cisco License Manager displays the devices in the network and gathers the licensing information for each, saving it in the license management database. The information gathered includes which licenses are deployed on the devices, as well as other licensable features on each device that have not been activated yet.

- License information for all devices can be easily browsed or generated in a Device Summary Information report.
Cisco License Manager is installed on a server and can remotely manage software activation and licenses for various customer networks. With access control lists on devices and PAKs, Cisco License Manager can isolate one customer’s network information from that of other customers, helping enable channel partners to securely build and track software asset inventories for their customers. Software license management can provide an opportunity for channel partners to deliver added value for customers and enhance customer relationships.

**Automating Software Activation with Cisco License Manager**

Cisco License Manager can accelerate software license and feature set activation by automating the process – for one device or up to 30,000 devices:

1. When the purchased PAK is received, the partner enters it into Cisco License Manager.
2. Cisco License Manager sends the product IDs and serial numbers of the relevant devices, together with the PAK, to the Cisco licensing system over a secure connection.
3. Cisco returns the appropriate license files to Cisco License Manager.
4. Cisco License Manager automatically installs the licenses on the devices, or can store the license in its inventory.

**Virtualizing Management for Multiple Customers**

Cisco License Manager can significantly simplify channel partners’ abilities to manage licenses for multiple customer installations. By “virtualizing” or separating views by customer, partners can quickly and easily check the status of licenses, verify deployment, monitor expiration dates of temporary licenses, identify unused features, and inventory PAKs and licenses for all of their customers. They can even provide their customers with access to Cisco License Manager for secure viewing of their software assets and PAKs.

**Summary**

The new Cisco software activation process will help channel partners to better manage the software licenses and feature sets deployed in their customers’ networks. At the same time, the process offers new opportunities for channel partners to sell additional software and management services. Cisco License Manager can play a vital role in establishing software license management best practices and streamlining license management for large numbers of devices across diverse networks.

For more information about Cisco IOS Software activation, please visit [www.cisco.com/go/sa](http://www.cisco.com/go/sa).