

# Cisco 7200 and 7500 Series Routers

## Software, Feature, and Feature Upgrade Licenses

### Introduction

Cisco IOS<sup>®</sup> Software on the Cisco 7200 and 7500 Series offers three distinctly different types of software licensing. This document describes the differences between software licenses, software feature licenses, and software feature upgrade licenses as well as when to order them, how they are used, and how they have been combined and simplified.

### Cisco IOS Software Licenses

Cisco IOS Software License is commonly referred to as *Cisco IOS Software*. This type of license includes the right to use a particular software release and feature set on one router. For example, the Cisco IOS Release 12.2(7)T Enterprise feature set for Cisco 7500 series platform, ordered as S75A-12207T, corresponds to the software image called rsp-jsv-mz.12207T.

### Cisco IOS Software Feature Licenses

Another type of license, Cisco IOS Software Feature License, is commonly referred to as a *Feature License*. In some cases, additional value-added functionality is provided in software images but not covered by the “base” Cisco IOS Software License. The right to use these features is offered through a feature license. For example, to use NetFlow Switching on a Cisco 7200 series platform, the WAN Packet Protocol/NetFlow Feature License, FR-WPP72, is required.

**Note:** A feature license conveys the right to use a feature, but it cannot add a feature to a software release that does not support it. For example, purchasing a WAN Packet Protocols/NetFlow license for software release 11.0 will not *upgrade* the software to support NetFlow. Choose a software release that supports all required features, then choose any necessary feature licenses.

Examples of feature licenses and the functionality rights they include are listed in Table 1. A complete listing of feature licenses available on the 7200 and 7500 series platforms are listed in Tables 2 and 3 respectively.

**Table 1** Feature Licenses and Functionality Included

WAN Packet Protocols/NetFlow	Interdomain Routing/MPLS	Broadband User Services
ATM DXI SMDS over ATM X.25 Switching NetFlow Switching) CIP Support SNA Support TCP/IP Offload	Tag Switching/MPLS	PPPoA/PPPoE PPPoEoE/PPPoEoVLAN RBE (Route Bridged Encapsulation) PPPoA VPI/VCI Acc PPPoA/PPPoE Auto Detect L2TP Scalability and Multi-Hop

**Table 2** Feature Licenses Available on the 7200 Series Platform

Product Code	Description
FR-WPP72	Cisco IOS 7200 Series WAN Packet Protocols/NetFlow License
FR-WPP72=	Cisco IOS 7200 Series WAN Packet Protocols/NetFlow License
FR-IR72	Cisco IOS 7200 Series InterDomain Routing/Tag Switching License
FR-IR72=	Cisco IOS 7200 Series InterDomain Routing/Tag Switching License
FR-BUS72=	Cisco IOS 7200 Series Broadband User Services (BUS) License
FR-CES72=	Cisco IOS 7200 Series CES Software License for ATM CES PA
FR72-AN2=	Cisco IOS 7200 Series DBConn

**Table 3** Feature Licenses Available on the 7500 Series Platform

Product Code	Description
FR-WPP75	Cisco IOS RSPx Series WAN Packet Protocols/NetFlow License
FR-WPP75=	Cisco IOS RSPx Series WAN Packet Protocols/NetFlow License
FR-IR75	Cisco IOS RSPx InterDomain Routing/Tag Switching License
FR-IR75=	Cisco IOS RSPx InterDomain Routing/Tag Switching License
FR75-AN2=	Cisco IOS 7500 Series DBConn

### Cisco IOS Software Feature Upgrade Licenses

Customers who purchase “base” software licenses may wish to increase software functionality or a feature set at some point. For example, some customers with IP software may wish to upgrade to Enterprise. Similarly, some customers with Enterprise software may wish to upgrade to Enterprise with Firewall. The following examples illustrate the benefits of software feature licenses as well as how they are used to provide increased software functionality.



### Upgrade a Feature Set (Single)

If a customer purchased a 7200 chassis with Enterprise software, product code S72A-12203, Cisco IOS 7200 Series Enterprise, and now wants to upgrade to Enterprise with Firewall, the customer has one of two options.

With a valid maintenance contract, the customer may purchase the software feature license, FL72H=, Cisco IOS 7200 Series Firewall Upgrade, to upgrade from Enterprise to Enterprise with Firewall.

Without maintenance, the customer will need to purchase a new software license, product code S72AH-12203=, Cisco IOS 7200 Series Enterprise/FW/IDS, in order to upgrade from Enterprise to Enterprise with Firewall.

### Upgrade Feature Sets (Multiple)

If a customer purchased a 7200 chassis with IP software, product code S72C-12007XK, Cisco IOS 7200 Series IP, and now wants to upgrade to Enterprise/SNASwitch, the customer has one of two options.

With a valid maintenance contract, the customer will need to purchase the following two software feature licenses: Cisco IOS 7200 Series IP to Enterprise, FR72-C-A=, **and** Cisco IOS 7200 Series SNASwitch Upgrade, FL72-R1=. The first license upgrades from IP to Enterprise, and the second from Enterprise to Enterprise/SNASwitch.

Without maintenance, the customer will need to purchase a new software license, product code S72AR1-12110=, Cisco IOS 7200 Series Enterprise/SNASwitch, in order to upgrade from IP to Enterprise/SNASwitch.

Currently available feature upgrade licenses for the Cisco 7200 and 7500 series platforms are listed in Tables 4 and 5 respectively.

**Table 4** Feature Upgrade Licenses Available on the 7200 Series Platform

Product Code	Description
FR72-R-I=	Cisco IOS 7200 Series Layer 3 Switching to IP
FR72-R-BS=	Cisco IOS 7200 Series Layer 3 Switching to Desktop/IMB
FR72-R-A=	Cisco IOS 7200 Series Layer 3 Switching to Enterprise
FR72-C-BS=	Cisco IOS 7200 Series IP to Desktop/IBM
FR72-C-A=	Cisco IOS 7200 Series IP to Enterprise
FR72-BS-A=	Cisco IOS 7200 Series Desktop/IBM to Enterprise
FR72-40=	Cisco IOS 7200 Series 40 Bit Encryption
FR72-56=	Cisco IOS 7200 Series 56 Bit Encryption
FL72-H=	Cisco IOS 7200 Series Firewall Upgrade
FL72-K2=	Cisco IOS 7200 Series IPSEC 3DES Upgrade
FL72-L=	Cisco IOS 7200 Series IPSEC 56 Upgrade
FL72-R1=	Cisco IOS 7200 Series SNASwitch Upgrade
FL72-N-R1=	Cisco IOS 7200 Series APPN to SNASwitch Upgrade
FL72-K3Z=	Cisco IOS 7200 Series Secured Shell 56 Upgrade
FL72-K5Z=	Cisco IOS 7200 Series Secured Shell 3DES Upgrade

**Table 5** Feature Upgrade Licenses Available on the 7500 Series Platform

Product Code	Description
FR75-C-DS=	Cisco IOS RSPx Series IP to IP/IPX/IBM
FR75-DS-BS=	Cisco IOS RSPx Series IP/IPX/IBM to Desktop/IBM
FR75-DS-A=	Cisco IOS RSPx Series IP/IPX/IBM to Enterprise
FR75-C-BS=	Cisco IOS RSPx Series IP to Desktop/IBM
FR75-C-A=	Cisco IOS RSPx Series IP to Enterprise
FR75-BS-A=	Cisco IOS RSPx Series Desktop/IBM to Enterprise
FR75-40=	Cisco IOS RSPx Series Encryption 40 Upgrade
FR75-56=	Cisco IOS RSPx Series Encryption 56 Upgrade
FL75-K2=	Cisco IOS RSPx Series IPSEC 3DES Upgrade
FL75-L=	Cisco IOS RSPx Series IPSEC 56 Upgrade
FR75-APPN=	Cisco IOS RSPx Series APPN Upgrade
FL75-R1=	Cisco IOS RSPx Series SNASwitch Upgrade
FL75-N-R1=	Cisco IOS RSPx Series APPN to SNASwitch Upgrade
FL75-K3Z=	Cisco IOS RSPx Series Secured Shell 56 Upgrade
FL75-K5Z=	Cisco IOS RSPx Series Secured Shell 3DES Upgrade

**Obsolete Licenses**

As mentioned, Cisco has combined some feature licenses, deeming some of the earlier licenses obsolete. For example, NetFlow functionality is now included in the WAN Packet Protocol/NetFlow license, making the previous NetFlow licenses, FR-NF72 and FR-NF75, obsolete.

In the case of the Network Address Translation (NAT) licenses, this functionality is now included in the Cisco IOS Software licenses, and no additional feature licenses are required.

Obsolete feature licenses and their replacements are described in Table 4.

**Table 6** Obsolete Feature Licenses

Platform	License	Replacement
7200	FR72-NAT	Included with Base Cisco IOS License—No Feature License Required
7200	FR-NF72	Now Included in FR-WPP72
7500	FR75-NAT	Included with Base Cisco IOS License—No Feature License Required
7500	FR-NF75	Now Included in FR-WPP75

For any questions or comments regarding this document, please contact the [cs-7200@cisco.com](mailto:cs-7200@cisco.com) or [cs-7500@cisco.com](mailto:cs-7500@cisco.com) alias.



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