

# Cisco IOS Software Release 12.2(18)ZYA Cisco Catalyst 6500 Series Switches with Cisco Catalyst 6500 Supervisor Engine 32 PISA

PB468195

Cisco<sup>®</sup> IOS<sup>®</sup> Software Release 12.2(18)ZYA is for the Cisco Catalyst<sup>®</sup> 6500 Supervisor Engine 32 (Programmable Intelligent Services Accelerator (PISA) on Cisco Catalyst 6500 Series Switches.

#### Overview

The Cisco Catalyst 6500 Supervisor Engine 32 PISA, the next-generation supervisor engine for the Cisco Catalyst 6500 Series of modular switches, delivers superior and integrated deep packet inspection, application awareness, security, availability, and manageability services for the networks of small and medium-sized businesses, enterprises, and service providers. This supervisor engine is ideal for securing campus access networks, converged services, MAN/WAN applications, and small/medium backbone functions. The PISA on the Cisco Catalyst 6500 Supervisor Engine 32 PISA provides hardware acceleration of intelligent services such as network-based application recognition (NBAR) and flexible packet matching (FPM) at multigigabit speeds, in addition to the management and control plane functions traditionally provided by the Multilayer Switch Feature Card (MSFC).

Cisco IOS Software Release 12.2(18)ZYA provides significant service enhancements and several innovative features to the Cisco Catalyst 6500 Supervisor Engine 32 PISA, including:

- Extending PISA NBAR and FPM services from Layer 3 routed wiring closet deployments to Layer 2 wiring closet deployments.
- Software integration with Cisco Catalyst 6500 Series Firewall Services Module (FWSM) to provide application-aware firewall policy enforcement.
- URL filtering to allow customers to enforce Internet usage policy at enterprise WAN or branch offices. This helps enterprises to improve employee productivity, conserve network bandwidth, and mitigate legal liability.
- Enhanced Power over Ethernet (PoE) support.
- New NBAR packet description language modules (PDLMs) covering more than 30 applications and network protocols including instant messaging applications such as Yahoo! Messenger, MSN and AOL messenger; enterprise applications such as Microsoft Outlook, Cisco Unified IP phones and PC-based Unified Personal Communicators, and Common Internet File System (CIFS); healthcare applications such as DICOM and HL7; and financial applications such as FIX; network protocols such as VNC, ISAKMP etc.

#### **Hardware Support**

There is no new hardware support added to Cisco IOS Software Release 12.2(18)ZYA. Cisco IOS Software Release 12.2(18)ZYA supports all of the Cisco Catalyst 6500 Series hardware previously supported in Release 12.2(18)ZY.

## **New Software Features**

Cisco IOS Software Release 12.2(18)ZYA supports all of the software features previously supported up to Release 12.2(18)ZY2 on the Cisco Catalyst 6500 Supervisor Engine 32 PISA. In addition, Release 12.2(18)ZYA adds the software features listed in Table 1.

For more detailed information, please refer to the Cisco IOS Software Release 12.2(18)ZYA release notes, available at the links within the "For More Information" section.

 Table 1.
 Software Features of Cisco IOS Software Release 12.2(18)ZYA

Software Feature	Description	
Layer 2 NBAR and FPM	This feature allows PISA NBAR and FPM services to be applied to access Layer 2 wiring closet access deployments with Layer 2 interface configurations such as user access ports, trunk ports, Layer 2 VLAN, and EtherChannel <sup>®</sup> ports.	
Application-aware firewall policy enforcement	This feature provides solution integration between the Cisco Catalyst 6500 Supervisor Engine 32 PISA and the Cisco Catalyst 6500 Series FWSM. It allows the FWSM to define an enhanced application-based access control policy by using the stateful application classification information provided by the Cisco Catalyst 6500 Supervisor Engine 32 PISA.	
	With this integration, the Cisco Catalyst 6500 Supervisor Engine 32 PISA recognizes applications at the campus access edge and tags the application information along with the IP packets. The upstream FWSM is then able to apply access control policy based on this application knowledge provided by the PISA.	
URL filtering	URL filtering allows customers to enforce Internet usage policy by validating the users' Internet requests against corporate policies defined in an external policy server from WebSense, Inc. Additional information about WebSense can be found online at <a href="http://www.websense.com">http://www.websense.com</a> .	
New NBAR PDLMs	New NBAR PDLMs are introduced with Release 12.2(18)ZYA. These PDLMs include:	
	<ul> <li>Instant messaging applications such as Yahoo! Messenger, MSN and AOL messenger.</li> <li>Enterprise applications such as Microsoft Outlook, Cisco IP phones and PC-based Unified Personal Communicators, and Microsoft CIFS protocol</li> <li>Healthcare applications such as DICOM and HL7</li> <li>Financial applications such as FIX</li> </ul>	
	<ul> <li>Recreational applications such as YouTube and Doom</li> </ul>	
	<ul> <li>Network protocols: klogin, kshell, Ora-srv, sqlexec, clearcase, appleqtc, rcp, isakmp,lbm- db2,lockd,npp, Microsoft-ds, VNC, echo, systat, daytime, chargen, time, lsi-gl, rtelnet, xdmcp, nickname,Corba-iiop, tacacs</li> </ul>	
FPM enhancements	Increased FPM search window size from 32 bytes to 128 bytes	
Enhanced PoE support	Support for Enhanced PoE, a Cisco extension of the IEEE 802.3af standard that delivers more than 15.4 watt per port. This allows the Cisco Catalyst 6500 system with Supervisor Engine 32 PISA to support the latest technologies such as Cisco Aironet 1250 Series wireless access points.	

## **Software Ordering Information**

Table 2 provides ordering information.

#### Table 2. Software Ordering information

Product Number	Description	Image
S3P3IBL-12218ZYA	Cisco CAT6000-SUP32-PISA IOS IP BASE LAN ONLY	s32p3-ipbase-mz
S3P3IBK9L-12218ZYA	Cisco CAT6000-SUP32-PISA IOS IP BASE SSH LAN ONLY	s32p3-ipbasek9-mz
S3P3IS-12218ZYA	Cisco CAT6000-SUP32-PISA IOS IP SERVICES	s32p3-ipservices_wan-mz
S3P3ISK9-12218ZYA	Cisco CAT6000-SUP32-PISA IOS IP SERVICES SSH	s32p3-ipbasek9-mz
S3P3AIK9-12218ZYA	Cisco CAT6000-SUP32-PISA IOS ADVANCED IP SERVICES SSH	s32p3-advipservicesk9_wan-mz
S3P3ESK9-12218ZYA	Cisco CAT6000-SUP32-PISA IOS ENTERPRISE SERVICES SSH	s32p3-entservicesk9_wan-mz
S3P3AEK9-12218ZYA	Cisco CAT6000-SUP32-PISA IOS ADVANCED ENT SERVICES SSH	s32p3-adventerprisek9_wan-mz

# For More Information

For more information, see the Cisco Catalyst 6500 Series release notes at <a href="http://www.cisco.com/univercd/cc/td/doc/product/lan/cat6000/relnotes/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/lan/cat6000/relnotes/index.htm</a>.

The Cisco Catalyst 6500 Series configuration guide is available at <a href="http://www.cisco.com/en/US/partner/products/hw/switches/ps708/products">http://www.cisco.com/en/US/partner/products/hw/switches/ps708/products</a> installation and config uration guides list.html.



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