

# PRODUCT BULLETIN

## XOS V9.5.0.0

Crossbeam releases XOS V9.5.0.0 for the X45 and X80 X-Series Platforms. Crossbeam is also introducing new X-Series Platforms - the X20, X30, and X60 - that will expand the overall product line. The XOS V9.5.0.0 release adds support for these new platforms, new modules, and for many new advanced software features and applications.

### NEW X-SERIES PLATFORMS

Crossbeam is introducing three new X-Series Platforms that will be supported by the XOS V9.5.0.0 software release.

#### X20 AND X30 PLATFORMS

The X20 and X30 platforms are flexible, pre-configured solutions for customers who value the Crossbeam benefits, but with requirements for a 5 to 10-Gbps solution with limited future growth needs. The X20 is configured with a CPM-9600, APM-2030, and an NPM-20 installed, providing a 5Gbps backplane performance with ten 1Gbps physical interfaces. The X30 ships with the same CPM and APM modules and an NPM-30 installed, providing 10Gbps backplane performance with ten 1Gbps and two 10Gbps physical interfaces. Both platforms can be expanded with an additional APM-2030, which can be used to either increase capacity of a single application, or add a second application. The X20 and X30 ship complete and ready to deploy; customers only need to select the appropriate power cords and SFP/XFP transceivers.

#### X60 PLATFORM

The X60 platform provides Enterprise & Service Provider customers with a fully modular 7-Slot 80Gbps network security platform that can be used to deploy multiple applications simultaneously. The chassis is fully modular and can support a variety of Network and Application Processor Modules to fit the necessary application and environment; it can support up to two NPMs, five APMs and two CPMs (one slot supports either an APM or CPM). Desired modules must be ordered separately as well as power supplies and SFP/XFP transceivers.

### NEW X-SERIES MODULES

In addition to the new X-Series platforms, Crossbeam is introducing several new modules that will be supported by the XOS V9.5.0.0 software release.

#### APM-9600

The APM-9600 is a new Application Processor Module (APM) and it comes with dual hex-core CPUs, allowing a fully configured X80 system to apply a massive 120 processor cores to the customer's security needs. The APM-9600 is available in two memory configurations, 12GB or 24GB. Optional HDDs are also available.

The APM-9600 is required to support the new McAfee Firewall Enterprise solution. It also offers significant performance boost to Crossbeam's already industry-leading performance when used with Check Point Security Gateway, Sourcefire 3D IPS, and the other best-of-breed applications supported on the Crossbeam X-Series platforms.

#### APM-2030

The APM-2030 is a new Application Processor Module (APM) built specifically for the X20 and X30 platforms and supports all of the applications supported by the X-Series (except for the McAfee Firewall Enterprise). This module comes with dual quad-core CPUs, 8GB of on-board memory and a memory upgrade option (16GB). Optional HDDs are also available.

#### CPM-9600

The CPM-9600 is a new Control Processor Module (CPM) that is supported on all X-Series platforms. It is a technology refresh from the CPM-8600 product, providing a high speed quad-core processor, 16GB of on-board RAM, and dual SATA HDDs. The CPM-9600 supports all applications on the X-Series platforms; it is required to support the McAfee Firewall Enterprise.

#### NPM-8650-8G-S

This new version of the NPM-8650 has 8GB of on-board RAM, providing a significant increase of number of Concurrent Connections compared to the standard version of the NPM-8650. Existing NPM-8650 customers can upgrade to 8GB via a new Upgrade Kit (see product codes table below). Note that the new 8GB upgrade kit replaces the previous 4GB upgrade kit. Please refer to the X-Series Data Sheets for details on performance.

## **XOS V9.5.0.0 SOFTWARE FEATURES**

Refer to the XOS V9.5.0.0 Release Notes and the XOS Command Reference Guide for detailed information on new and changed commands and features.

XOS V9.5.0.0 contains many new software features which deliver on the Crossbeam commitment to enhancing customer value. Key features include:

### **ALARM & EVENT MANAGEMENT INFRASTRUCTURE ENHANCEMENTS**

The extensive alarm and event signaling capabilities of XOS have been brought together in a centralized infrastructure to improve trouble-shooting and problem resolution activities. Customers can now receive consistent and complete alarm and significant event notifications through their interface of choice - be it the CLI, GEM (Green-Light Element Manager), SNMP or system logs. Individual alarm information also includes detailed trouble-shooting and repair advice taken directly from Crossbeam's engineering and support experts.

### **DBHA SYSTEM CONNECTIVITY MONITORING ENHANCEMENTS**

Crossbeam's Dual-Box High-Availability (DBHA) solutions have been successfully deployed by many customers for disaster avoidance and/or recovery purposes. The DBHA solutions are critically dependent on the status of the network connectivity and communications between the systems. These enhancements provide customers detailed status information on all active, standby, and back-up communication paths between DBHA systems. Additionally, customers are immediately notified of any changes detected in the status of these paths using the new Alarm & Event Management Infrastructure.

### **DBHA FAILOVER ON LAG (LINK AGGREGATION GROUP) INTERFACE FAILURE**

Customers can now configure a minimum number of interfaces in a LAG group used in a DBHA deployment. The actual system (VRRP) priority is decremented if the number of active interfaces falls below this number.

### **NEW DATA MODEL AND CONFIGURATION OF INTERNAL CIRCUITS**

Crossbeam has changed the way internal circuits (required for serialized applications or internal sync circuits) are configured within XOS. The change is to align the terminology and configuration steps with those used for external circuits, thus providing consistency and improving ease-of-use.

## **GEM DATA VISIBLE VIA SNMP**

XOS V9.0.0.0 introduced the GEM Health Monitor application. All of the data visible through the GEM GUI will now be accessible via SNMP MIBs, improving the ability of XOS to integrate into various operational environments.

### **CIRCUIT/VND STATISTICS VISIBLE VIA SNMP (IF-MIB)**

As part networking device, the X-Series has always made external interface packet counts and statistics available through standard SNMP MIBs; with this new enhancement, customers will also be able to obtain circuit and vnd statistics using the same standard tools, providing better visibility to the traffic flowing through their networks.

### **APM RESETS WHEN MISSING HEARTBEATS AND/OR HEALTH POLLS**

This feature gives the customer additional control over system reactions to missed heartbeats and/or health polls. By allowing customer configuration of how much time to wait before resetting, XOS is able to prevent resets (and potential service impacting events) when the congestion causing the missed polls is momentary.

### **NUMERICAL USER NAME SUPPORT**

XOS V9.5.0.0 includes the ability to use numbers in User Names configured for CLI access. This seemingly simple enhancement provides significant operational value to customers in situations where numerical identification credentials (e.g. employee id numbers) are used, especially in an environment that utilizes automated processes with centralized user and account information (e.g. LDAP or RADIUS).

### **ENHANCEMENTS TO 'SHOW TECH-SUPPORT'**

XOS has a 'show tech-support' command that gathers system information for the purposes of trouble-shooting issues; this command is a one-touch step that can be used when Crossbeam or partner Support personnel have been called on to provide assistance. This command has been enhanced with additional show command output (items that have repeatedly been found to help problem resolution). APM/Unix related files/logs have also been added to "show tech-support". Finally, the output of the 'show tech-support' command will be written to a tar.gz file, along with all log files, for easy access.

### **HP NNM INTEGRATION SUPPORT**

Crossbeam, recognizing that many customers use the HP Network Node Manager solutions for network management, has worked with HP to provide a closer integration between XOS V9.5.0.0 and HP NNM. This provides integrated discovery, topology mapping, and monitoring of X-Series platforms in customer networks. Additionally, the integration allows Crossbeam's GEM to be launched directly from NNM. The HP Network Node Manager Integration Kit is available free-of-charge from Crossbeam.

## XOS V9.5.0.0 SUPPORTED APPLICATIONS

### NEW APPLICATIONS AVAILABLE ON XOS V9.5.0.0 AT THE TIME OF RELEASE:

McAfee Firewall Enterprise V8.1  
Check Point Security Gateway R70 HCC (High Concurrent Connections)

**MCAFEE FIREWALL ENTERPRISE V8.1** provides the latest Identity and Application Awareness, Global Threat Intelligence and integrated Web filtering, A/V, IPS and SSL Encryption.

**CHECK POINT SECURITY GATEWAY R70 HCC** is a variation of R70 designed to operate with a 64-bit operating system; on Crossbeam, this provides extreme scaling of the number of concurrent connections supported. All other standard R70 features are supported. NOTE: this application will not be Generally Available from Check Point. Availability to customers will be controlled upon evaluation of customer requirements. Please contact your Crossbeam representative for more information

### OTHER APPLICATIONS AVAILABLE ON XOS V9.5.0.0 AT THE TIME OF RELEASE:

Check Point Security Gateway R71  
Check Point Security Gateway R70  
Check Point Security Gateway R70 IPv6 Pack  
Check Point VPN-1 NGX R65 (not supported on the APM-9600)  
Check Point VPN-1 NGX R65 IPv6 Pack (not supported on the APM-9600)  
Check Point VPN-1 VSX NGX R67  
Check Point VPN-1 VSX NGX R65 (not supported on the APM-9600)  
Check Point Firewall-1 GX 4.0 (not supported on the APM-9600)  
Sourcefire 3D Sensor 4.9.1 (not supported on the APM-9600)  
Imperva SS 7.0  
Sophos PureMessage 5.6  
IBM Proventia N-IPS 2.0 (not supported on the APM-9600)

### OTHER APPLICATIONS THAT WILL BE AVAILABLE ON XOS V9.5.X.X WITHIN 1-TO-2 QUARTERS OF RELEASE:

Check Point Security Gateway R75  
SourceFire 3D Sensor 4.10  
FaceTime USG 4.2  
Imperva SS 8.0

## SUPPORTED HARDWARE:

### XOS V9.5.0.0 MODULE SUPPORT

**NOTE:** Crossbeam has recently introduced a new brand color scheme for aesthetic purposes only; the table below is accurate irrespective of the module branding (i.e. face plate color is not an indicator of support/compatibility).

Module Type	Family	XOS V8.1.0.0	XOS V8.5.0.0	XOS V9.0.0.0	XOS V9.5.0.0
NPM	8200	✓			
	8600	✓	✓	✓	✓
	8620/8650		✓	✓	✓
	20/30				✓
APM	8400	✓			
	8600	✓	✓	✓	✓
	8650		✓	✓	✓
	9600				✓
	2030				✓
CPM	8400	✓			
	8600	✓	✓	✓	✓
	9600				✓

## XOS V9.5.0.0 CHASSIS SUPPORT:

**NOTES:** Crossbeam has recently introduced a new brand color scheme for aesthetic purposes only; the table below is accurate irrespective of the chassis branding (i.e. chassis color is not an indicator of support/compatibility).

An X40 chassis can be upgraded to an X80. Please contact your Crossbeam representative for more information.

Chassis Type	XOS V8.1.0.0	XOS V8.5.0.0	XOS V9.0.0.0	XOS V9.5.0.0
X20				✓
X30				✓
X45 AC/AC-2	✓			
X45 AC-3	✓	✓	✓	✓
X60				✓
X80 - AC	✓	✓	✓	
X80 - AC-2 and AC-3	✓	✓	✓	✓
X80 DC	✓	✓		
X80 DC-2/-3	✓	✓	✓	✓
X40 all versions	✓			

## XOS V9.5.0.0 CHASSIS AND MODULE INTEROPERABILITY:

Module Type	X40 all versions	X45 AC/AC-2	X45 AC-3	X60	X80 AC and X80 DC	X80 AC-2 and AC-3	X80 DC-2 and DC-3	X20	X30
NPM-8600	See note 1		✓		✓	✓	✓		
NPM-8620	See note 2		✓	✓	✓	✓	✓		
NPM-8650	See note 2		✓	✓	✓	✓	✓		
NPM-20								✓	
NPM-30									✓
APM-8600	See note 1		✓		✓	✓	✓		
APM-8650 (see note 3)	See note 2		✓	✓	✓	✓	✓		
APM-9600 (see note 3)	See note 2			✓		✓	✓		
APM-2030								✓	✓
CPM-8600	See note 1		✓		✓	✓	✓		
CPM-9600	See note 2			✓		✓	✓	✓	✓

**Note 1:** Not all X40 chassis support these modules. Please contact your Crossbeam representative for more information.

**Note 2:** Support may be possible and will require an upgrade to an X80 via an X80 upgrade kit. Please contact your Crossbeam representative for more information.

**Note 3:** Use of the APM-8650 and APM-9600 may require older systems to have a fan tray upgrade and/or the use of air flow panels. Please consult the XOS V9.5.0.0 Release Notes and related Hardware Installation Guides.

## XOS V9.5.0.0 RELATED PRODUCT CODES:

Product code	Description
X20	X20 Chassis with Dual 1200W PSU. Includes 1 x NPM (10x1GE ports), 1xAPM-2030, 1xCPM-9600. (Power Cords to be ordered separately). Supports up to 5Gbps Performance. RoHS compliant
X30	X30 Chassis with Dual 1200W PSU. Includes 1 x NPM (10x1GE & 2x10GE ports), 1xAPM-2030, 1xCPM-9600. (Power Cords to be ordered separately). Supports up to 10Gbps Performance. RoHS compliant
X60	X60 Chassis (Supports only xPM-8650 and xPM-9600 modules.) (Power Supplies & cords must be ordered separately.) Supports 2 NPMs, 3 APMs (or 5 APMs if using only 1 NPM and 1 CPM), and 2 CPMs
APM-9600-2HCX-12G	APM-9600 - Two Hex Core Xeon CPUs and 12 GB DRAM. RoHS Compliant.
APM-9600-2HCX-24G	APM-9600 - Two Hex Core Xeon CPUs and 24 GB DRAM. RoHS Compliant.
APM-2030	APM-2030 - Additional APM module for the X20 and X30 products. Two Quad Core Xeon CPUs and 8 GB DRAM. RoHS Compliant.
APM96-UPG-1HDD	Single HDD for add on to an APM-9600
APM96-UPG-DIMM-24G	APM-9600 Memory Upgrade Kit. Qty 6 x 4 GB DIMMs. RoHS compliant
CPM-9600-2HDD-RAID1	CPM-9600 with 2 Hard Disk Drives in a RAID 1 configuration. Contains USB port, 1 x RJ-45 10/100/1000 port, and 2 x SFP Transceiver ports (SFPs sold separately). RoHS Compliant.
CPM96-UPG-1HDD-BLANK	Replacement Hard Drive (unformatted) for CPM-9600's. RoHS Compliant.
NPM-8650-8G-S	10 Gbps Network Processing Module with 8GB scty processor mem; 2x10 GE (XFP) ports; & 10x1 GE (SFP) ports. SFP/XFP xcvs must be ordered separately.
NPM86-UPG-DIMM-8G	NPM-8650 8 GB security processor memory upgrade kit; 4 x 2G DIMM
X60-SPR-FTRAY	X60 Fan Tray Replacement Module with high performance fans. RoHS compliant.
X80-SPR-FTRAY-4	X80 and X80-S One Fan Tray Spare/Replacement Module with high performance fans. Replaces Top or Bottom Fan Tray. RoHS compliant.
X80-SPR-FTRAY-UPG-4	X80 High Performance Fan Tray Upgrade Kit. Two trays included for top and bottom fan tray replacement. Required for APM-8650 and APM-9600 modules. RoHS compliant.
XS-AFP-UPG-ASSY	Qty 1 Air Flow Panel Assembly (panel and slot cover). Required for X80 with APM-9600. Not needed for the X60 and X80-S as these chassis ship with Air Flow Panels
XS-AFP-UPG-PNL-5PACK	Qty 5 panel components of Air Flow Panel to fill 5 slots. To use with existing blank slot covers. Required for X80 with APM-9600. Not needed for the X60 and X80-S as these chassis ship with Air Flow Panels

## ABOUT CROSSBEAM

We improve the sophisticated networks of enterprises, government agencies, and service providers by architecting platforms that are more adaptable, high-performing, reliable, and secure.