

CROSSBEAM MANAGEMENT SOLUTION

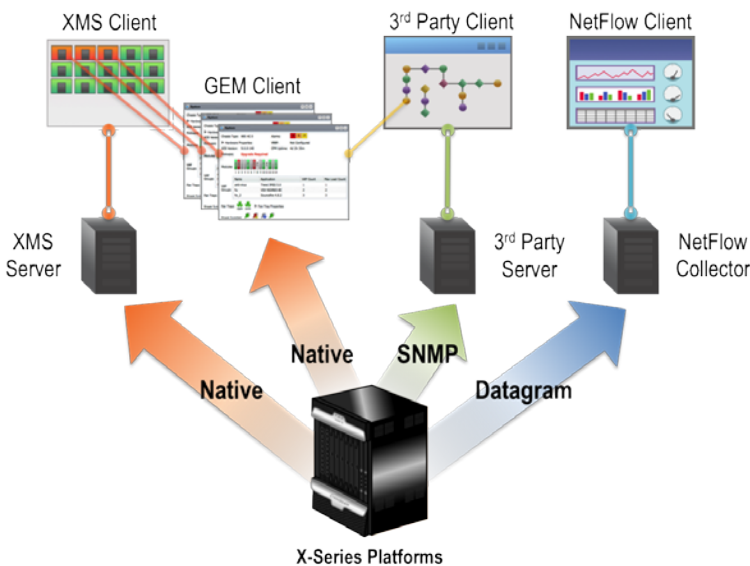
BENEFITS:

- Quickly adapt to change by easily upgrading, maintaining and configuring your X-Series infrastructure while minimizing errors
- Optimize the security infrastructure by immediately identifying where and when anomalies occur and the root cause, greatly reducing the time to resolution
- Lower Total Cost of Ownership (TCO) by understanding X-Series system properties to assure the highest performance and properly plan for future growth
- Extend the visibility of network management and NetFlow-based performance management systems leveraging your X-Series platforms as key data sources

TAKE CONTROL

Network security is not a part-time utility - it needs to run at optimal performance 24 hours a day, 7 days a week, 365 days a year. Crossbeam understands that in the rare instance that the security infrastructure experiences a performance anomaly, time is of the essence and IT needs a clear picture of the entire security infrastructure landscape, from platform to application, to identify the problem, diagnose the root cause and take steps to resolve the issue.

The Crossbeam Management Solution consists of the Crossbeam X-Series Manager System (XMS), Greenlight Element Manager (GEM) and the Command Line Interface (CLI) that includes the Automated Workflow System (AWS). XMS and GEM act in unison to enhance visibility and control across the entire X-Series infrastructure allowing IT organizations to more effectively recognize, diagnose and remediate performance-impacting issues.

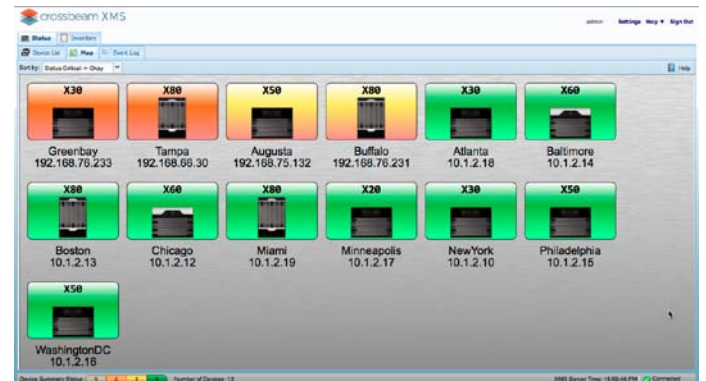


The Crossbeam X-Series Management Solution allows you to use the native XMS and GEM interfaces or fully integrate the X-Series Platforms as a data source within industry-leading network management systems and NetFlow-based performance management solutions.

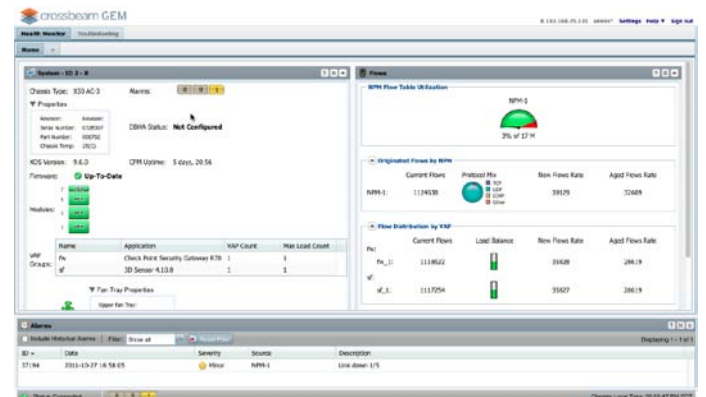
With visibility from the entire solution, to individual platforms, to modules, to flows and applications, the Crossbeam X-Series Management Solution delivers comprehensive insight into anomalous conditions delivering the who, what, when, where and how information needed to make precise and effective decisions that keep the Crossbeam X-Series infrastructure operating at peak performance.

The comprehensive view minimizes operational costs and improves efficiency by streamlining the process of configuring, auditing inventory, monitoring device health, troubleshooting and capacity planning. These streamlined logical workflows speed the process performing arduous tasks, freeing personnel to focus on securing the network and not maintaining the infrastructure.

The X-Series Management Solution can fully integrate X-Series Platforms as a data source within existing industry-leading network management systems and NetFlow-based performance management solutions to support companies network management strategies for end-to-end visibility.



Crossbeam X-Series Management System (XMS) provides a solution-level view of the entire X-Series infrastructure allowing you to quickly identify which platforms experience anomalous behavior. A single click allows you to contextually drill-down to the Greenlight Element Manager (GEM) for further investigation.



Crossbeam Greenlight Element Manager (GEM) provides a system level view with a "single pane of glass" perspective to all modules, flows and applications that reside on the specific platform.

KEY FEATURES	BENEFIT	SUPPORTING FUNCTIONS
Streamlined Configuration	<ul style="list-style-type: none"> Quickly adapt to change by easily upgrading, maintaining and configuring your X-Series infrastructure while minimizing errors 	<ul style="list-style-type: none"> Standard CLI with built-in automated workflow systems (AWS) simplifies common tasks Automatically upgrade software from XOS version 9.0 and beyond Compare current firmware with recommended versions and display the results Automatically update firmware Automatically prepare for roll back by backing up current XOS version Automatically return the X-Series platform to a previous version of XOS Install base application configurations Upgrade key applications
Monitoring and Troubleshooting	<ul style="list-style-type: none"> Optimize the security infrastructure by immediately identifying where and when anomalies occur and the root cause, greatly reducing the time to resolution 	<ul style="list-style-type: none"> Contextual trouble-shooting workflow easily moves from solution-level view to an individual-platform view, to flow, module or component views to quickly identify the source of anomalous behavior before it become critical The solution-level view displays all X-Series platforms by name or alarm state with visibility to device type, associated name and IP address The platform-level view displays type, status, key properties, installed module state, Virtual Application Processor (VAP) group metrics and fan and power status The flow-level view shows Network Processor Module (NPM) flow table memory utilization, current, new and aged flows, protocol mix, flow distribution by VAP group and historical flow utilization xPM-level views show key metrics for Network Processor Modules (NPM), Application Processor Modules and Control Processor Modules (CPM) including type, status, properties, uptime, XOS version, administrator status, synchronization state, network interface status, application status, CPU utilization, CPU load, core utilization, memory, disk usage and RAID status Alarm-level view identifies minor, major and critical alarms with anomaly description and probable cause
Inventory Auditing and Planning	<ul style="list-style-type: none"> Lower Total Cost of Ownership (TCO) by understanding X-Series element properties to assure the highest performance and properly plan for future growth 	<ul style="list-style-type: none"> Recognize component trends and properly plan for growth Average or peak flow utilization over time for current, new or aged flows by chassis or NPM by hour, day, week, month, quarter or year Average or peak interface utilization over time for NPMs or ports by hour, day, week, month, quarter or year Average or peak central processor unit (CPU) utilization over time for NPMs, CPMs or APM by hour, day, week, month, quarter or year Average or peak core utilization over time for APMs or CPMs by hour, day, week, month, quarter or year Average or peak memory utilization over time for NPMs, CPMs or APMs by hour, day, week, month, quarter or year Historical data can be exported for further analysis with the AWS.
Integrated Data Delivery	<ul style="list-style-type: none"> Extend the visibility of network management and NetFlow-based performance management systems leveraging your X-Series platforms as key data sources 	<ul style="list-style-type: none"> Integrate as a data source within third-party network management systems with support for SNMPv1, v2 and v3 for comprehensive network fault and performance monitoring View branded Crossbeam X-Series elements within HP Network Node Manager i (NNMi) maps Contextually drill down from third-party solutions to Crossbeam Greenlight Element Manager (GEM) Integrate X-Series Platforms as a data source into existing NetFlow monitoring solutions with support for NetFlow version v5, v9, v10

XMS SERVER REQUIREMENTS:

Processor	1GHZ, 64-bit architecture on the following processors: AMD64, EM64T and X86-64
Hard Disk Space	Minimum: 250MB Disk Space
Memory	Minimum: 1GB RAM
Centralized Processing Unit (CPU)	Minimum: 1GHz
Operating System	Red Hat Enterprise Linux v6 (RHEL6) or CentOS 6

XMS CLIENT REQUIREMENTS:

Processor	2GHZ, dual-core processor
Hard Disk Space	Minimum: 250MB Disk Space
Memory	Minimum: 2GB RAM (4GB RAM Recommended)
Supported Browsers	Microsoft Windows 7 or XP <ul style="list-style-type: none">• Google Chrome 13 (Recommended)• Mozilla Firefox 4.0 or above• Microsoft Internet Explorer 8 on Windows XP• Microsoft Internet Explorer 9 on Windows 7 Linux / CentOS 6 <ul style="list-style-type: none">• Google Chrome 13 (Recommended)• Mozilla Firefox 4.0 or above Macintosh 10.5 <ul style="list-style-type: none">• Firefox 4.0 or above• Safari
Screen Resolution	1024 x 768

GEM CLIENT REQUIREMENTS:

Processor	2GHZ, dual-core processor
Hard Disk Space	Minimum: 250MB Disk Space
Memory	Minimum: 2GB RAM
Supported Browsers	Microsoft Windows 7 or XP <ul style="list-style-type: none">• Google Chrome 13 (Recommended)• Mozilla Firefox 4.0 or above• Microsoft Internet Explorer 8 on Windows XP• Microsoft Internet Explorer 8 on Windows 7 Linux <ul style="list-style-type: none">• Mozilla Firefox 3.0 or above Macintosh 10.5 <ul style="list-style-type: none">• Firefox 3.0 or above
Screen Resolution	1024 x 768

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.