

The Jalasoft Smart Management Packs for Cisco Nexus deliver enterprise ready monitoring of your network environment. You can monitor your network proactively and be aware of any potential problems that might occur, verify the status of your interfaces and ports, CPU load, traffic and much more. All information is forwarded efficiently to Microsoft System Center Operations Manager which creates a one stop interface to see the status of your servers and network infrastructure.

Alerts and performance data are **visible in Ops Mgr** and will help you take action and prevent any downtime.

A large number of **predefined rules** are provided with the Jalasoft Smart Management Pack for Cisco Nexus. Installation is quick and simple and starting to monitor your network is just a matter of dragging and dropping the rules on the specific devices.

This is made possible through the use of Xian Network Manager, the platform that runs the Smart Management Pack; no complicated programming or scripting is needed. You can also configure **syslog filters** to forward syslog alerts to Ops Mgr and monitor single interfaces as an object, simplifying the monitoring of devices with **distributed applications**.

To analyze the behavior of the network device for a long period of time, the Cisco Nexus Smart Management Pack has a set of **reports** that can be executed from the Ops Mgr Reporting Console.

Rule Parameters

An easy wizard lets you configure the rule parameters. All rules have by default three steps: rule parameters, active rule options and schedule.

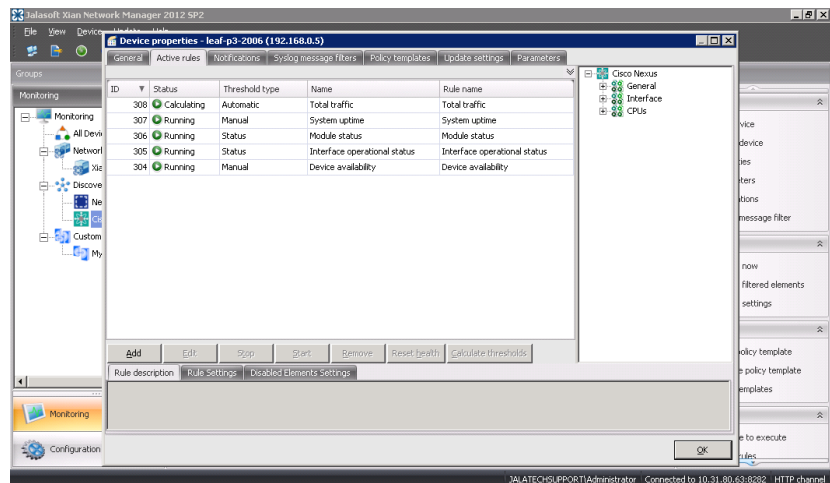
Parameters

You can configure when an alert will be sent to Ops Mgr. In many cases, this will be when the value is over or under a certain threshold.

However, for status based rules you can choose to generate an alert when the status changes or when it becomes a certain value (e.g. interface operational status: up, down, testing, unknown, or dormant).

For those rules related to interfaces, it is possible to select the interfaces where you want to apply the rule and define their individual thresholds. In this way, you can fine-tune the Xian environment.

Active rule options



The severity level is sent to Ops Mgr when a rule meets the selected criteria. Ops Mgr organizes the alerts by severity. With this option you can predefine each alert with a different level of severity (debug, informational, warning, error or critical), define the collection of performance counters to be used in performance data views or Xian Reports, rename the rule, and enable debug mode for the active rule.

Schedule

You can set the interval between each execution of the rule. This can vary within a range of seconds, minutes or days. When setting this step, take into account that a short interval will consume more system resources.

Rules

Cisco Nexus performance and status rules*

General

- Attempt failed TCP connections
- Average Memory utilization
- Console port status
- Device availability
- Established TCP connections
- Open active TCP connections
- Open TCP connections
- System uptime
- UDP open ports

Interfaces

- Bandwidth percentage
- Ethernet alignment errors
- Ethernet carrier sense errors
- Ethernet deferred transmissions
- Ethernet excessive collisions
- Ethernet FCS errors
- Ethernet frame too long
- Ethernet late collisions
- Ethernet MAC receive errors
- Ethernet MAC transmission errors
- Ethernet multiple collisions
- Ethernet single collisions
- Ethernet SQE test errors
- Failed reassembly requests
- Fragmentation failed
- Fragments created
- Incoming discarded packets
- Incoming error packets
- Incoming segments
- Incoming traffic
- Incoming traffic for 64 bits
- Interface operational status
- Outgoing discarded packets
- Outgoing error packets
- Outgoing segments
- Outgoing traffic

- Outgoing traffic for 64 bits
- Output packet queue length
- Package loss percentage
- Reassembly requests
- Total discarded packets
- Total error packets
- Total segments
- Total traffic
- Total traffic for 64 bits

CPUs

- Average CPU utilization

*Some rules may not be applicable to specific device models.

Supported Models

The Xian NM Smart Management Pack for Cisco Nexus supports the following models:

- Cisco Nexus n7000-s1-dk9
- Cisco Nexus 5020 Switch (N5K-C5020P-BF)
- Cisco Nexus 5010 Switch(N5K-C5010P-BF)
- Cisco Nexus 1000v-mz
- Cisco Nexus 7000 9-Slot Switch
- Cisco Nexus 5548p
- Cisco Nexus 5596UP
- Cisco Nexus 3064 (N3K-C3064PQ)
- Cisco Nexus n5000-uk9
- Cisco Nexus 1000V
- Cisco Nexus n6000 (n6000-uk9)

If you want to obtain the updated list of supported devices or if you are interested in adding support for new models, please contact us.

System Requirements

Minimum requirements to install Xian NM Smart Management Pack for Cisco Nexus for Microsoft System Center Operations Manager are:

- Windows server 2008 SP1 or higher
- SQL Server 2005 SP1 or higher
- .NET Frameworks 4.0 or higher
- Message queuing 2.0 or higher
- System Center Operations Manager 2007 R2 or 2012
- SNMP connectivity to the devices that need to be monitored