

The **Jalasoft Smart Management Packs for Cisco Switches** 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 Switches**. 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 longer period of time, the **Cisco Switches Smart Management Pack** has a set of **reports** that can be executed from the Ops Mgr Reporting Console.

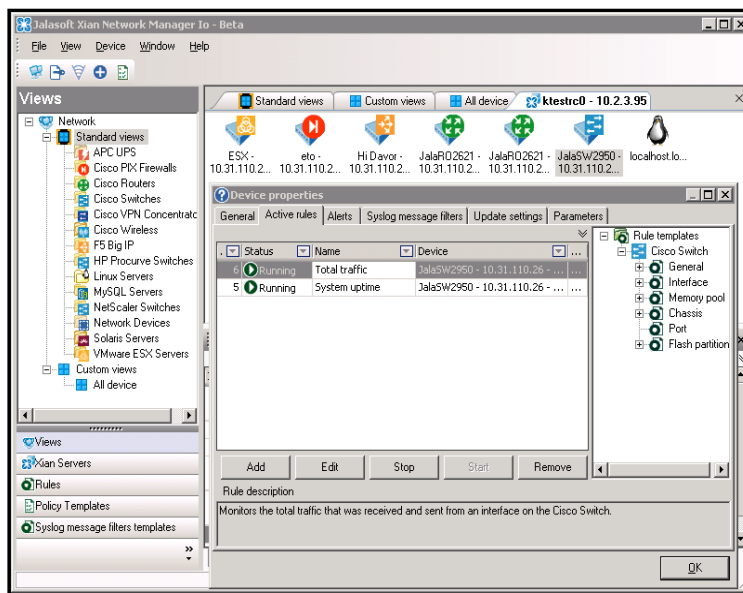
### Rule Parameters

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. 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 Switches performance and status rules\***

#### **General**

- Attempt failed TCP connections
- Bandwidth usage
- CPU load
- Device availability
- Established TCP connections
- Open Active TCP connections
- Open TCP connections
- Processes count
- System uptime
- UDP open ports

#### **Flash partition**

- Flash partition free memory
- Flash partition status

#### **Memory pool**

- Big buffers created
- Big buffer hits
- Buffer element hits
- Buffer elements created
- Created huge buffers
- Created middle buffers
- Created small buffers
- Free big buffers
- Free buffer elements
- Free huge buffers
- Free large buffers
- Free memory on pool
- Free middle buffers
- Free small buffers
- Huge buffer hits
- Large buffers created
- Large buffer hits
- Middle buffer hits
- Missed big buffers
- Missed buffer elements
- Missed huge buffers

- Missed large buffers
- Missed middle buffers
- Missed small buffers
- Small buffer hits
- Total free memory
- Total used memory
- Trimmed big buffers
- Trimmed huge buffers
- Trimmed large buffers
- Trimmed middle buffers
- Trimmed small buffers

#### **Interface**

- 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
- Interface operational status
- Outgoing discarded packets
- Outgoing error packets
- Outgoing segments
- Outgoing traffic
- Output packet queue length
- Reassembly requests
- Total discarded packets
- Total error packets
- Total segments
- Total traffic

#### **Chassis**

- Current temperature
- Current voltage
- Fan component status
- Fan status
- Module stand-by status
- Module status
- Power supply component status



- Power supply status
- Temperature sensor status
- Voltage component status

#### Port

- Port duplex status
- Port self-test
- Port status
- VLAN port status

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

#### Supported Models

The Xian NM Smart Management Pack for Cisco Switches supports almost all types of the Cisco Switches Series. 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 Switches 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

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