



Topology Diagrams with Jalasoft Xian and Savision Live Maps

Extending System Center Operations Manager 2007
with Jalasoft and Savision

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Topology Diagrams with Jalasoft Xian and Savision Live Maps

Being aware of the state and performance of individual devices and servers along with any internal errors or problems is essential for the monitoring your environment; however, a more thorough network monitoring can be achieved by knowing the effects that those specific errors and problems have on other related devices and servers. This is possible if you have a topology diagram that shows the way the devices are connected and the effect that one device has on another.

Jalasoft Xian and Savision Live Maps bring you all the tools to accomplish this in an OpsMgr environment by discovering and monitoring all the desired devices with Xian and then displaying their relationships diagrams with Live Maps. Let's take a look at the following example:

On this sub network we have 4 servers, (3 Solaris servers and one Windows 2008 server) connected through 2 Cisco switches as displayed on the following diagram:

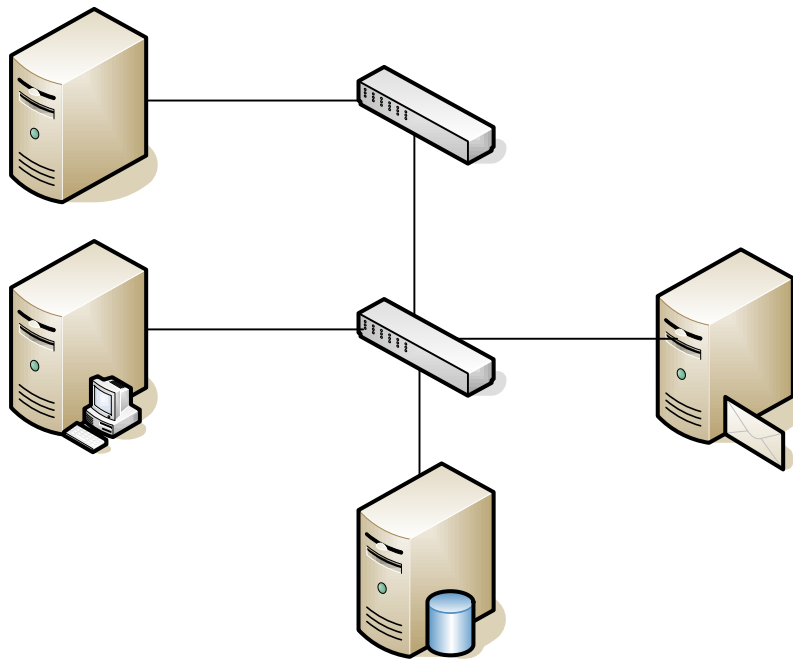


Fig. 1: topology diagram

Discovering and monitoring devices:

The first step consists of individually discovering and monitoring the servers and the devices: the Windows 2008 server (hosting OpsMgr and Xian) is automatically monitored by OpsMgr itself; these are the steps taken to discover and monitor the remaining devices and servers using Xian Io:

1. Open the Jalasoft Xian console and then go to 'file > add network scan tasks': the network scan task configuration wizard will be displayed.

2. Configure the scan task to look for any Solaris and Cisco switches within the corresponding network range and configure it to automatically apply a policy template to the discovered devices.
3. Verify that the devices were successfully discovered so they are being displayed on the Xian and OpsMgr consoles:

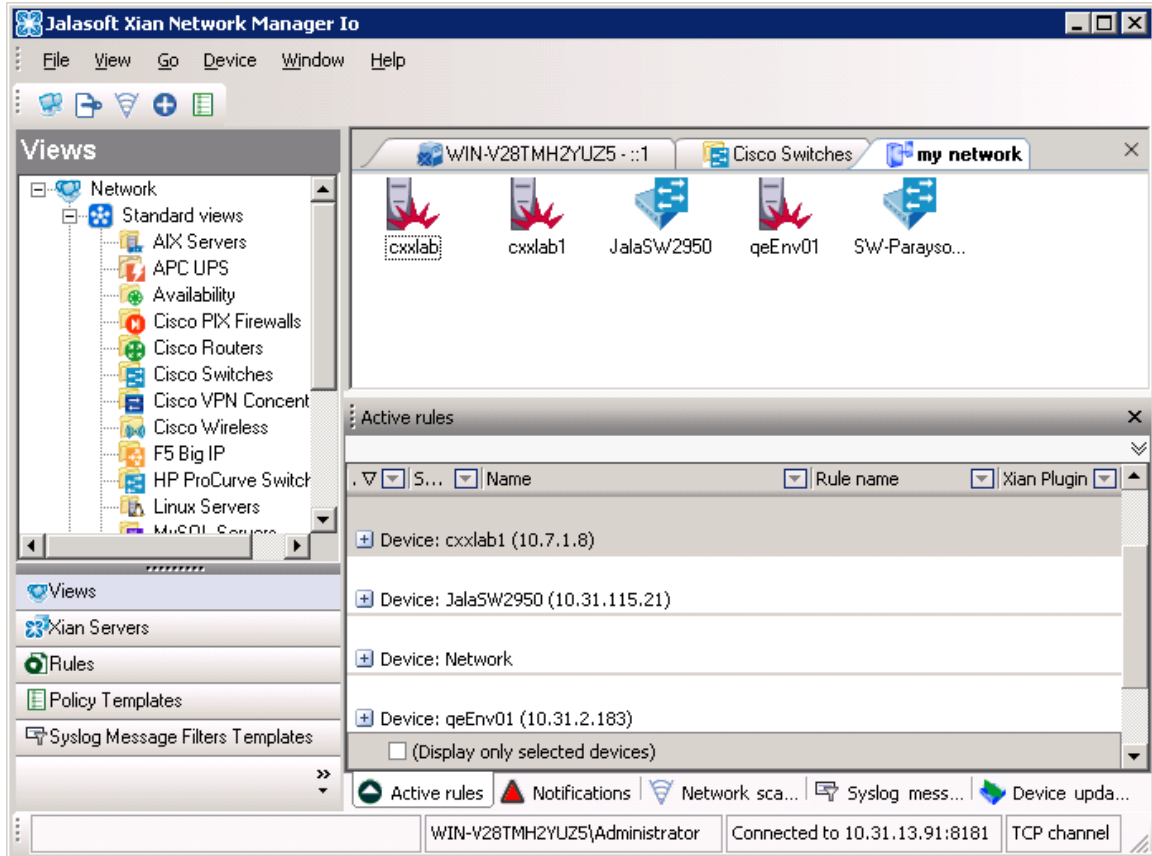


Fig. 2: Xian console displaying the Solaris servers and Cisco switches.

Creating a topology diagram with Livemaps:

Once the desired devices are being properly monitored with Xian, we need to create the corresponding topology diagram.

1. Open the Savision Live Maps authoring console.
2. Right click on the desired folder or node within the upper left 'views' tree and then click on 'add > drawing'. An empty diagram will be displayed.
3. The list of all available devices is displayed under the 'objects' pane. Simply drag and drop the desired devices (servers) to the center pane:

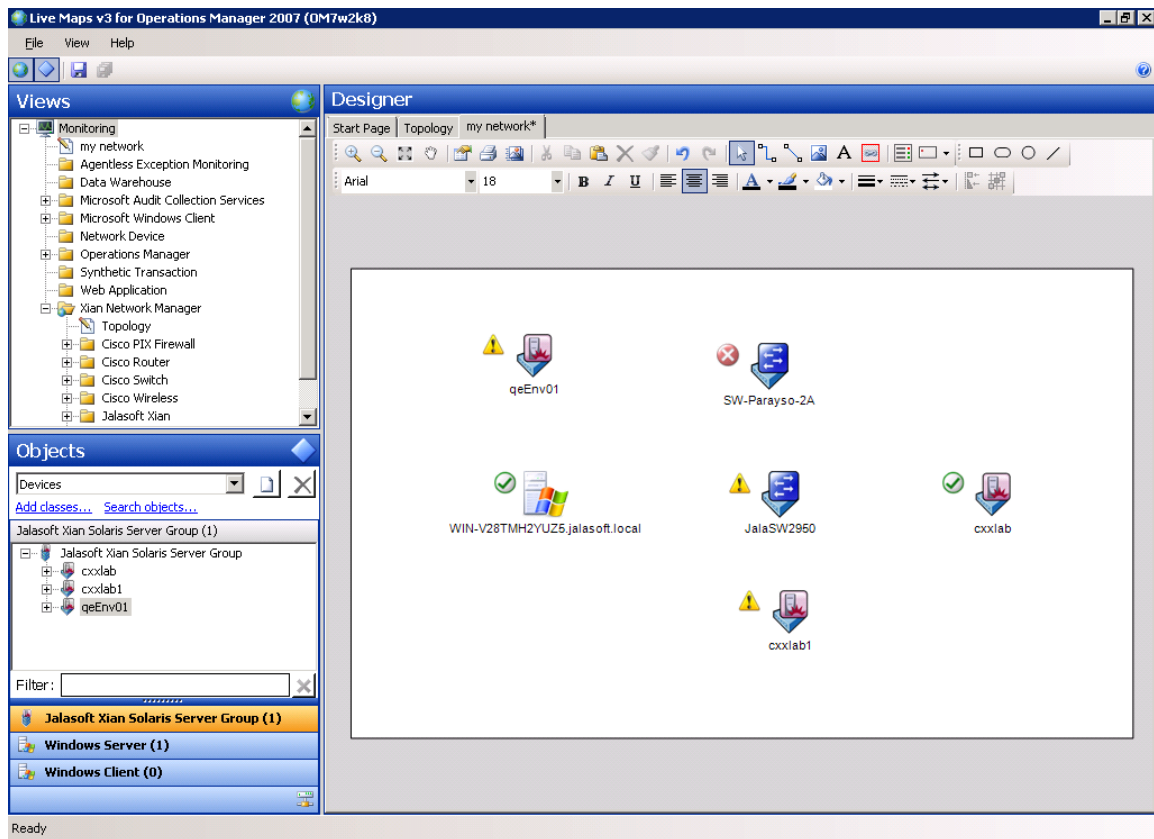


Fig. 3: Live maps diagram displaying all the devices and servers within the sample network.

- Note that certain objects like the Solaris servers do not appear automatically under the 'objects' pane; instead, you have to add their corresponding groups by clicking on the 'add classes' link and then look for the corresponding group. (in this example 'group > Jalasoft Xian Solaris Server group').
4. Next, create links between devices by selecting the 'straight connector tool' lines drawing icon, then select two devices or servers to link and provide the corresponding interfaces as endpoints.

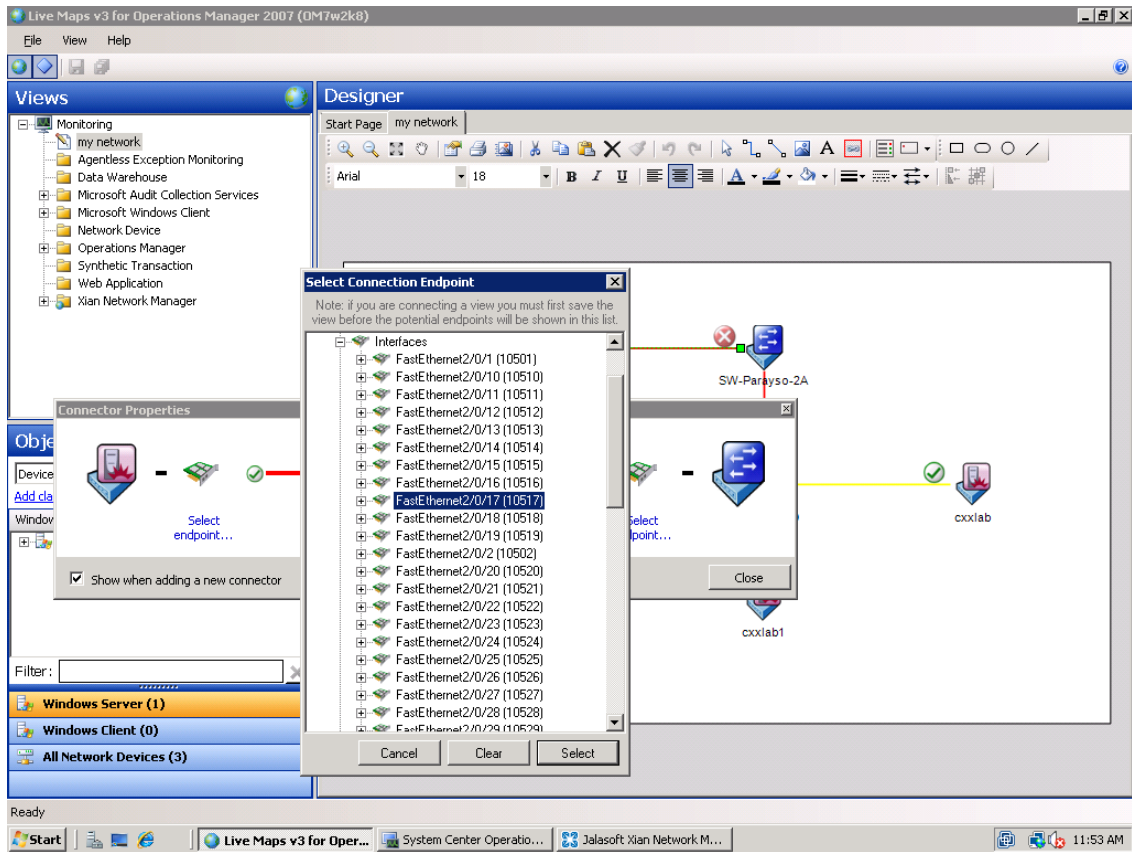


Fig. 4: selecting the connection endpoints.

5. Once we finish linking the devices, the diagram will look like this:

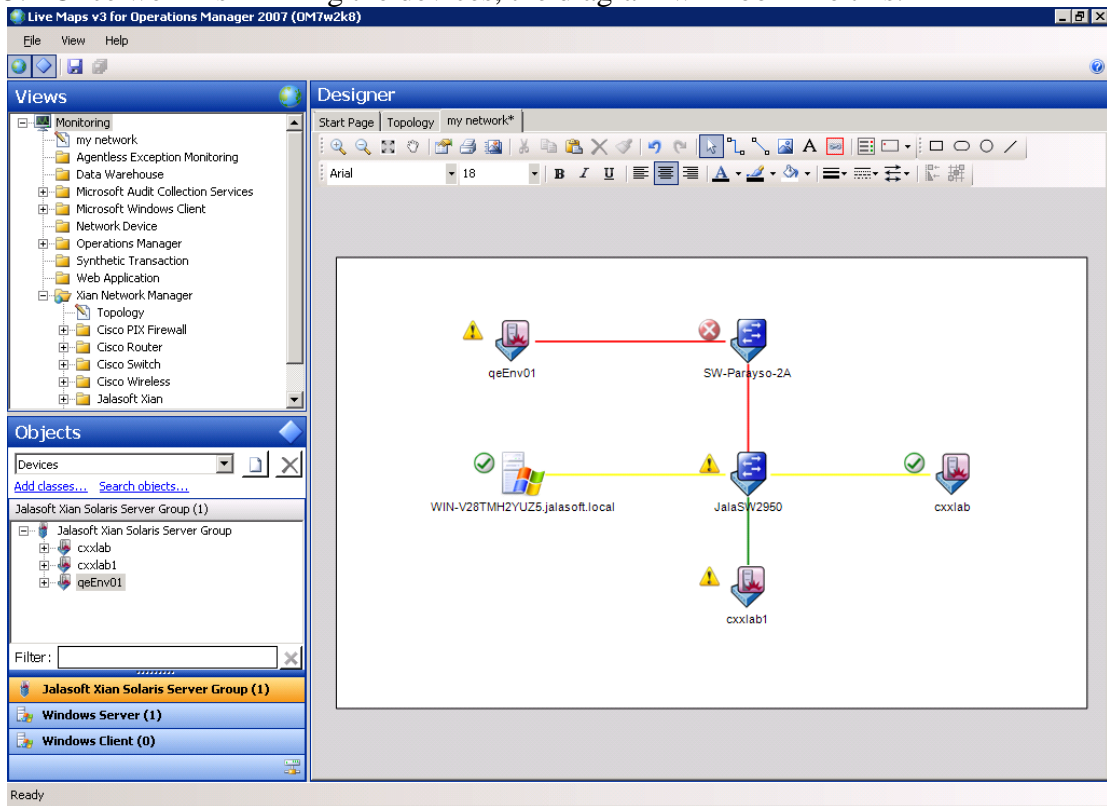


Fig. 5: topology diagram created on the Live Maps console.

6. Save the changes and close the console. Notice that figure 5 displays lines with 3 different colors based on the current states of the devices and the selected endpoints: green if there is no problem with the connection between devices, yellow if there is a warning on the connection and red if a critical error has occurred (in this example a connection between 2 devices is down).

View the diagram on the OpsMgr console:

Now that the devices have been discovered and the topology diagram created, we need to open the OpsMgr console and see the states of the servers and devices and how their events affect the network:

1. Open the OpsMgr console.
2. Go to the folder where the diagram node created with Live Maps was created and select it.

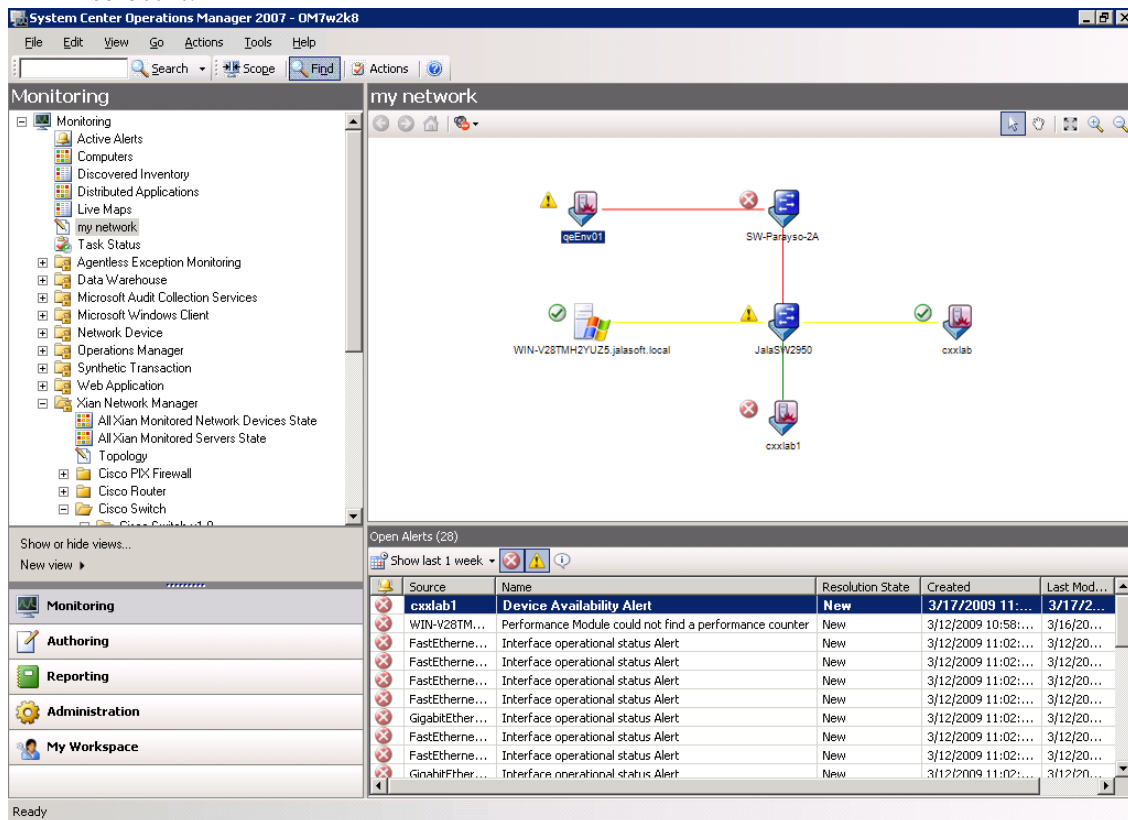


Fig. 6: topology diagram displayed on the OpsMgr console.

3. From this view we can see the states of the devices and their relationships; we can also see a list of all related open alerts. It is possible to double click on any device to open its health explorer dialog and right click on it in order to open its state, events, alerts or performance views.

If you have any questions/comments about Jalasoft Xian & Savision Live Maps, please reply to this post, and we'll make sure to send you an answer as soon as possible. For further information on Xian Io for Ops Mgr 07 please visit our website www.jalasoft.com or visit our booth (#227) at the Microsoft Management Summit in Las Vegas.