

## *Knowledge Base Articles*

**TITLE:**

Understanding and configuring the Xian NMS Failover feature.

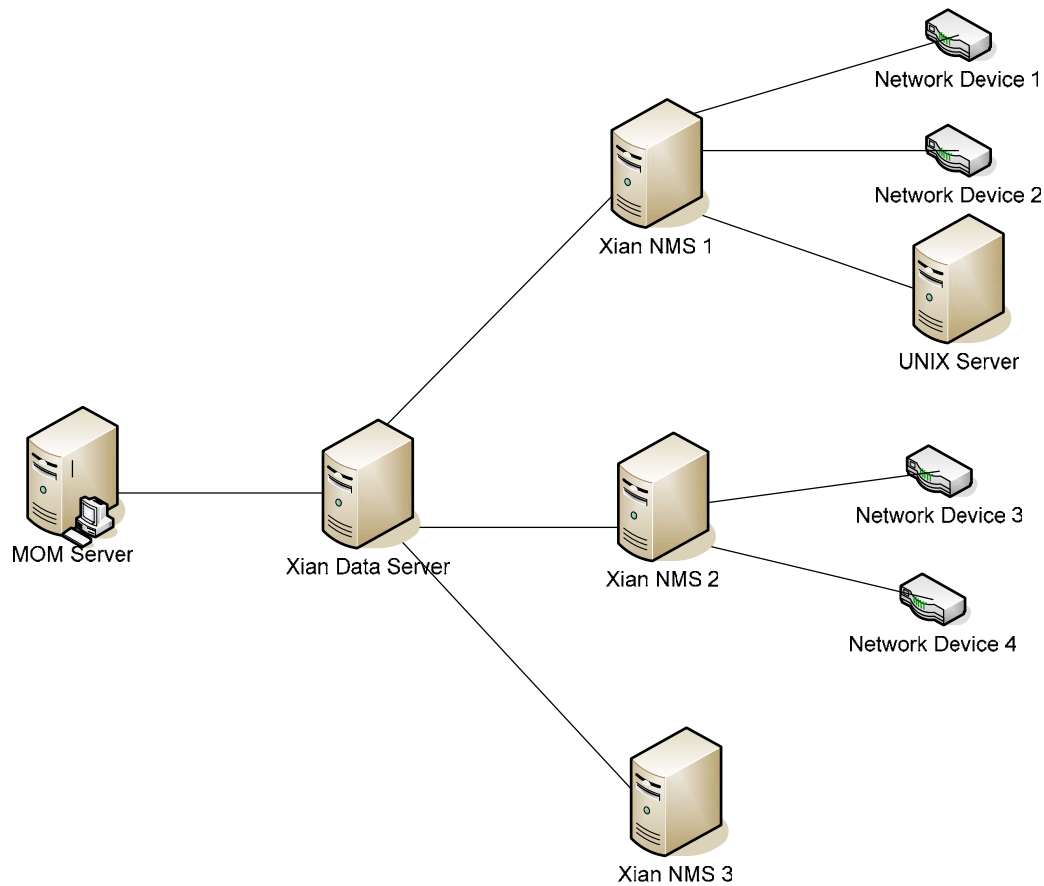
**DESCRIPTION:**

Jalasoft Xian Network Manager 2005 provides a stable architecture and functionality for network devices and UNIX Servers monitoring. However, the success of the product is based on the capability of monitoring the network infrastructure 24 hours, 7 days a week. Even if a Xian component goes down, Xian must still work and monitor properly the network. It is for this reason that Xian Network Manager 2005 implements the NMS failover mechanism feature.

The NMS (Network Manager Server) is the Xian component that directly monitors the discovered network devices and UNIX servers. The 'NMS Failover' monitors all the NMSs that are being used (which have discovered devices and running rules over them) to see if they are up and running.

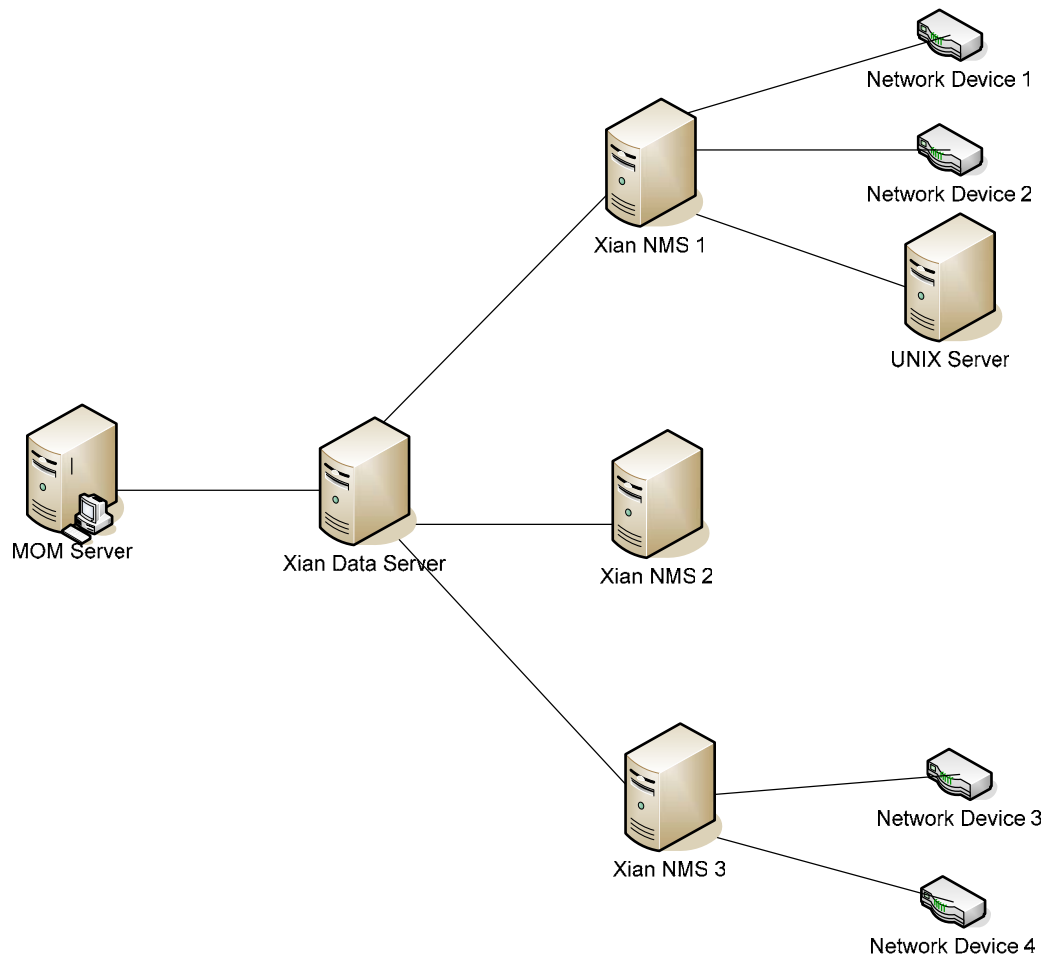
If the 'NMS Failover' encounters that a certain NMS is not running, it will try to start it; if the operation fails, then, it will determine which backup NMS is available and move all the devices and rules data to this NMS in order to monitor continuously. Note that for each case, the NMS failover will send an alert to MOM.

Figure 1 shows a Xian configuration with three NMS, two of them monitor network devices and servers.



*Figure 1: Certain Xian monitoring configuration with 3 NMS.*

If for instance Xian NMS 2 is down and can not be recovered, then the 'NMS failover' will search for a secondary or backup NMS, in this case it will find Xian NMS 3. The next step is to determine if this NMS is up and running and can be configured by the Xian Data Server machine. The last step consists on moving the Xian NMS license to the Xian NMS 3 and then moving the monitored devices and their rules to this NMS. Figure 2 shows the same Xian deployment after executing the failover process:



*Figure 2: The final state of the Xian monitoring configuration after the failover operation*

## REQUIREMENTS:

To run the NMS failover mechanism you need to meet the following requirements:

- A MOM agent installed and monitoring the machine where the Xian Data Server is running.
- At least one primary NMS pointing to the Data Server machine (a NMS that has a Xian license assigned and has at least one network device or server being monitored).
- At least one secondary or backup NMS pointing to the Data Server machine (a NMS that does not have a Xian license assigned to it, so it is not monitoring any device or server)

## **CONFIGURATION:**

To configure the NMS Failover mechanism, please follow these steps:

- Go to the machine where the Xian Data Server component was installed.
- Stop all the Xian Data Servers.
- Go to the following directory [installation directory]\Jalasoft\Xian 2005 Network Manager\
  - Open the XianDataServer.exe.config file.
  - Configure the following settings:
    - o FailoverConfiguration enabled="true". This setting will enable the failover feature. It is set to false by default (disabled).
    - o monitoringIntervalTime="5". It will configure the granularity of the fail over monitoring, this value is expressed in minutes (Default value 5 minutes)
    - o failoverThresholdTime="30". Sets the time in minutes that the NMS should not respond to be considered down (Default value 30 minutes)
- Save the config file and exit.
  - o Start the Xian Data Server.

## **APPLIES TO:**

Xian 2005 Network Manager Service Pack 2

## **STATUS:**

Procedure provided