

Knowledge Base Article: Article 216

How to use fixed ports for WMI through firewalls for NSI WMI Centralized Server v10

Date: November 5th, 2010

Problem:

The WMI Centralized Server in NSI needs to connect to the Microsoft WMI agent of a machine to get WMI information.

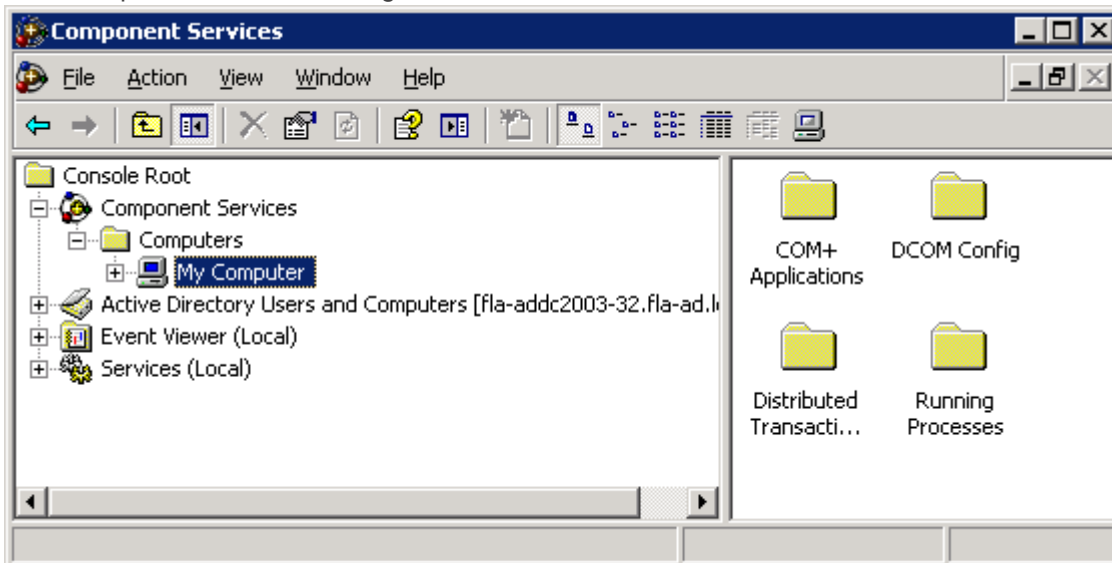
By default, the first call is done in DCOM through the TCP port 315; then DCOM allocate dynamic ports to continue the communication.

When this flow has to cross firewall, dynamic port is not acceptable, fixed ports must be used.
So, remote server that will spied by the NSI WMI Centralized Server should be configured as below.

1. Solution for Remote Windows 2003 Servers

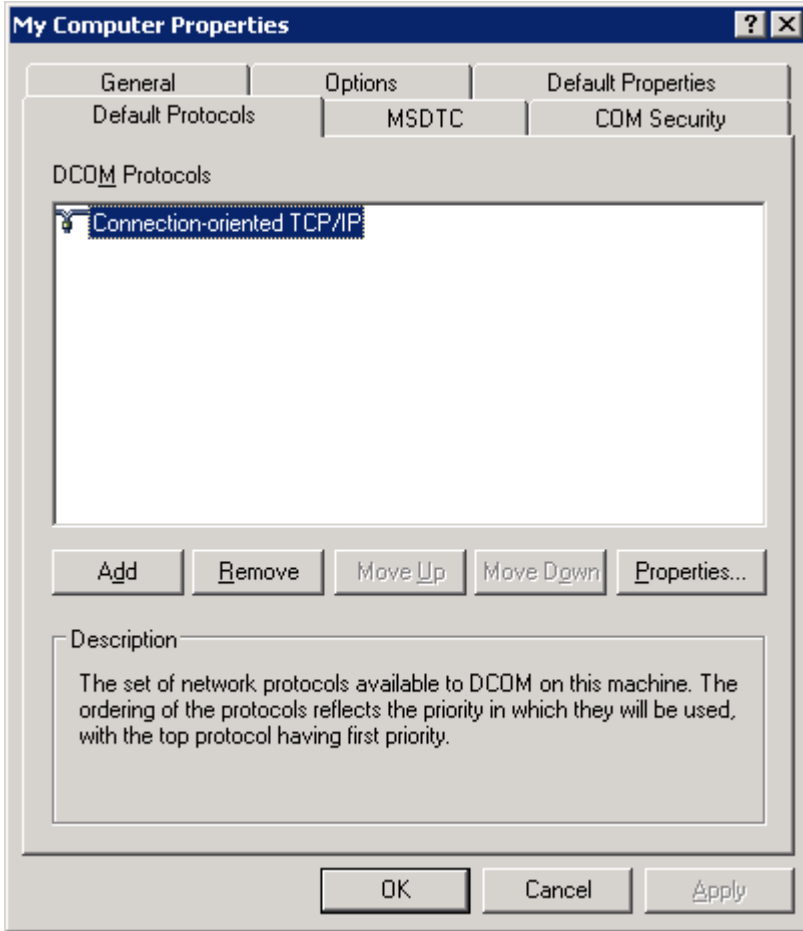
DCOM Settings

Start Component services management from Administration tools:

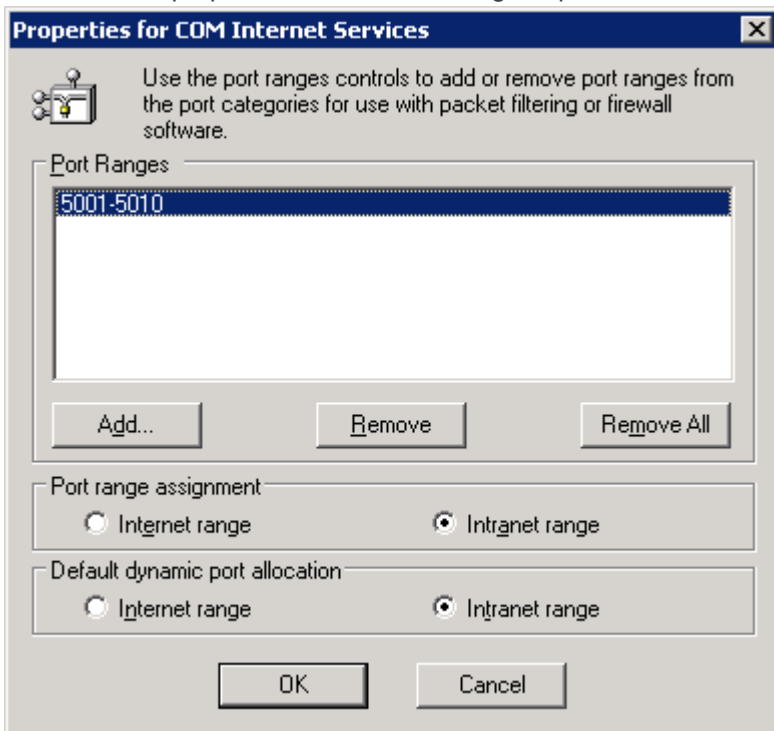




Right click my computer, then click properties and select default protocol as below:



Then, click on properties and create a range of ports for intranet network: 5001 to 5010 per example.



FIREWALL Settings

Open TCP ports you just have set in DCOM Settings plus TCP 135 for initial DCOM communication.

2. Solution for Remote Windows 2008 Servers

DCOM Settings

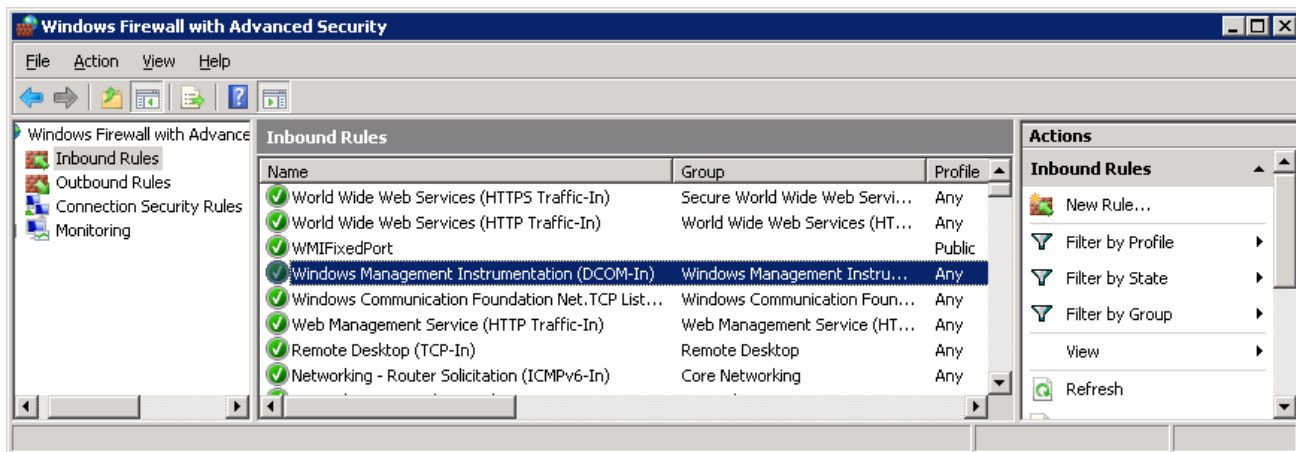
Under the command line, type the following commands:

- winmgmt –standalonehost
- net stop "Windows Management Instrumentation"
- net start "Windows Management Instrumentation"
- netsh firewall add portopening protocol=TCP port=24158 name=WMIFixedPort scope=ALL profile=CURRENT mode=ENABLE

This will open the 24158 TCP port as in the screen shot below

FIREWALL Settings

Enable the “Windows Management Instrumentation (DCOM-In)” rule on the right scope and profile.



WARNING

Check that the scope and profile of your network is well matching the FIREWALL rules.

3. Reboot to apply DCOM Settings