

Industrial Innovation Network Management System (JetView Pro)

User Manual

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www.korenix.com

Industrial Innovation Network Management System User Manual

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1 Introduction

Welcome to the Industrial Innovation Network Management System User Manual. Following topics are covered in this section:

1.1 Overview

1.2 Major Features

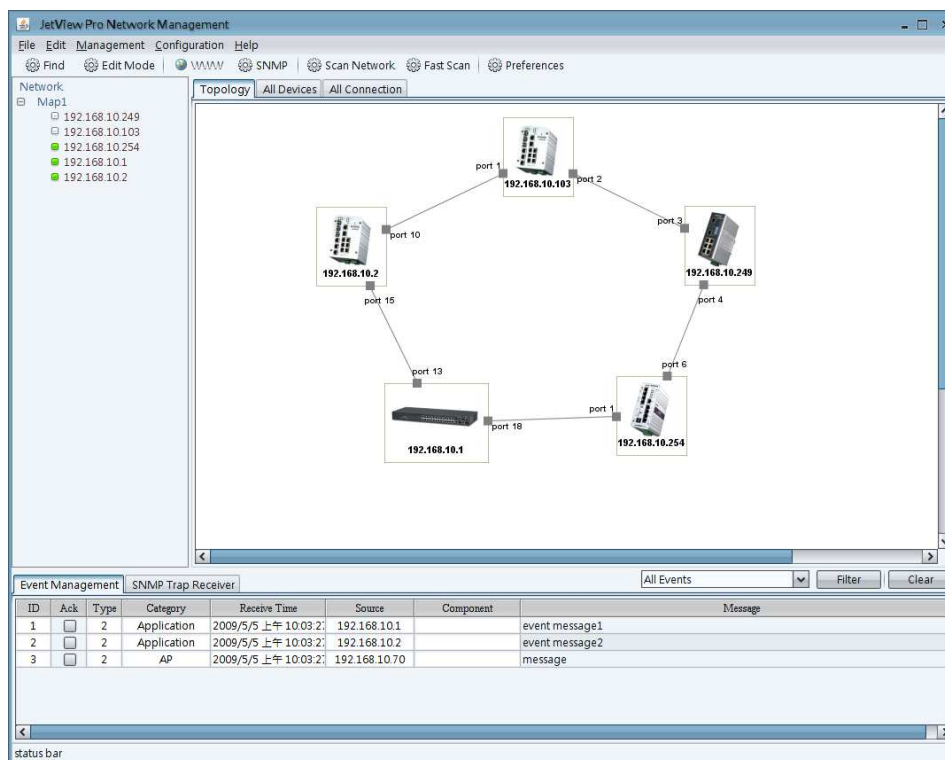
1.3 Supported Devices

1.4 Support MIBs

1.5 Ordering Information

1.1 Overview

JetView Pro is an Industrial Innovation Network Management System (i²-NMS).



JetView Pro is specifically designed for mission critical industrial environments. The JetView Pro provides a comprehensive platform for monitoring, configuring, and maintaining mission-critical IP-based communication networks, such as IP surveillance, factory automation, mining, substation, maritime and military applications.

1.2 Major Features

Korenix i²-NMS has the following features:

- Manage IP-based devices from both central office and remote sites
- Automated network discovery and topology visualization
- Event handling via polling, syslog, email, and SNMP trap. Notifications can be sent via email, application programs, SNMP trap, SMS, and MSN Messenger
- Device configurations via SNMP, Web, Telnet, and SSH
- Provide SNMPv1/v2c/v3 Browser and SNMP MIB compiler
- MSR group management
- Provide performance management
- Provide accounting management
- Centralized management to reduce network traffic.

1.3 Supported Devices

Supported Devices by functions:

- Auto Topology (LLDP), device management, and device discovery features

Auto Topology, device management, and device discovery features can be applied in the IP-enabled devices which support LLDP and SNMP features. For instances, JetNet series, JetPoE series, JetRock series and 3rd party devices that support LLDP and SNMP features.

 - JetNet series: JetNet6524G, JetNet6059G, JetNet5628G, JetNet5228G, JetNet5428G, JetNet5018G, JetNet5012G, JetNet5010G, JetNet4510(f), JetNet4006(f)
 - JetPoE series: JetNet6710G, JetNet5728G-24P, JetNet5728G-16P, JetNet5720G-8P, JetNet5708G, JetNet4706(f)
 - JetRock series: JetNet4506-M12, JetNet4506-RJ
- Device management and device discovery features

Device management and device discovery features can be applied in the IP-enabled devices which support SNMP feature. For instances, JetNet series and 3rd party devices that support SNMP.

 - JetNet series: JetNet4508(f)
 - JetBox series, JetPort series, JetIO series and JetWave series
- Device discovery feature

Device discovery feature can be widely applied in all the IP-enabled devices. For example, JetNet series and 3rd party devices that support WEB or telnet features and general windows PCs.

 - JetNet series: JetNet4010(f)
 - JetPoE series: JetNet3706(f)

1.4 Support MIBs

JetView Pro supports the following standard MIBs in addition to the Korenix private MIBs.

- RFC1213-MIB-II.mib
- RFC1215-MIB-II.mib
- RFC1398-ETHER.mib
- RFC1493-BRIDGE.mib
- RFC1724-RIP.mib
- RFC1757-RMON.mib
- RFC1850-OSPF.mib
- RFC3621-PSE.mib

1.5 Ordering Information

A trial version that supports monitoring of 64 IP-enabled devices is available for authorized distributors.

Request licenses as follows:

- 128 – manage 128 devices
- 256 – manage 256 devices
- 1024 – manage 1024 devices
- Unlimited – unlimited devices

For more detailed information, please contact your local sales representative.

2 Installation

This section includes software installation. Following topics are covered in this section:

2.1 System Requirements

2.2 Installation

2.3 Uninstallation

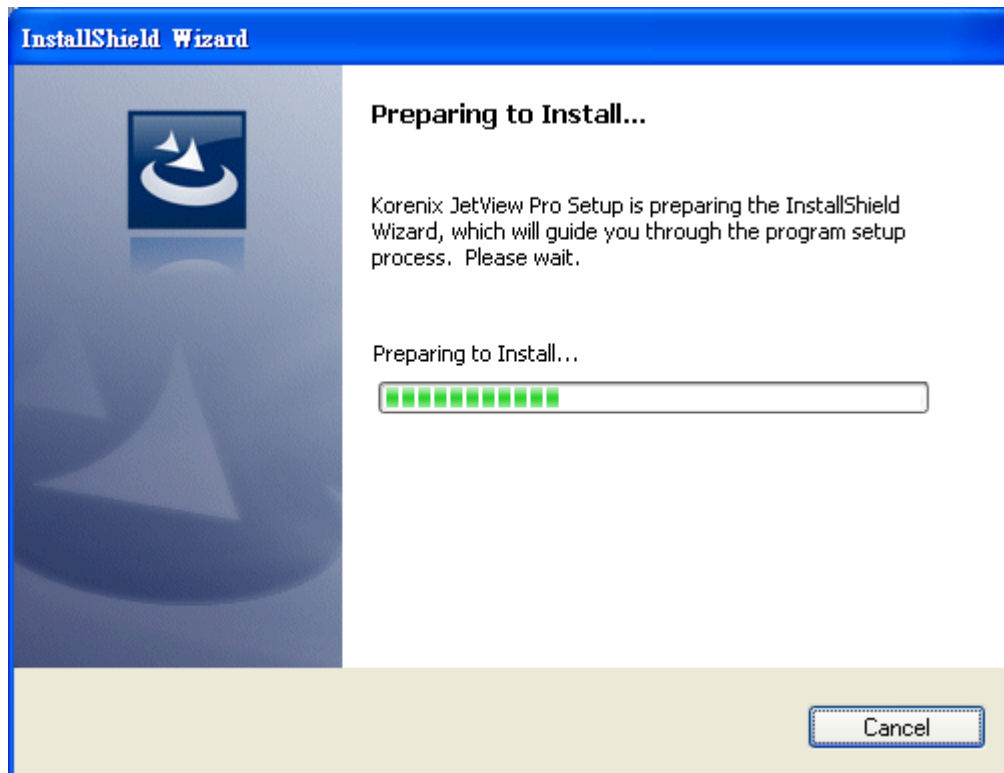
2.1 System Requirements

- Hardware:
 - ✧ Processor
Minimum Intel Core 2 Duo CPU 2.5 GHz or higher
 - ✧ RAM
1GB RAM
 - ✧ Disk
1GB hard disk
- Software
 - ✧ Operation system
Windows XP/2000/2003 platforms
 - ✧ Java Runtime Environment (JRE) 1.6.0 or higher
- Screen Resolution
It is optimized for a screen resolution of 1024x768

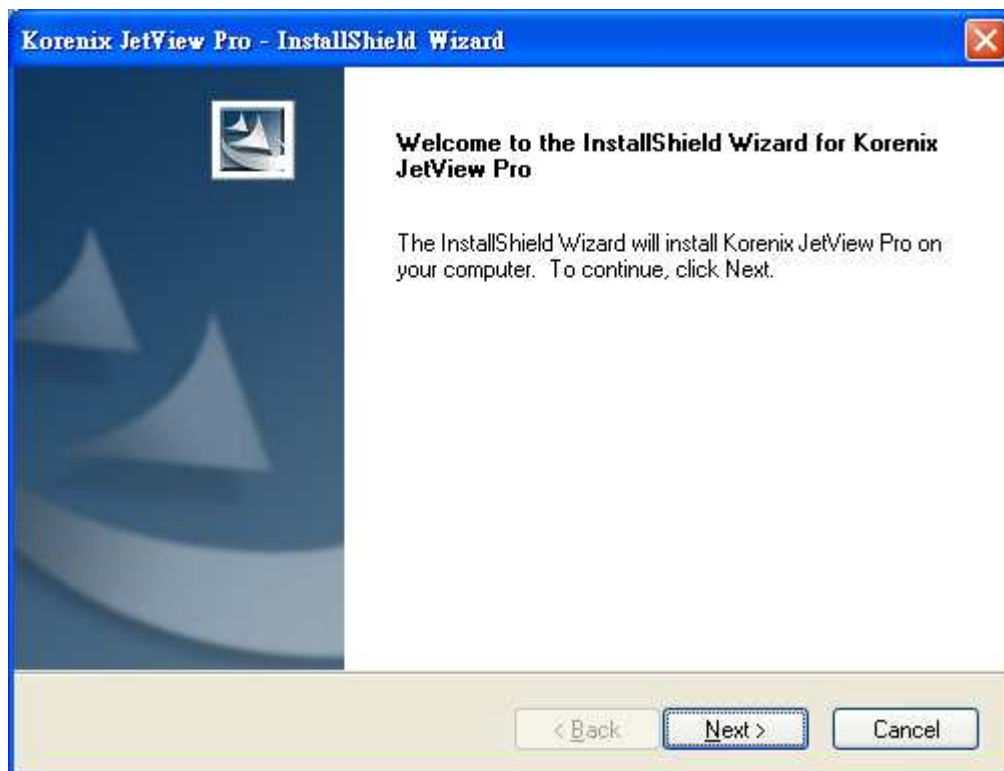
Note: Before starting the JetView Pro installation, please confirm whether Java Runtime Environment is installed on your computer. If not, you can download Java Runtime Environment (JRE) package from <http://www.java.com> and install JRE to your computer.

2.2 Installation

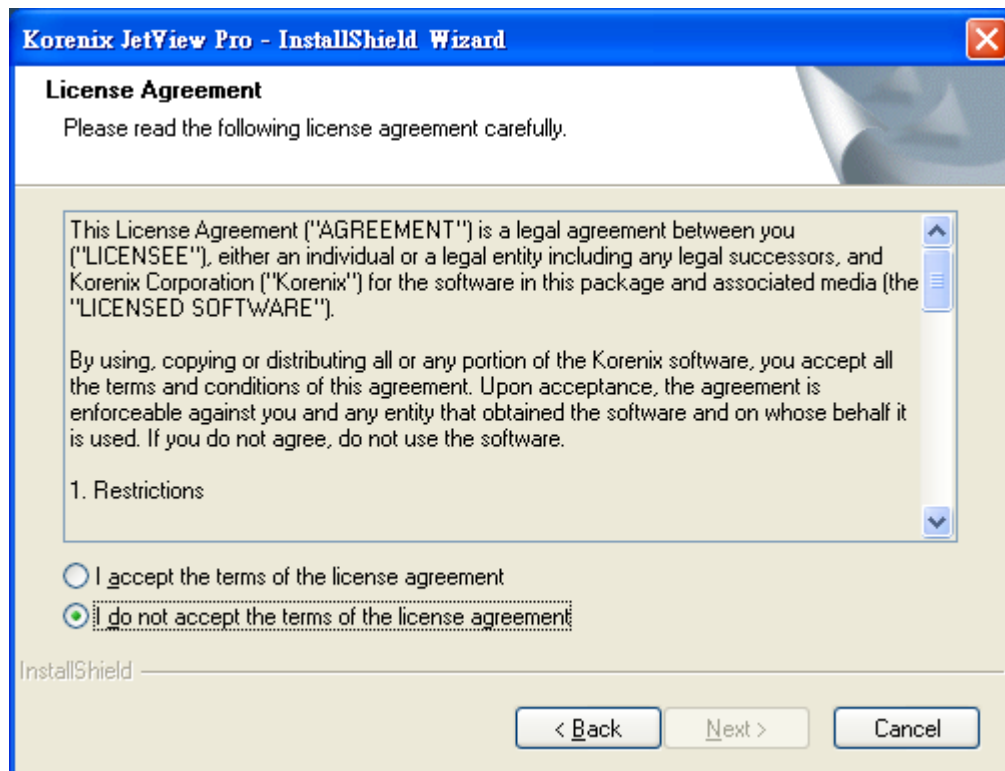
1. Run setup.exe



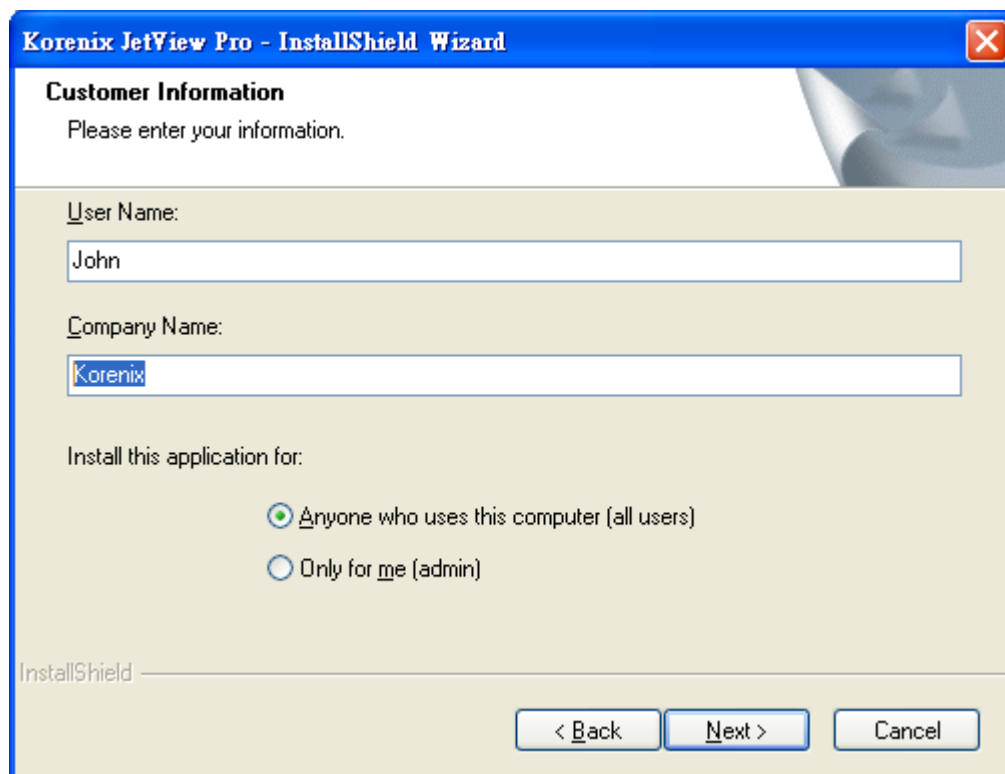
2. Press **Next** to the next screen.



3. Please read the license agreement and select "I accept the terms of the license agreement."
Press Next to next screen.

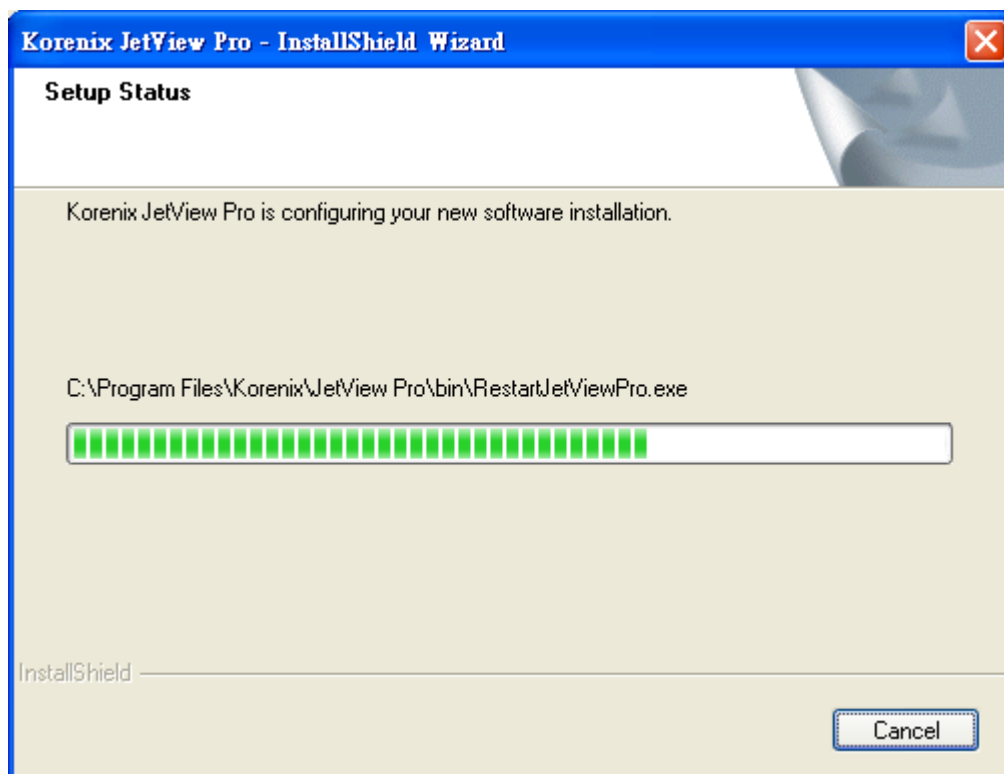
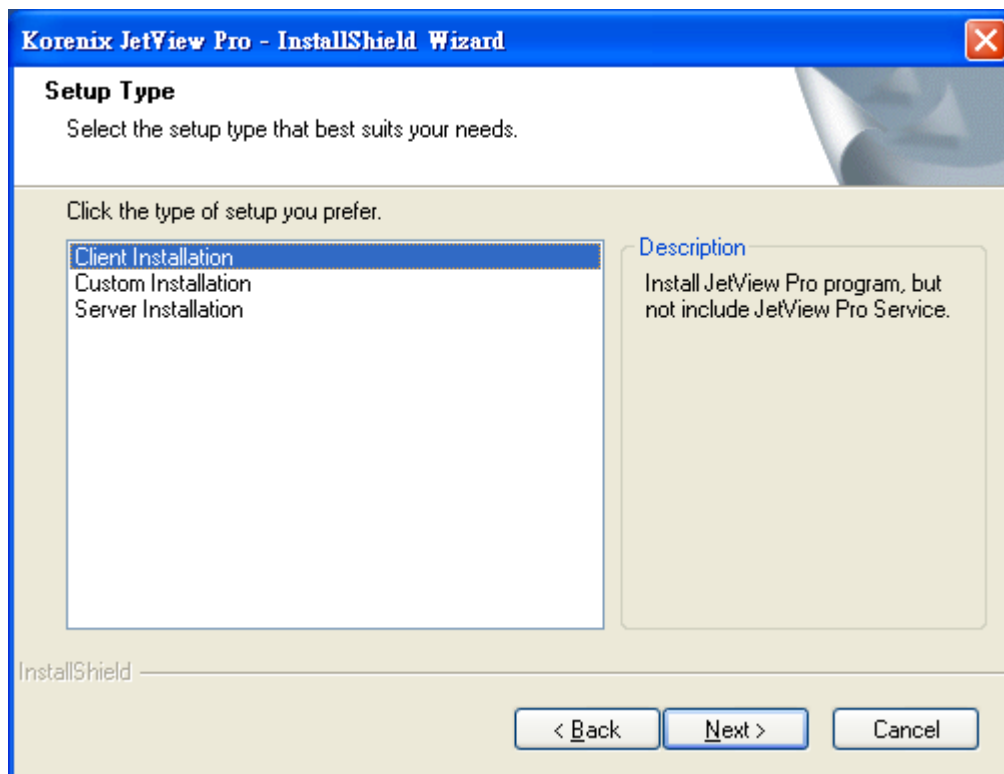


4. Input User Name and Company Name and press **Next** to next screen.

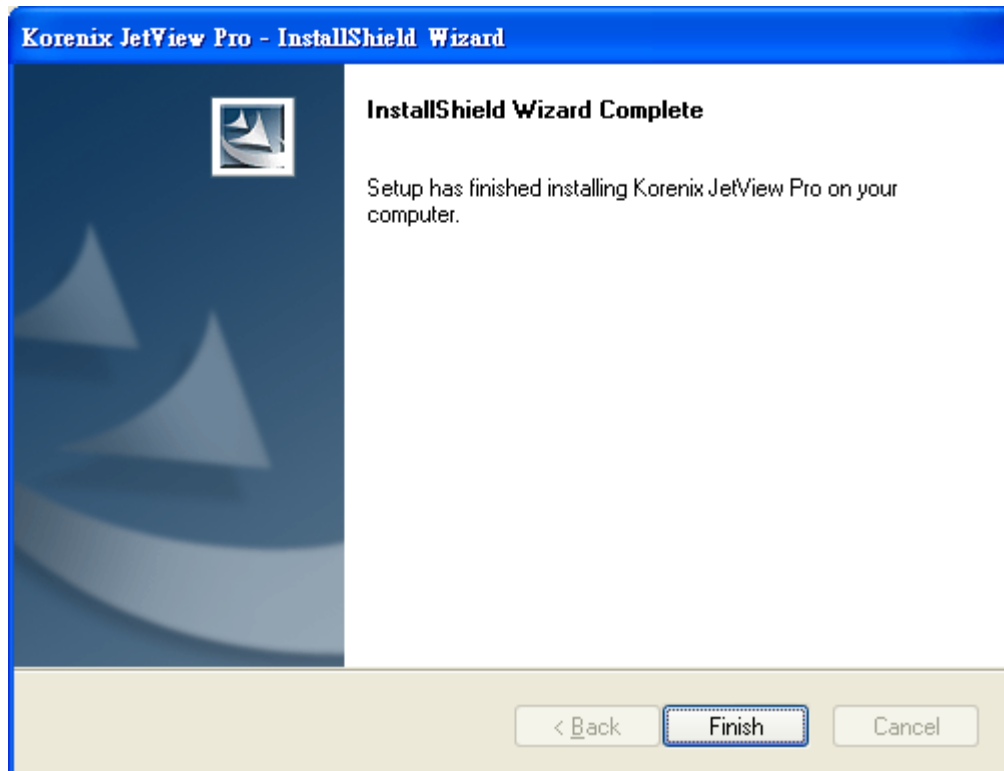


5. Select the type of setup and press **Next** to next screen.

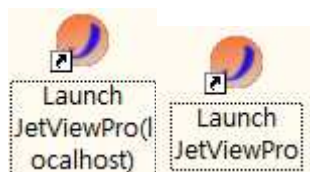
Note: choose client installation for client only, server installation for all or custom installation.



6. Press **Finish** to end installation.



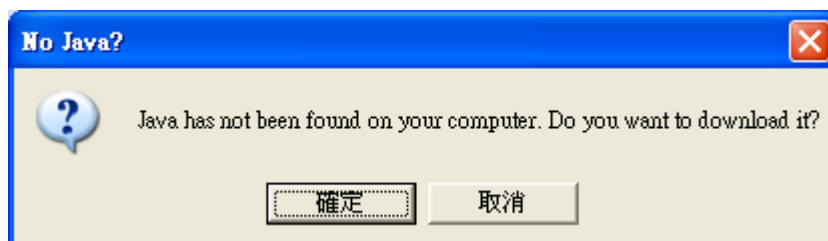
On the desktop or in **Start / Programs / Korenix / Korenix JetView Pro /**, you can see two program shortcuts (as figure).



The “Launch JetView Pro(localhost)” is for local connection, while the “Launch JetViewPro” is used to connect to remote server.

Note: Failed to Run JetView Pro.

In case of failure the following dialog or other error dialogs will appear on your desktop.



Please connect to <http://www.java.com> and download the java runtime environment (JRE).

2.3 Uninstallation

Remember to quit the JetView Pro program before you get starting the uninstallation

Follow below steps to uninstall

1. To uninstall JetView Pro, select **Start / Control Panel / Add or Remove Program**.
2. Select the program "**Korenix JetView Pro**".
3. Click on **Remove** and follow the instructions of the uninstallation routine.

Or directly run this shortcut

Start / All Programs / Korenix / Korenix JetView Pro / Uninstall Korenix JetView Pro

3 Getting Started

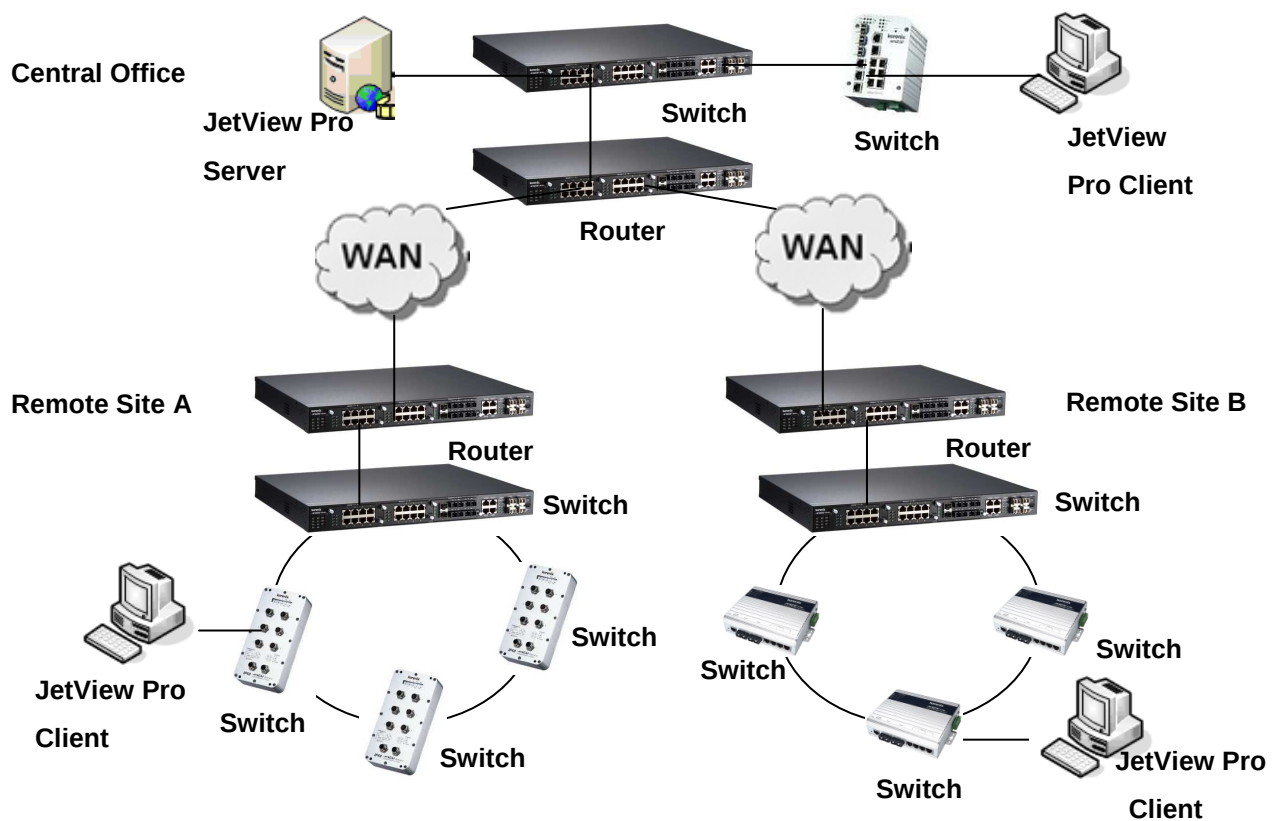
Following topics are covered in this section:

3.1 JetView Pro Applications

3.2 Run JetView Pro server and remote access clients

3.1 JetView Pro Applications

JetView Pro is a client/server based network system. One JetView Pro server can serve many remote access JetView Pro clients (maximum is 5)¹ (see figure below).



¹ Only one remote client connection per computer is possible. The server will refuse the new connection if already one session exists.

Due to the accounting management, only one client can enter the **Edit** mode at the same time and other clients are in the **Monitor** mode. The default password to enter the two modes is “korenix”. The **Monitor** mode can only allow viewers to browse the topology. The **Edit** mode can use all functions.

3.2 Run JetView Pro server and remote access clients

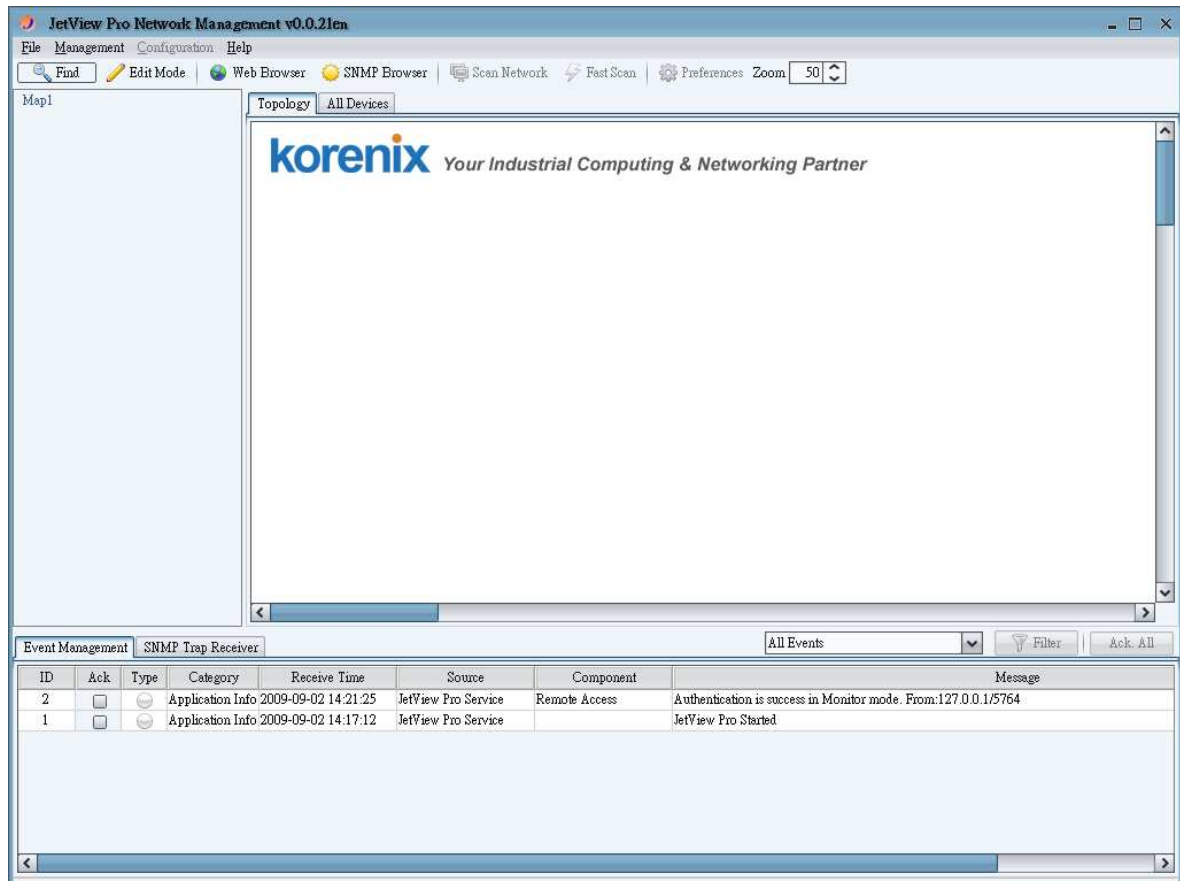
“Korenix JetView Pro Service” starts automatically when Windows XP starts. You can get the status of the service in Windows XP under Start / Control Panel / Administration / Services. This service has a connection to a database containing all the relevant data for the settings of JetView Pro. Note that when the service is stopped, the relevant monitored data cannot be recorded into the database.



For Windows XP, it starts automatically “Korenix JetView Pro Service” after installation. You can change Startup type of this service to Manual if you don't want the service to run after your pc boot up.

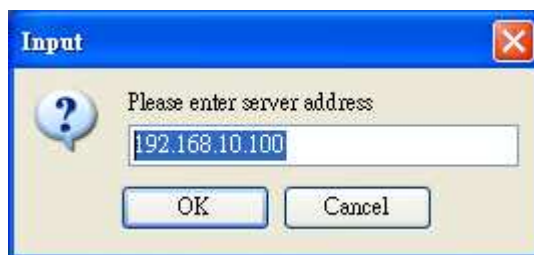
3.2.1 Start JetView Pro server on Server site

1. **Start / Programs / Korenix / Korenix JetView Pro / Launch JetViewPro(localhost)**
2. Display JetView Pro main window

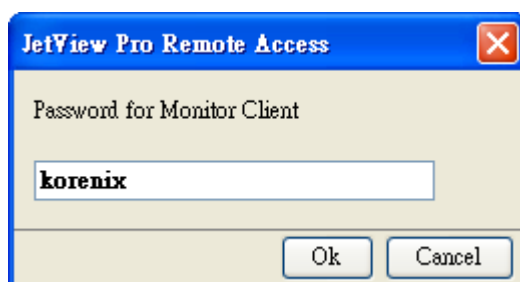


3.2.2 Start JetView Pro client (connect to server)

1. Start / Programs / Korenix / Korenix JetView Pro / Launch JetViewPro
2. Enter server address to connect. (ex. Server IP: 192.168.10.100)

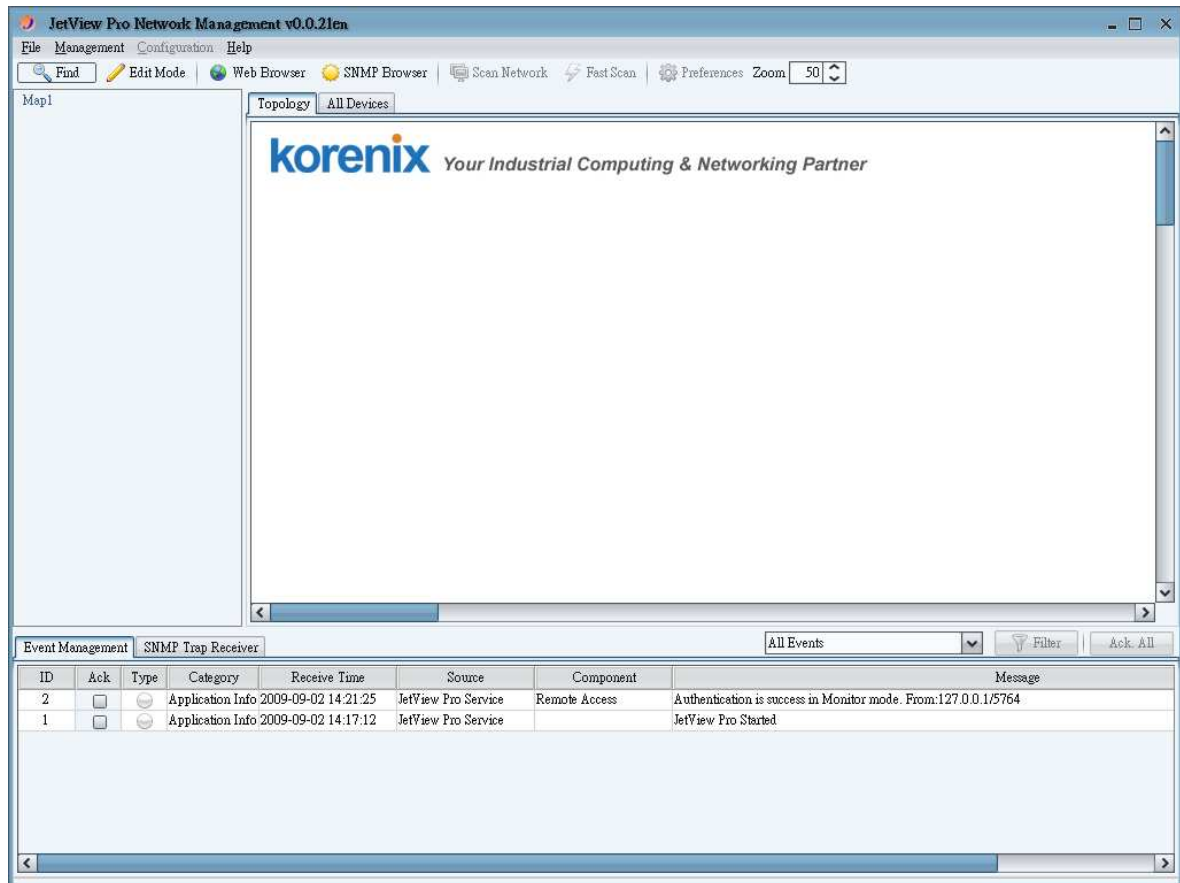


3. Enter password into monitor mode and press Ok.²



² Note that the default password for Monitor Mode access is "korenix".

4. Display JetView Pro main window



4 Interface of JetView Pro

Following topics are covered in this section:

4.1 Main Window of JetView Pro

4.2 Menu Function

4.3 Toolbar Function

4.4 Map Tree

4.5 Topology Tab

4.6 All Devices Tab

4.7 Event Management Tab

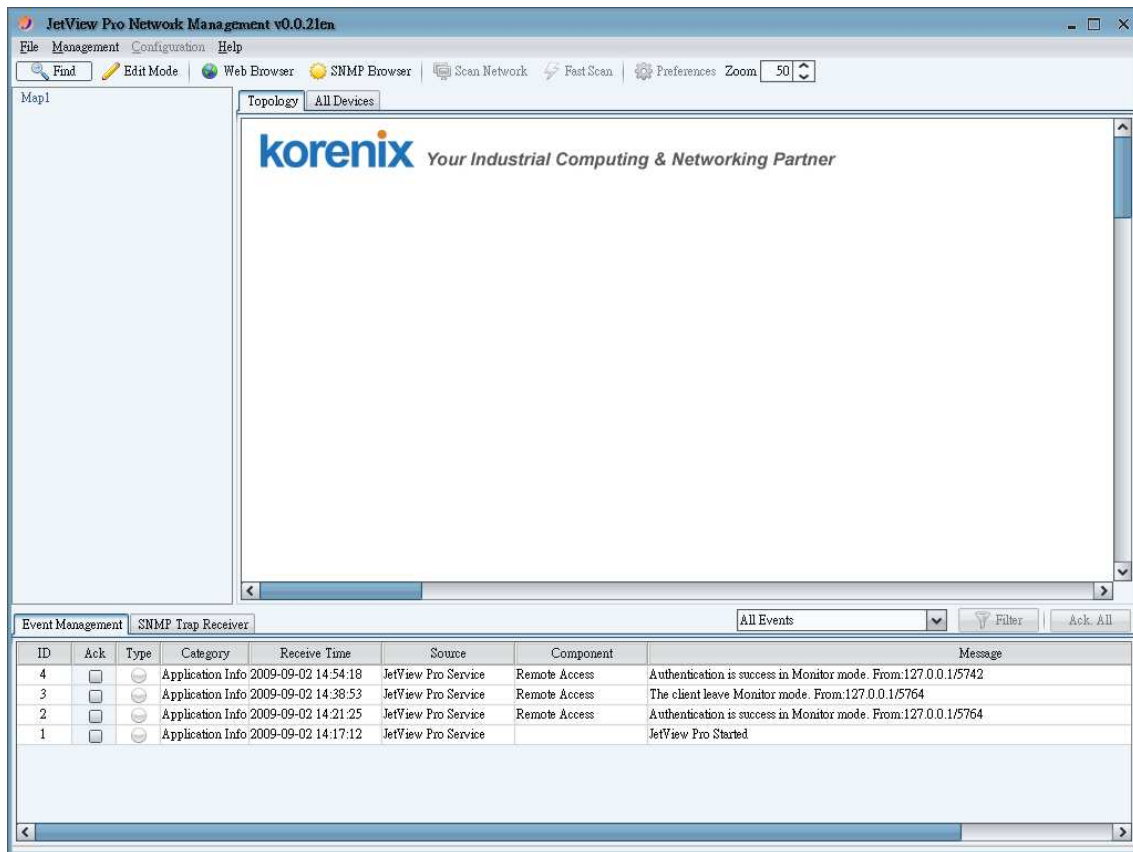
4.8 SNMP Trap Receiver Tab

4.1 Main Window of JetView Pro

4.1.1 Main Window

When you start JetView Pro, the main window appears on the screen. It consists of the following parts:

- Menu Function
- Toolbar Function
- Map Tree
- Topology Tab
- All Devices Tab
- Event Management Tab
- SNMP Trap Receiver Tab

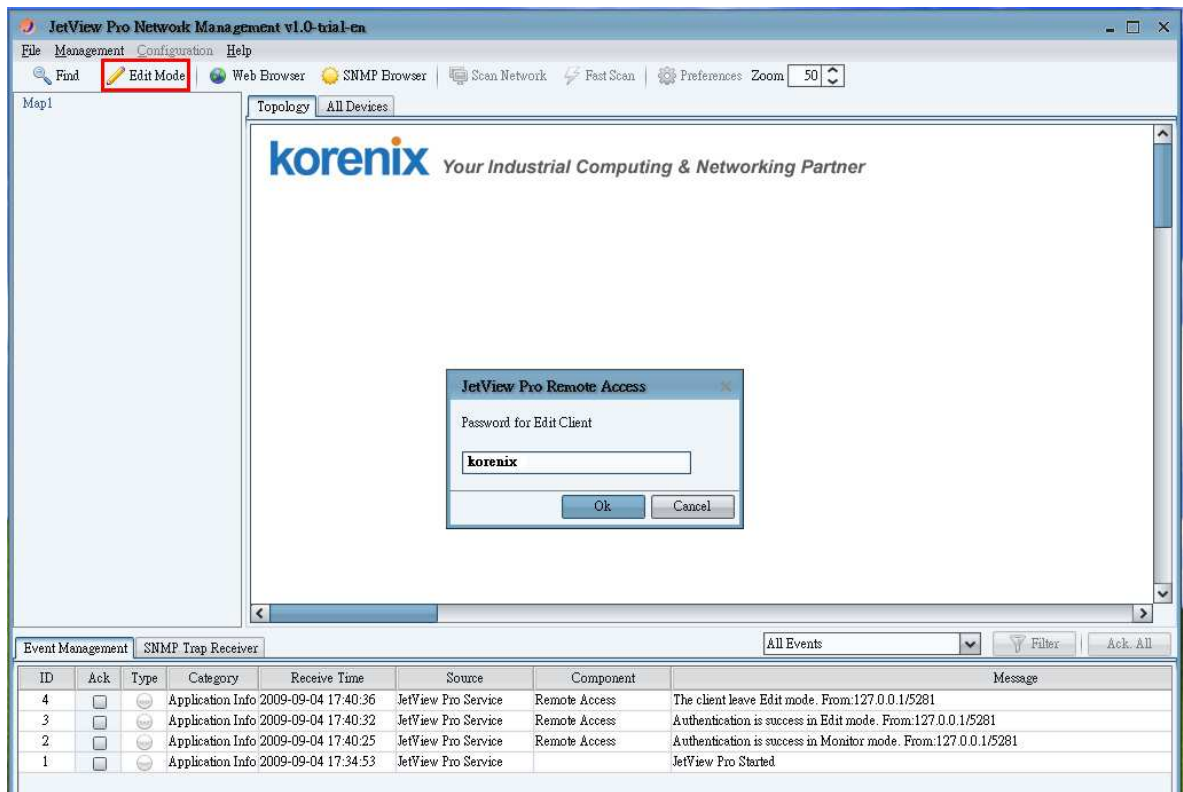


4.1.2 Enter the Edit Mode

The **Monitor** mode is only able to “view” the topology when starting JetView Pro into main window.

To change the settings, need to enter **Edit** mode.

1. Click on Edit Mode on the toolbar, it displays Password dialog.



2. Input password and press Ok.³

3. After entering Edit Mode, the button will become green.



In the **Edit** mode, all functions are available. If return to **Monitor** mode, click on **Edit Mode** again.

4.2 Menu Function

File Management Configuration Help

The menu function contains the following selection items:

- File
- Management
- Configuration
- Help

³ Note that the default password for Edit Mode is "korenix".

4.2.1 File Submenu

File - Open: opens the previous saved database file.

File - Save: saves the current database into file.

File - Export: exports the displayed map in the Topology Map as Image file (BMP, JPEG, PNG format)

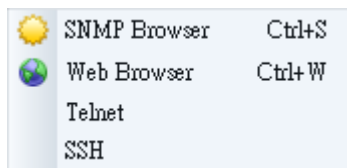
File - Print: exports the displayed map in the Topology Map as PDF file.

File - Exit: closes the JetView Pro Main Window.

File - Exit and Stop Service: closes JetView Pro Main Window and stops JetView Pro Service

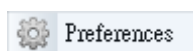


4.2.2 Management Submenu



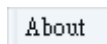
Please refer to section 7.4 for more information.

4.2.3 Configuration Submenu

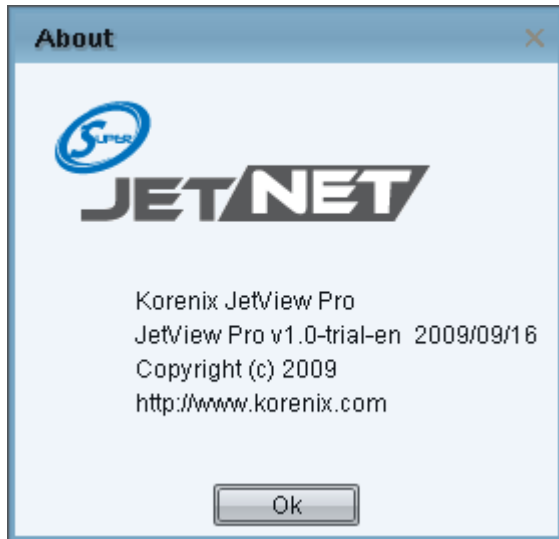


Please refer to section 9 for more information.

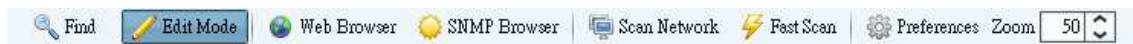
4.2.4 Help Submenu



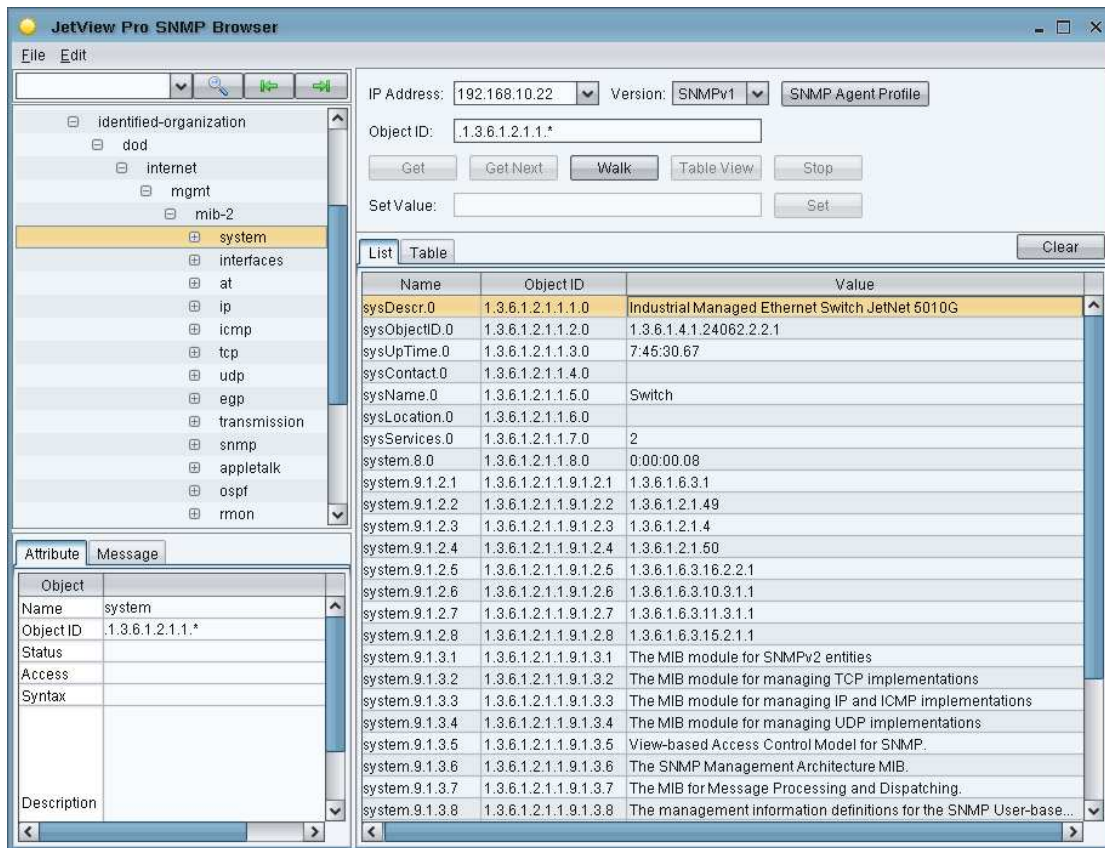
It shows the version and release date of JetView Pro.



4.3 Toolbar Function



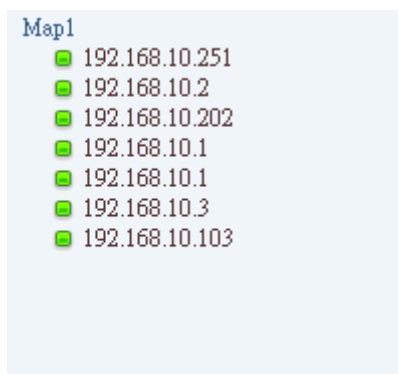
- Find
Quickly find out the selected device by IP address.
- Edit Mode
Click on **Edit Mode** to enter into Edit mode by input password.
- Web Browser
Run web browser to configure by Java Applet on Korenix's switch device
- SNMP Browser
The SNMP Browser tool lets you read and write the MIB of the IP-Address device.
Please refer to section 7.4.2 for more information



- Scan Network
Find out specified IP range assigned.
- Fast Scan
Find out all switch devices by the **JetView** protocol.⁴
- Preferences
Please refer to section 9 for more information.
- Zoom
Zoom in and out the device icons, texts and others only on the **Topology** tab.

4.4 Map Tree

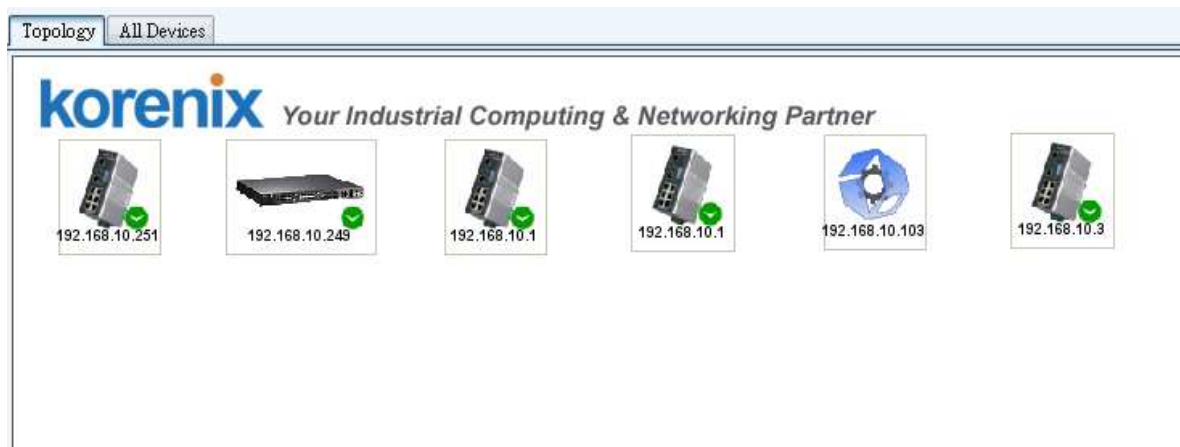
Click on the tree node to select the device on the **Topology** tab.



⁴ Only Korenix devices can be found

4.5 Topology Tab

This page displays the icons for monitored devices.



4.6 All Devices Tab

This page displays the icons for monitored devices (as **Topology** tab)

Topology		All Devices					
No.	Model	Mac Address	IP Address	Netmask	Version	Status	
1	JetNet4508	00:12:77:01:03:86	192.168.10.251	255.255.255.0	v2.10		
2	JetNet5010G	00:12:77:60:14:60	192.168.10.202	255.255.255.0	v2.2.2 (b1.6.2.12)		
3	JetNet4508f	00:12:77:01:1B:0B	192.168.10.1	255.255.255.0	v2.10		
4	JetNet4508	00:12:77:01:12:78	192.168.10.1	255.255.255.0	v2.6		
5	JetNet4508f	00:12:77:01:02:B3	192.168.10.3	255.255.255.0	v2.12		
6	JetNet4008	00:12:77:01:06:76	192.168.10.103	255.255.255.0	v2.6		
7	JetNet5428G	00:12:77:FF:02:C3	192.168.10.2	255.255.255.0	v0.0.30 (N/A)		

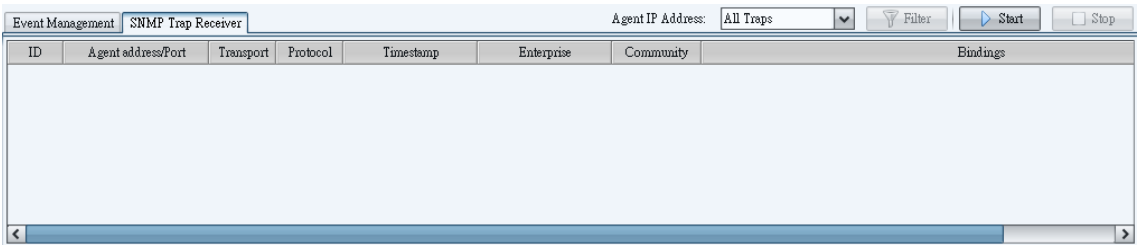
4.7 Event Management Tab

The event displays on the **Event Management** tab page while the event happens.

Event Management		SNMP Trap Receiver					All Events	Filter	Ack. All
ID	Ack	Type	Category	Receive Time	Source	Component	Message		
4	☐	☐	Application Info	2009-08-28 15:15:57	JetView Pro Service	Remote Access	Authentication is success in Edit mode. From:/192.168.10.80		
3	☐	☐	Application Info	2009-08-28 15:14:21	JetView Pro Service	Remote Access	Authentication is success in Monitor mode. From:/192.168.10.80		
2	☐	☐	Application Info	2009-08-28 15:14:16	JetView Pro Service	License	License file: is not exist!		
1	☐	☐	Application Info	2009-08-28 15:14:16	JetView Pro Service		JetView Pro Started		

4.8 SNMP Trap Receiver Tab

The SNMP trap displays on the **SNMP Trap Receiver** tab page while the trap happens. The SNMP Trap Receiver support SNMP v1/v2c traps receiving.



5 Device Discovery

To see the installed devices on the **Topology** tab or the **All Devices** tab, you have to add devices. How to do add devices and delete devices? How to quickly update the installed devices? This section gives answers to all the above questions.

Following topics are covered in this section:

5.1 Add Devices

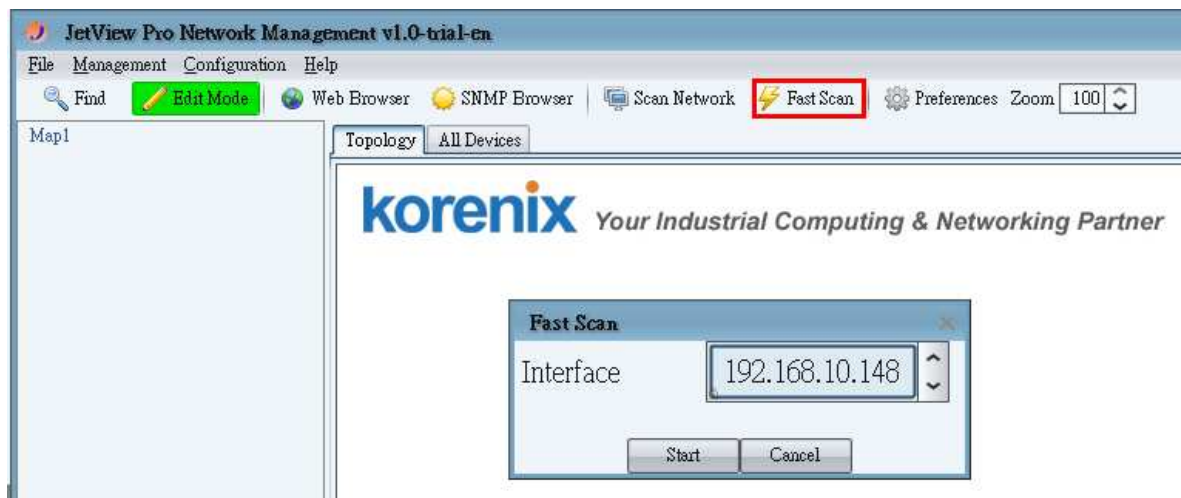
5.2 Delete Devices

5.1 Add Devices

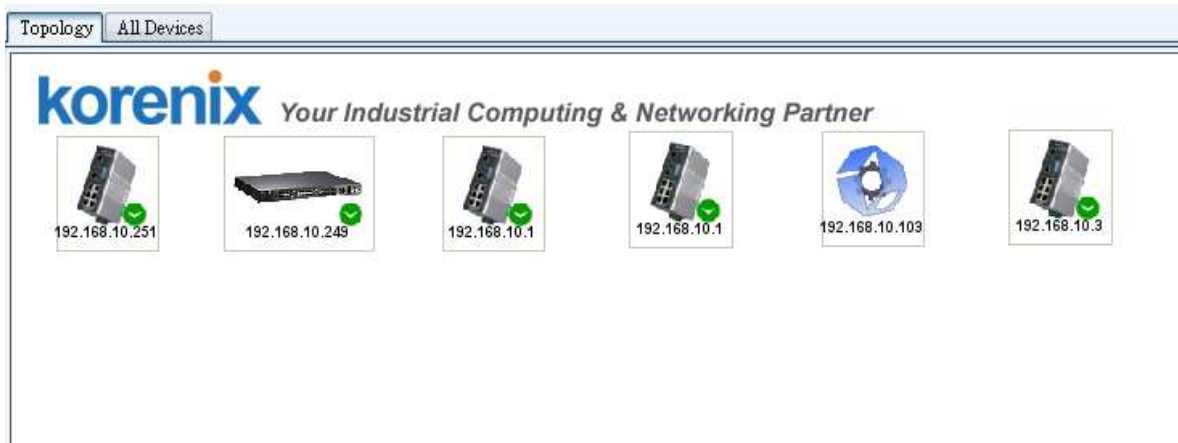
5.1.1 Fast Scan

This function is to discovery devices using the **JetView** protocol in the local network. JetView Pro discovers all network devices on the subnet network via the selected interface on the PC. This function adapts to setup a newly installed network.

To update installed network components (or devices), click on Fast Scan on the toolbar and select one of your NIC which connect to network devices.



It displays all Korenix devices in the network on the **Topology** tab.



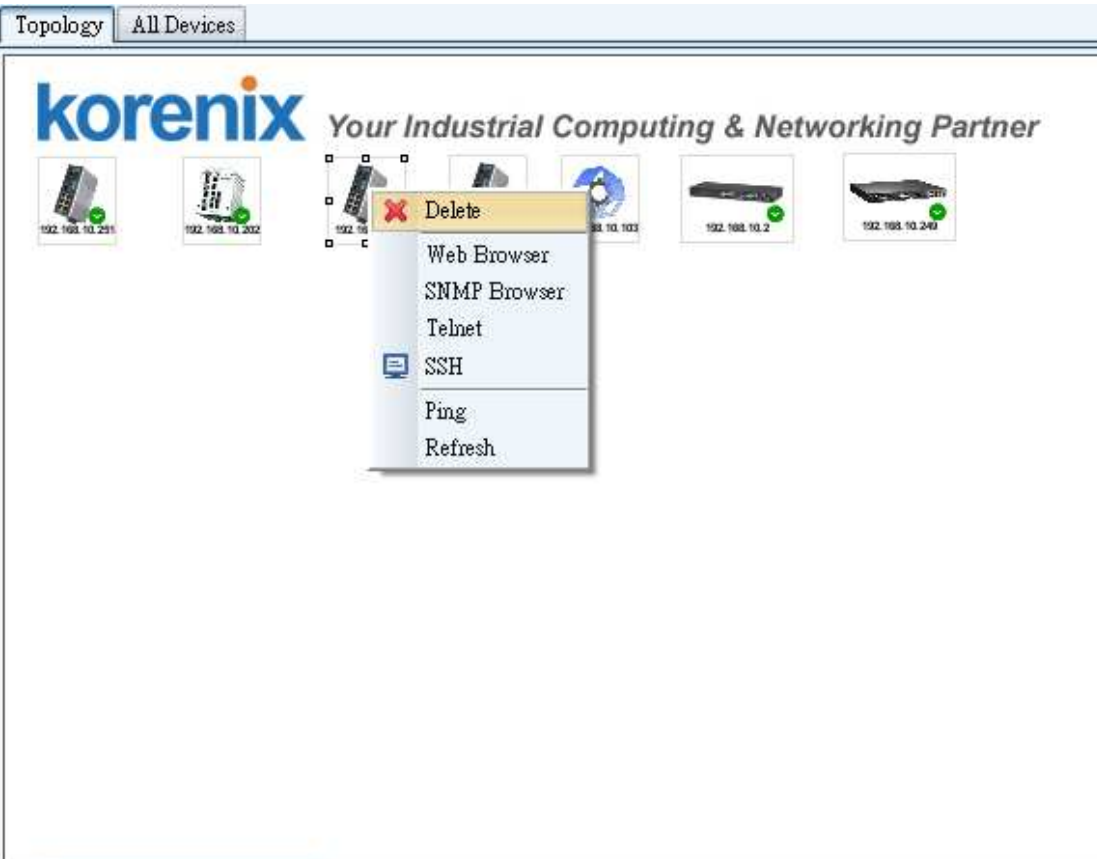
5.1.2 Scan Network

This function is to discovery devices via the assigned IP address range. While you want to add the specified IP-enabled device, this function is suitable.

Note: The "End Address" should great or equal then "Start Address"

5.2 Delete Devices

You can delete any device on **Topology** tab. Use the mouse to select multiple devices by **CTRL** key and right-click the selected device. Then display a pop-up menu and click on **Delete** menu item.



6 Topology Map

Following topics are covered in this section:

6.1 Device Information

6.2 Auto Topology

6.3 Manual Add Connection and Delete

6.4 Save Topology Map

6.1 Device Information

6.1.1 Device Status

- Move mouse cursor over the switch device icon on **Topology** tab. It will show the following status for the device.



Device Name: Switch

Device IP Address : 192.168.10.10

Device Type : JetNet5010G

Description : Industrial Managed Ethernet Switch JetNet 5010G

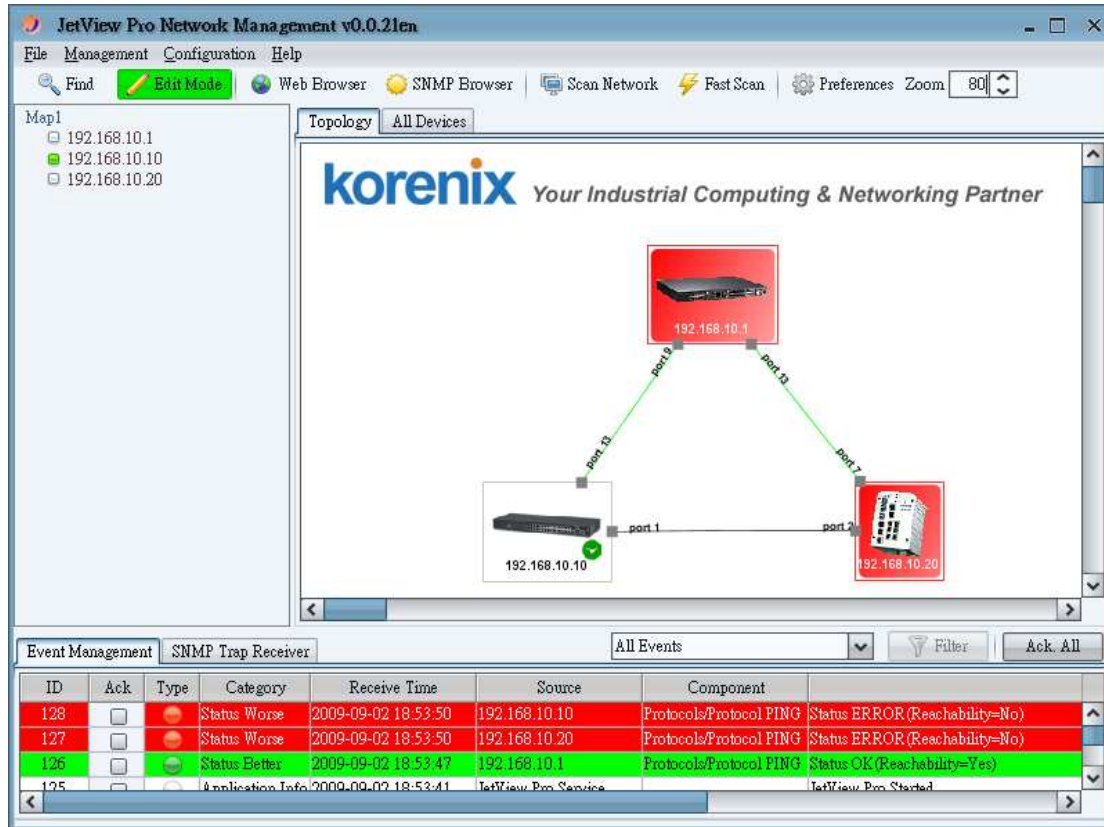
System Up Time : 0:00:56.18

LLDP Status : OK

LLDP Chassis ID: 00:12:77:60:14:60

Status : SNMP OK

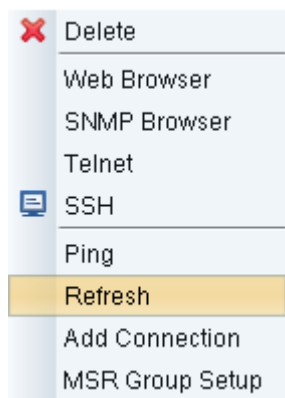
- The device (IP address: 192.168.10.1) lists in left tree panel with a status icon use to show its online/offline status. Green means online, while white means offline. The device icon on **Topology** tab also shows its status in the background. If the color is red, which indicates an error status (hint: the detail is in Event management tab). In other words, JetView Pro sends ICMP Ping request and then receives incorrect response (unreachable).



- There is a green check  on right-bottom of the device. This green check indicates the normal status for SNMP⁵.

6.1.2 Device refresh

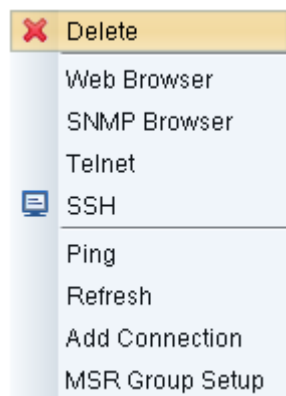
To update the device status, select one more device (especially on error status) and right-click mouse on the selected device. Then pop up as follows:



⁵ You may need to wait 0.5 minute to let JetView Pro collect devices' information.

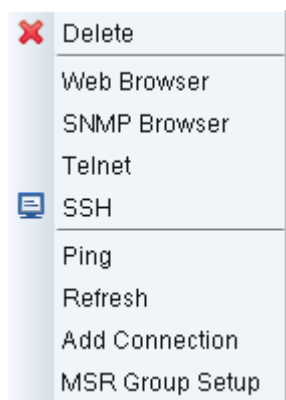
6.1.3 Device delete

To remove the device nodes, select one or one more devices and right-click mouse on the selected device. Then pop up as follows:



6.1.4 Managing devices

To manage the devices, select one device and right-click mouse on the selected device. It will pop up a dialog as follows. Choose to use Web Browser, SNMP Browser, Telnet, SSH, or Ping to manage the device. Also refer to section 7.4 for more details.



6.2 Auto Topology

The Auto Topology function allows you to automatically create the **links** (connections) between the devices (nodes). To support this function, the devices must support with LLDP and SNMP. LLDP enables the user to have automatic topology recognition for his LAN. Therefore the devices support for LLDP and SNMP and have to be configured to ready state.

6.2.1 Enable LLDP

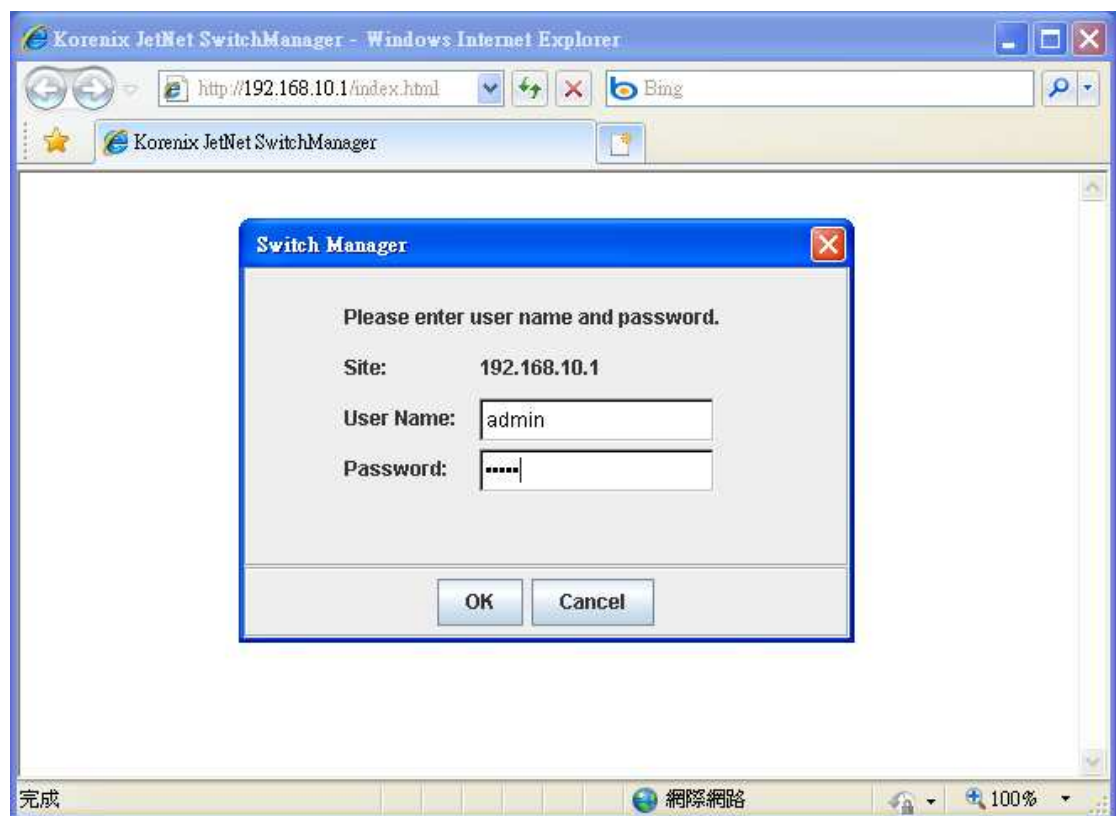
To let "Auto Topology" working, each device MUST enable LLDP function on installed network devices. You can use Web browser to confirm whether LLDP is enabled.

1. Use mouse to select one device on the Topology tab which you want to enable as LLDP.

2. Mouse right-click on the selected device and click on the **Web Browser** menu-item of pop-up menu.



3. When the login screen appears, login with the user name and password.⁶



⁶ Note: The default login User Name and Password: admin/admin

4. Click on the tree node **Topology Discovery**.

LLDP Disable ▼

LLDP Configuration

LLDP timer	
LLDP hold time	

LLDP Port State

Local Port	Neighbor ID	Neighbor IP	Neighbor VID

Apply

5. Confirm whether LLDP is enabled. If it is Disable, please set Enable and press **Apply**. You can manual set the timers of LLDP. The range of LLDP timer is 5~254 and LLDP hold time is 10~255.

Topology Discovery

LLDP Enable ▼

LLDP Configuration

LLDP timer	30
LLDP hold time	120

LLDP Port State

Local Port	Neighbor ID	Neighbor IP	Neighbor VID
fa9	00:12:77:ff:02:c3	192.168.10.10	1
fa13	00:12:77:60:14:60	192.168.10.20	1

Apply

6.2.2 Generate connections

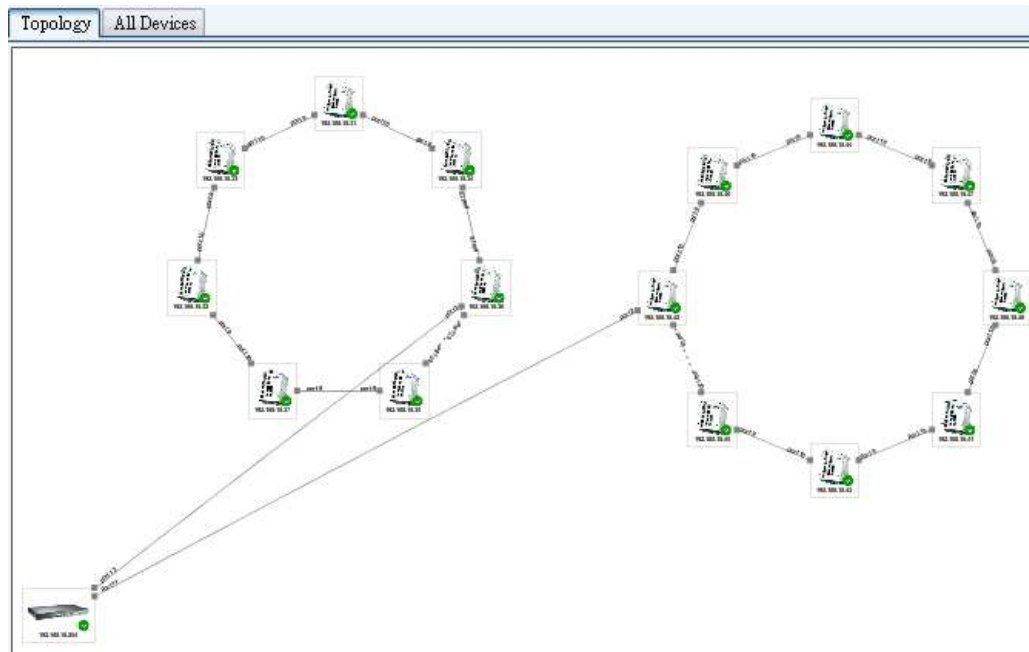
Generate connections between the devices.⁷

1. Check every devices' icon that each one has a green check  on it. Device icon without check icon can't access by SNMP.
2. Mouse right-click on the Topology tab and click on Auto Topology on pop-up menu. It will display as follows:

⁷ In the example below, JetView Pro add connections and place all devices according to the SNMP mib.



3. Press OK to display the following of screen.



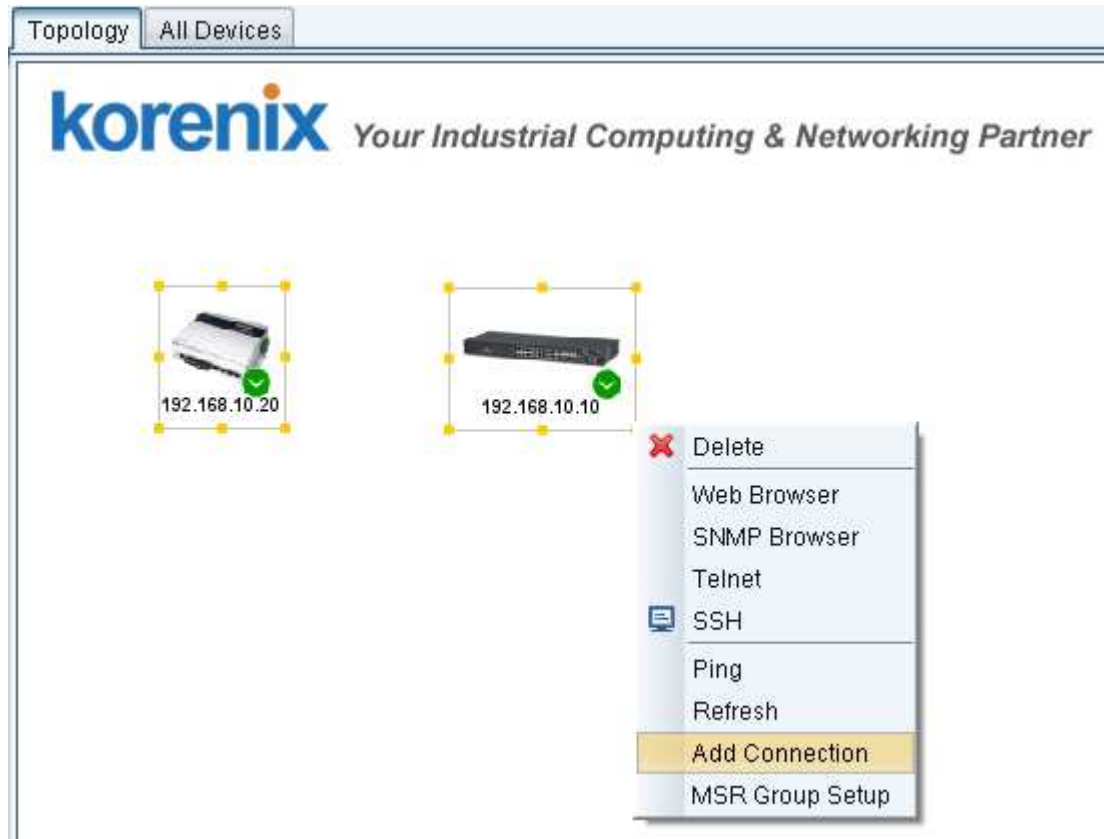
Auto Topology Check List:

Yes/No	Requirement
	Does every device enable SNMP?
	Does any device not using default SNMP community? (public, private)
	Does every devices' icon show green?
	Does every device enable LLDP?
	If the device show red (not reachable), after you fix the problem, did you refresh the device?

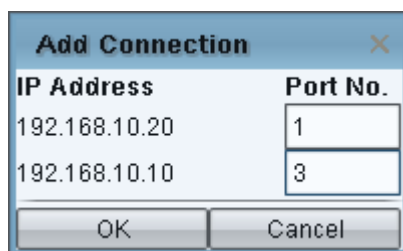
6.3 Manual Add Connection and Delete

6.3.1 Manual Add connection

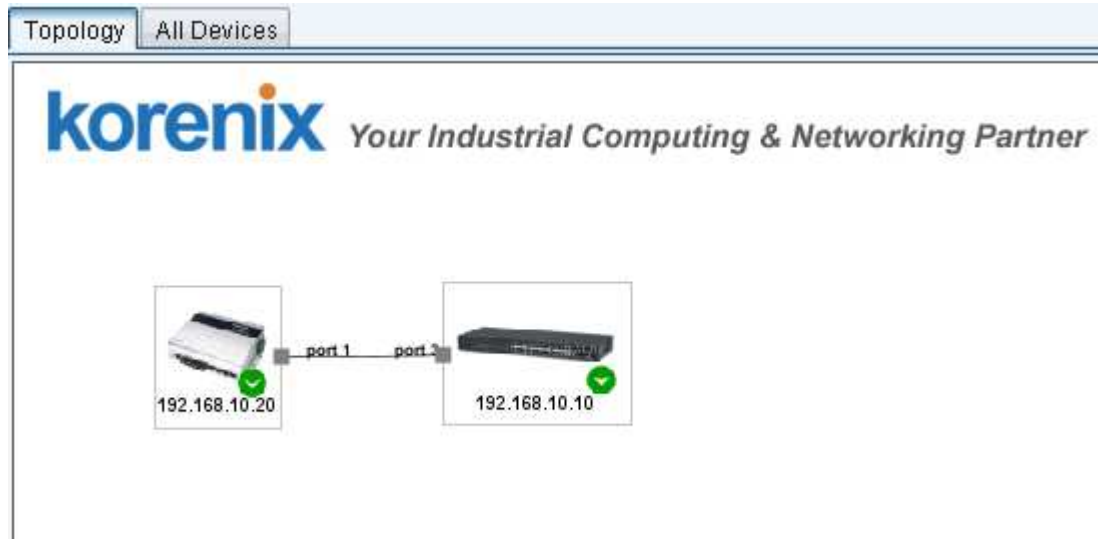
Select two switch icons and mouse right-click to show popup menu.



Click on **Add Connection** menu item of the pop menu. It will show this Add Connection dialog. Enter two port number connected between two switches and press OK.

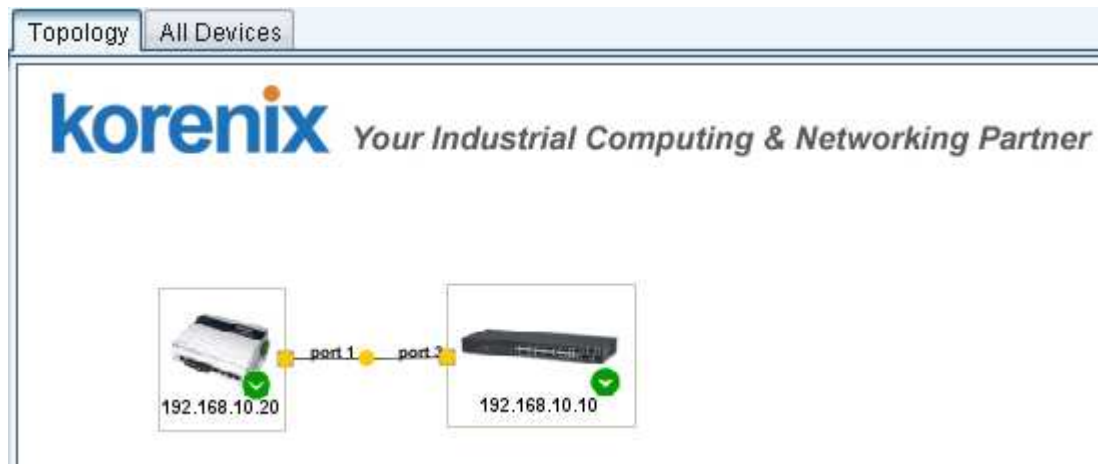


The screen will display that there is a connection between two switches.



6.3.2 Manual Delete connection

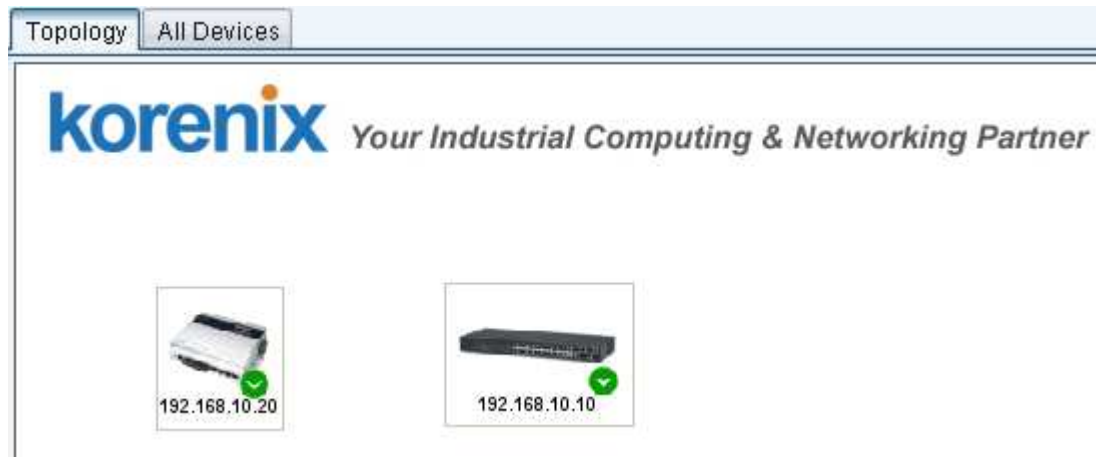
Select the connection between 192.168.10.20 and 192.168.10.10 by Mouse-Click.



Mouse Right-Click the connection and pop up **Delete** menu-item of pop-up menu.



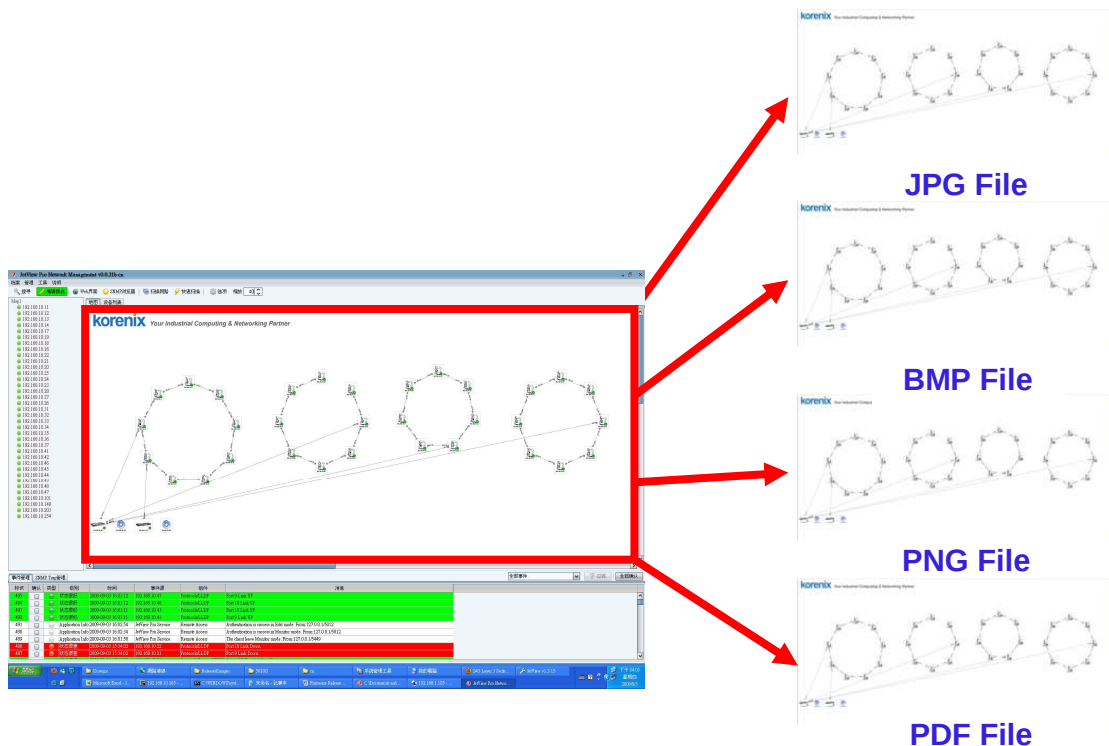
Click **Delete** to delete the connection.



6.4 Save Topology Map

To present to Topology Map, you could need to get topology map.

6.4.1 Save Topology Map as file

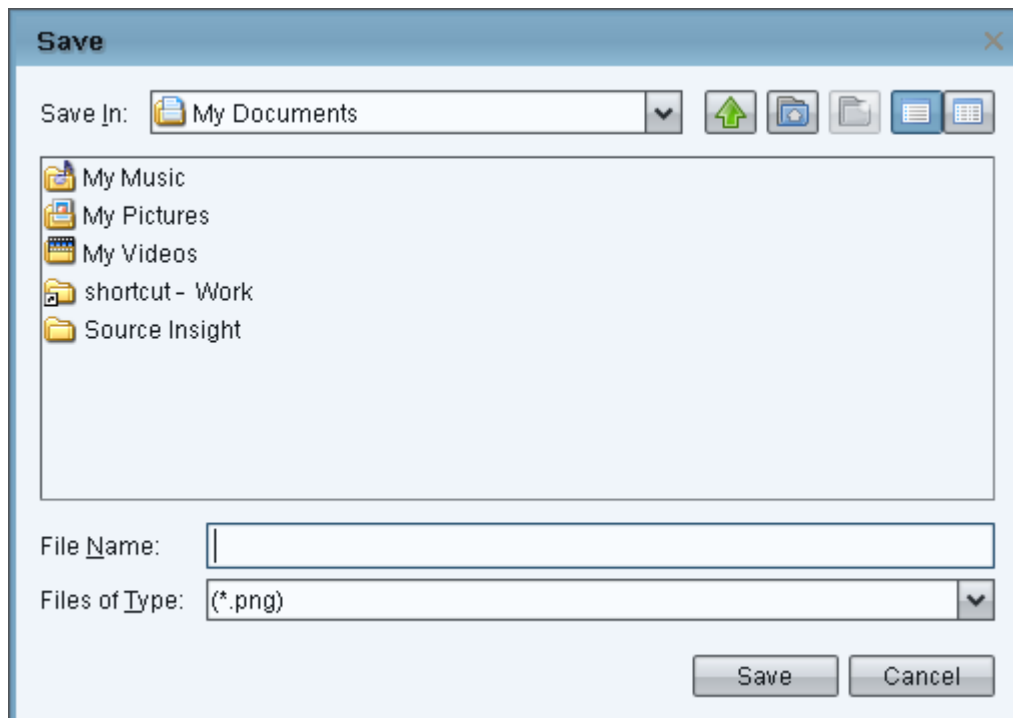


These two methods can help you save currently displayed map in the Topology Map to file.

1. Image format file (BMP, JPEG, PNG)

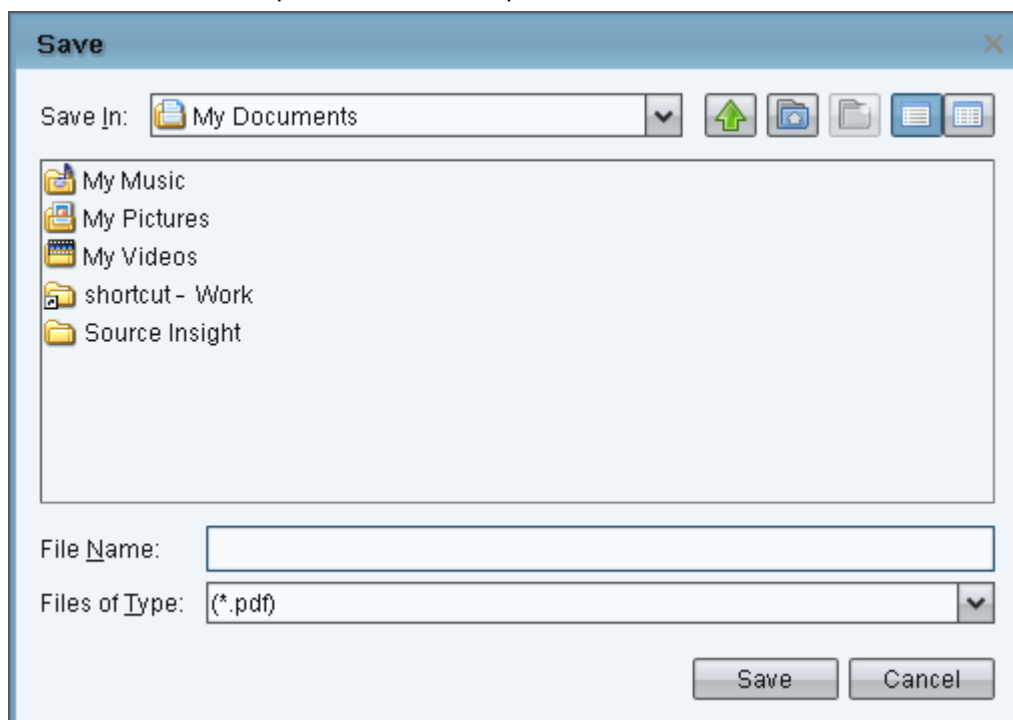
Click on **File / Export....** Choose File of Type to use BMP, JPEG, PNG image format.

Input **File Name** and press **Save** to save the file.



2. PDF file

Click on **File / Print**. Input **File Name** and press **Save** to save the file.

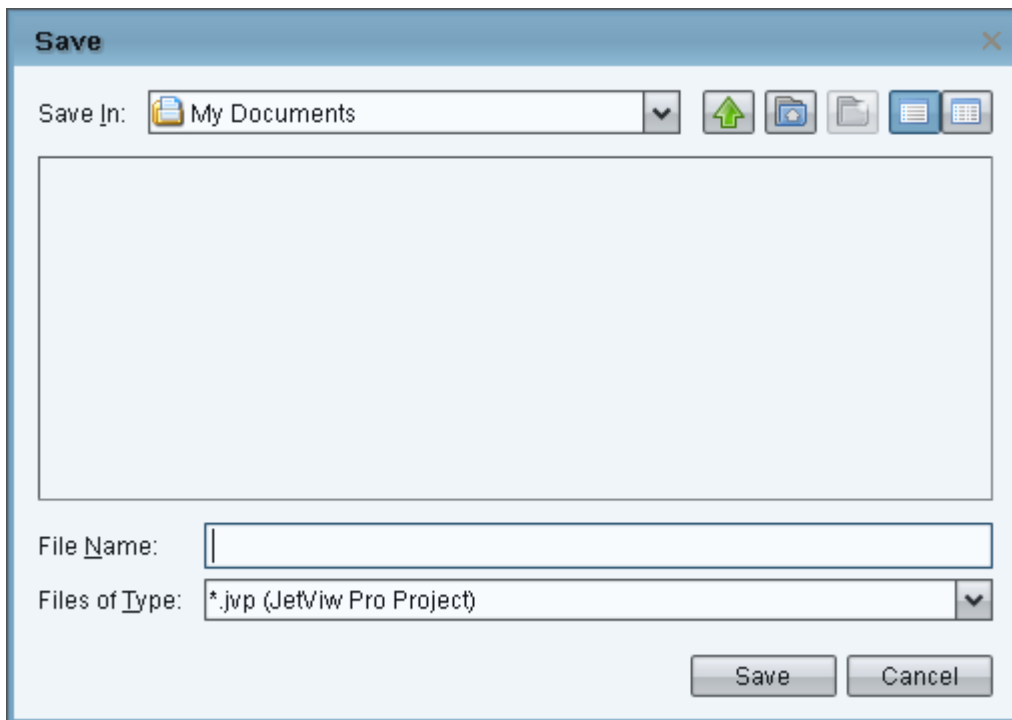


A PDF file will be generated. You can print it with the print function of your PDF viewer.

6.4.2 Save Topology Map as database file (*.jvp)

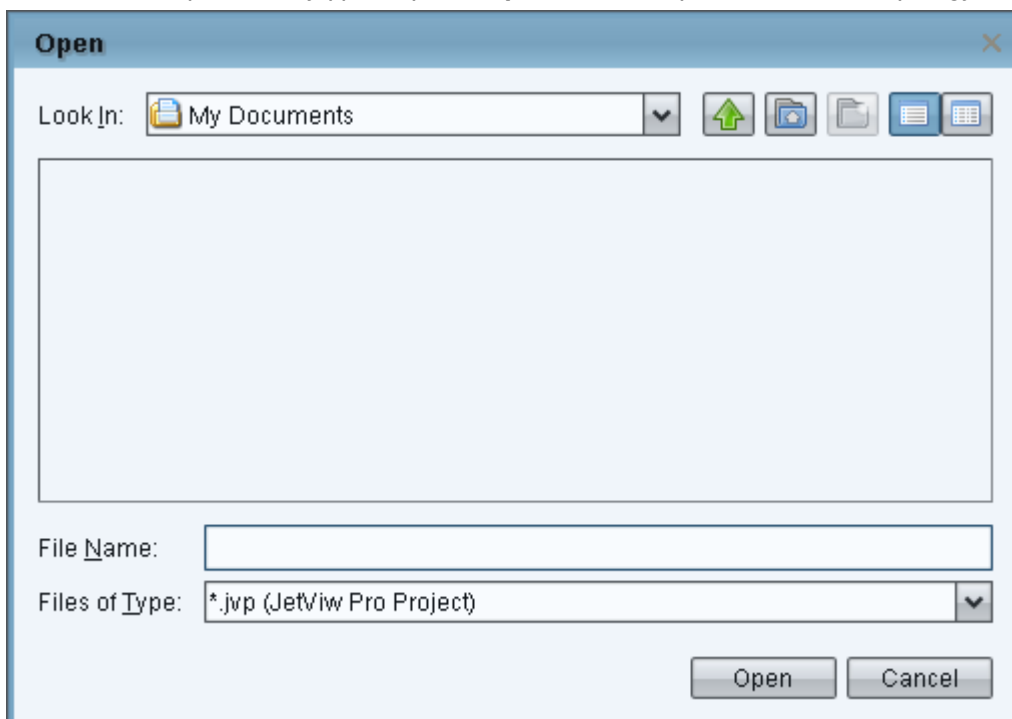
To record current displayed map in the Topology Map, use this map again. First, you need to save Topology Map as database file.

Click on **File / Save**. Input **File Name** and press **Save** to save the file. (ex. demo.jvp)



To restore previous saved Topology Map, you click on File / Open...

Set File Name (ex. demo.jvp) and press **Open** to restore previous saved Topology Map.



Note: This function only available on server. Remote client can't backup/restore database due to security precautions.

7 Device Configuration

This section explains the device configuration on the **All Devices** Tab. One switch device can be configured by one mouse selection. Group devices can also be configured by many selections at a time.

The methods of mouse selection can be single selected any rows by **Ctrl** + mouse click or continuously selected by first mouse click and then **Shift** + mouse click. Remember that first mouse select the switch devices to configure before the following of device configurations.

After having one more devices selections, show pop-up menu by mouse right-click.

Topology		All Devices					
No.	Model	Mac Address	IP Address	Netmask	Version	Status	
1	JetNet4508f	00:12:77:01:02:B3	192.168.10.3	255.255.255.0	v2.12		
2	JetNet5428G	00:12:77:FF:02:C3	192.168.10.2	255.255.255.0	v0.0.30 (N/A)		
3	JetNet5010G	00:12:77:60:14:60	192.168.10.202	255.255.255.1			
4	JetNet4508	00:12:77:01:12:78	192.168.10.1	255.255.255.1			
5	JetNet4508f	00:12:77:01:1B:0B	192.168.10.1	255.255.255.1			
6	JetNet4008	00:12:77:01:06:76	192.168.10.103	255.255.255.1			
7	JetNet4508	00:12:77:01:03:86	192.168.10.251	255.255.255.1			

Change IP

Firmware Upgrade

Boot Loader Upgrade

Configuration File >

Web Browser

SNMP Browser

Telnet

SSH

Ping

☐ LED Signal

Load Factory Default

Reboot Device

Following topics are covered in this section describing the pop-up menu functions:

7.1 Global Settings

7.2 MSR group setup

7.3 Firmware Upgrade

7.4 Configure File Operation

7.5 Manage by Application

Note: Before using pop-up menu functions, remember to select the target device (mouse selection) that should be configured.

7.1 Global Settings

7.1.1 Change IP

You can assign the new IP address to the switch devices.

7.1.2 LED Signal

This function is convenient for searching the switch device. While this function is enabled, the light of the LED on the switch device constantly twinkles.

7.1.3 Load Factory Default

You can reset all the configurations of the switch to default setting.

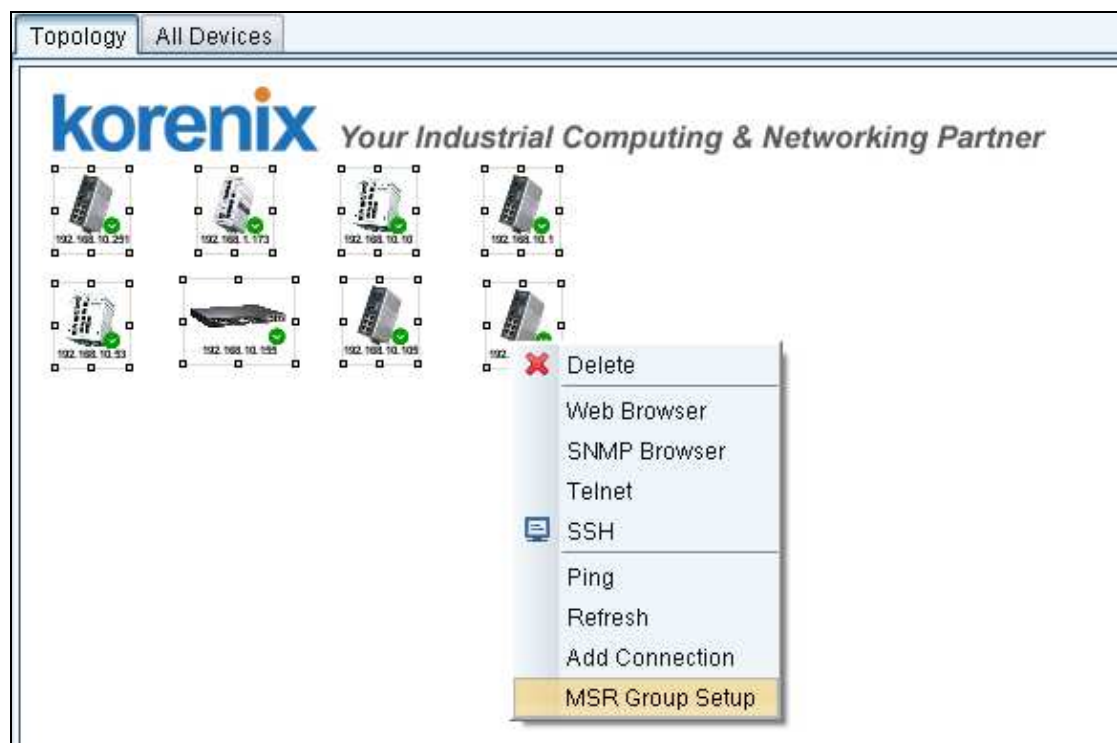
7.1.4 Reboot Device

Some of the feature change to require you rebooting the system. Click on **Reboot Device** on pop-menu to reboot your device.

7.2 MSR group setup

To let “Auto Topology” to generate Ring Topology, devices in the install ring network have to setup Multiple Super Ring (MSR) function.

1. Use mouse right click to select multiple devices on the Topology tab by CTRL key which you want to setup MSR function.
2. Mouse right-click on the selected device and click on the **MSR Group Setup** menu-item of pop-up menu.



3. It will show **MSR Group Setup** window. Set **Ring ID** (0~31), **Ring Name**, **Ring Version**, **Ring Port1** and **Ring Port2** for MSR setup. Then press **Check** button

The image shows a software window titled "MSR Group Setup". It contains several input fields and buttons on the left side, and a table at the bottom.

Fields and buttons on the left:

- Ring ID:
- Ring Name:
- Ring Version:
- Ring Port1:
- Ring Port2:

Buttons on the right:

- Check
- Apply
- Export >
- Save to Flash
- Cancel

Table at the bottom:

Device	Snmp	Ring ID	Ring Port1	Ring Port2	Status	Setup result

4. It will show check status of selected device in the bottom of **MSR Group Setup** window. The columns in the table explain as follow:
 - a. Device: IP address
 - b. Snmp: Connect via SNMP is available
 - c. Ring ID: whether Ring ID is used or exceeds the ring number limit
 - d. Ring Port1: whether Ring Port1 is enabled or exceed the port number limit for device
 - e. Ring Port2: whether Ring Port2 is enabled or exceed the port number limit for device
 - f. Status: the device status based on the status of Snmp, RingID, Ring Port1, Ring Port2.
 - g. Setup result: response this column after pressing **Apply** button

MSR Group Setup

Ring ID

1

Check

Ring Name

aa1

Apply

Ring Version

Rapid Super Ring

Export >

Ring Port1

1

Save to Flash

Ring Port2

2

Cancel

Device	Snmp	Ring ID	Ring Port1	Ring Port2	Status	Setup result
192.168.10.251	Available	Available	Enabled	Enabled	Available	Success
192.168.10.10	Available	Available	Enabled	Enabled	Available	Success
192.168.10.105	Available	Available	Enabled	Enabled	Available	Success
192.168.10.1	Available	Available	Enabled	Enabled	Available	Success
192.168.10.53	Available	Available	Enabled	Enabled	Available	Success
192.168.10.18	Available	Available	Enabled	Enabled	Available	Success
192.168.10.155	Available	Available	Enabled	Enabled	Available	Success

- To indicate that there is at least one of device in the unavailable status if the **Apply** is disabled. Press Check button again after solving the problem for unavailable devices. If all the selected devices are in the available status, the **Apply** button will enable. Then press **Apply** button to setup MSR setting for all selected devices. Final, the setup result will show the last column in the table.

MSR Group Setup

Ring ID

1

Check

Ring Name

aa1

Apply

Ring Version

Rapid Super Ring

Export >

Ring Port1

1

Save to Flash

Ring Port2

2

Cancel

Device	Snmp	Ring ID	Ring Port1	Ring Port2	Status	Setup result
192.168.10.251	Available	Available	Enabled	Enabled	Available	None
192.168.10.10	Available	Available	Enabled	Enabled	Available	None
192.168.10.1	Available	Available	Enabled	Enabled	Available	None
192.168.10.53	Available	Available	Enabled	Enabled	Available	None
192.168.10.155	Available	Available	Enabled	Enabled	Available	None
192.168.10.105	Available	Available	Enabled	Enabled	Available	None
192.168.10.18	Available	Available	Enabled	Enabled	Available	None

6. If you want to use these settings for rebooted devices, you **MUST** press **Save to Flash** button to save these settings into flash for each devices.

7.3 Firmware Upgrade

In this section, you can update the latest firmware for your switch. Korenix provides the latest firmware in Korenix Web site. The new firmware may include new features, bug fixes or other software changes. We'll also provide the release notes for the update as well. For technical viewpoint, we suggest you use the latest firmware before installing the switch to the customer site.

The UI also shows you the version and built date of current firmware. Please check the version number after the switch is rebooted.

Note: The system will be automatically rebooted after you finished upgrading new firmware/bootloader. Please remind the attached users before you do this.

7.4 Configure File Operation

The configuration file of the switch is a pure text file. You can open it by word/txt read file. You can also modify the file, add/remove the configuration settings, and then restore back to the switch.

7.4.1 Backup

With Backup function, you can save current configuration file saved in the switch's flash

7.4.2 Restore

This will allow you to go to Restore function later to restore the configuration file back to the switch.

7.4.3 Load default

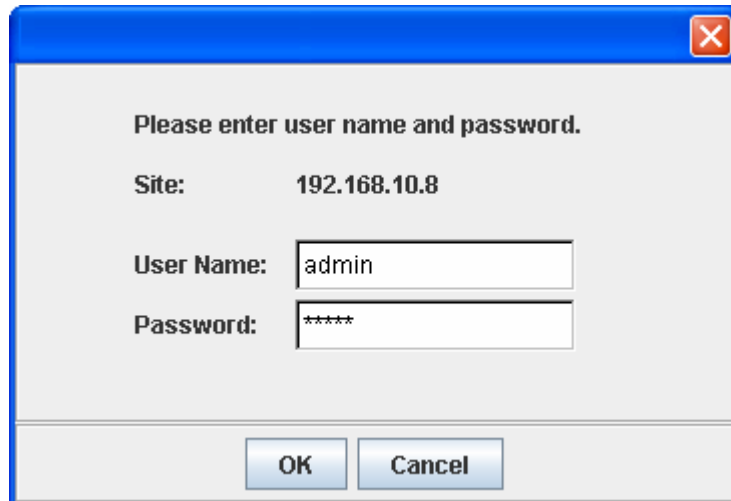
All of the configurations will be rollback to the factory default settings, except the device IP address.

7.5 Manage by Application

7.5.1 Web browser

For managing Korenix's Ethernet switch devices, you need to consider that they have web management function. Korenix web management page is developed by JAVA. It allows you to use a standard web-browser such as Microsoft Internet Explorer, or Mozilla, to configure and interrogate the switch from anywhere on the network.

1. Use mouse to select one device on the Topology tab which you want to configure.
2. Mouse right-click the selected device and click on the **Web Browser** menu-item of pop-up menu.
3. The login screen will appear next.
4. Key in user name and the password. Default user name and password are both **admin**.



Please enter user name and password.

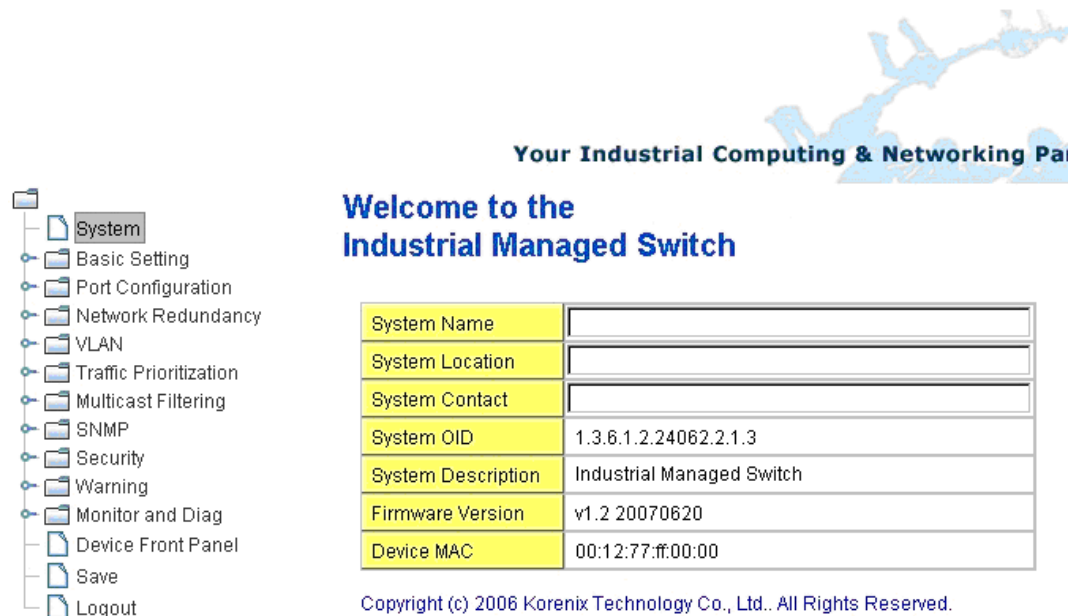
Site: 192.168.10.8

User Name:

Password:

OK Cancel

Click on **Enter** or **OK**. Welcome page of the web-based management interface will then appear.



Your Industrial Computing & Networking Partner

Welcome to the Industrial Managed Switch

System Name	
System Location	
System Contact	
System OID	1.3.6.1.2.24062.2.1.3
System Description	Industrial Managed Switch
Firmware Version	v1.2 20070620
Device MAC	00:12:77:ff:00:00

Copyright (c) 2006 Korenix Technology Co., Ltd.. All Rights Reserved.

- System
- Basic Setting
- Port Configuration
- Network Redundancy
- VLAN
- Traffic Prioritization
- Multicast Filtering
- SNMP
- Security
- Warning
- Monitor and Diag
- Device Front Panel
- Save
- Logout

5. Once you enter the web-based management interface, you can freely change the IP address to fit your network environment.

7.5.2 SNMP Browser

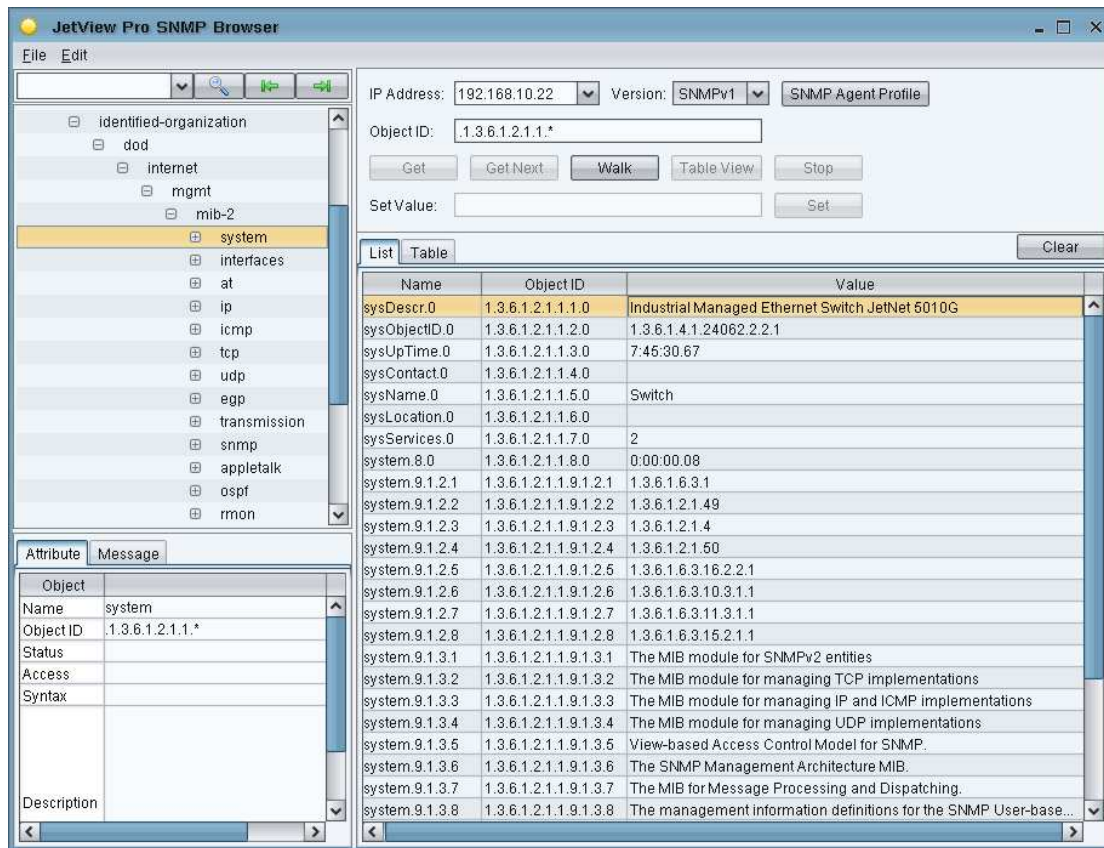
JetView Pro provides a SNMP browser for user to management SNMP devices. The SNMP Browser supports SNMP v1/v2c/v3 get, get next, walk, table view and set functions. And the SNMP Browser provides MIB file compiler tool "MIB File Manager" that can load public standard MIBs and private MIBs and build a MIB tree.

Korenix provides many standard MIBs for users to configure or monitor the switch's configuration by SNMP. But, since some commands can't be found in standard MIB, Korenix provides Private MIB to meet up the need. Compile the private MIB file by your SNMP tool. You can then use it. Private MIB can be found in product CD or downloaded

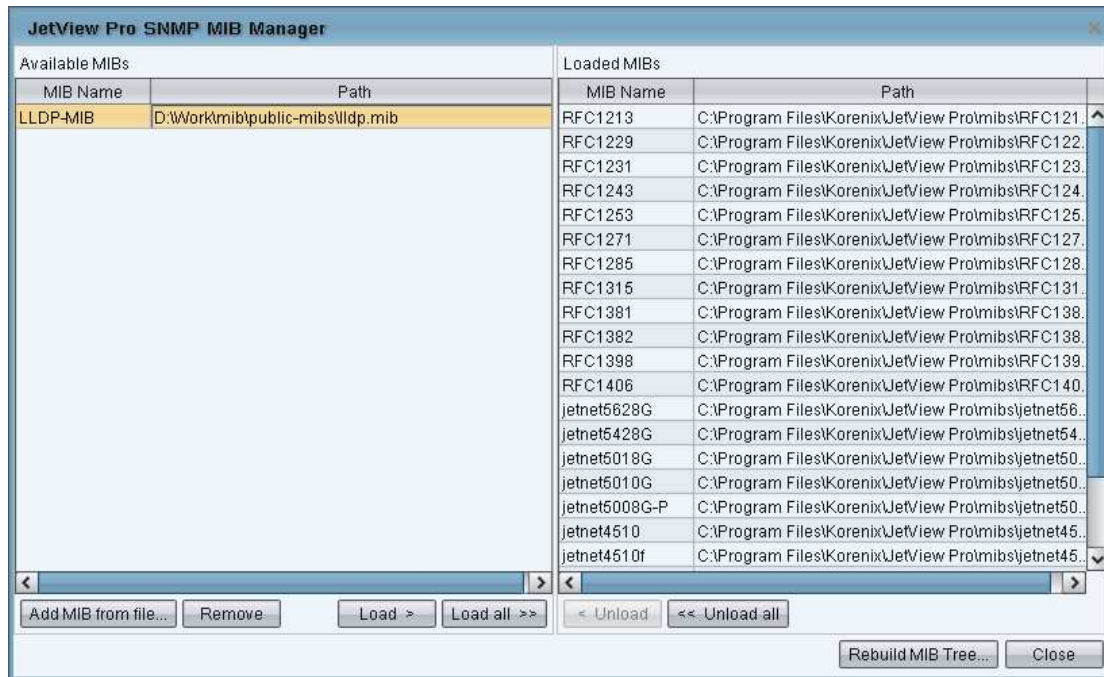
from Korenix Web site.

Private MIB tree is the same as the web tree. This is easier to understand and use. If you are not familiar with standard MIB, you can directly use private MIB to manage /monitor the switch, no need to learn or find where the OIDs of the commands are.

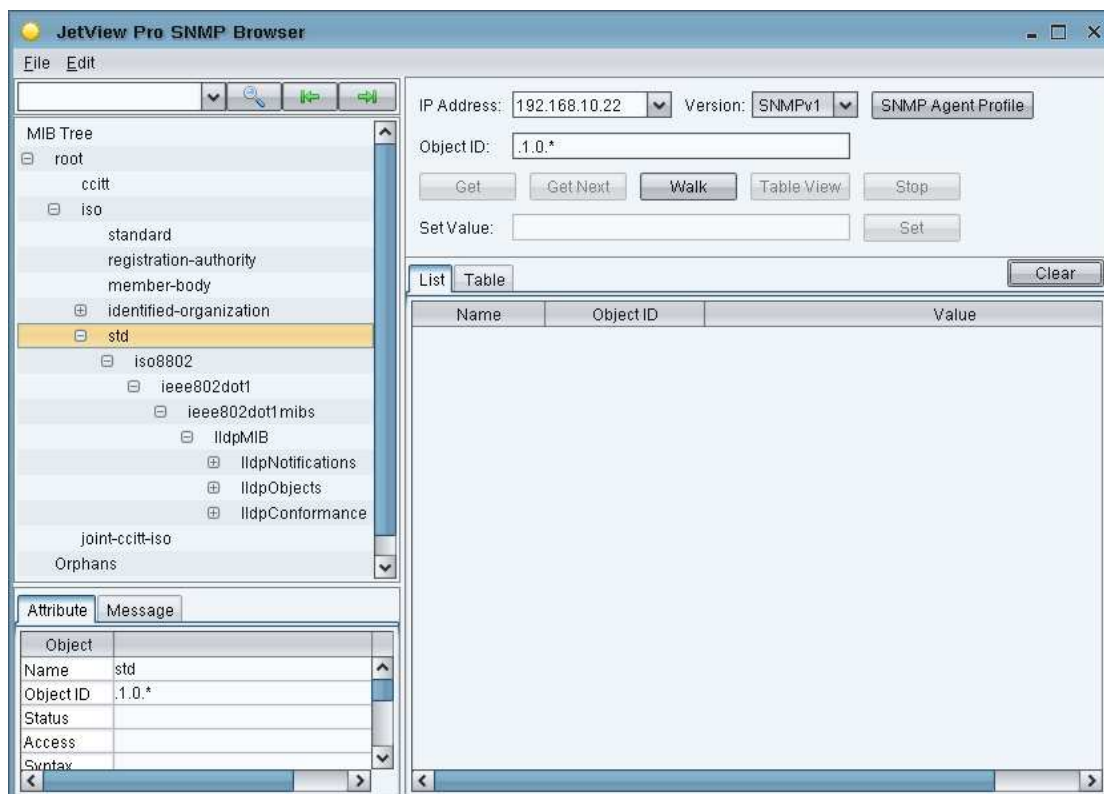
The SNMP Browser tool lets you read and write the MIB of the selected device.



The MIB Compiler assists user in building MIB tree. While MIB files have been changed, user uses the MIB Compiler to rebuild MIB tree. To add new MIB into MIB Tree, go **File > MIB Manager...** It will show the following window.



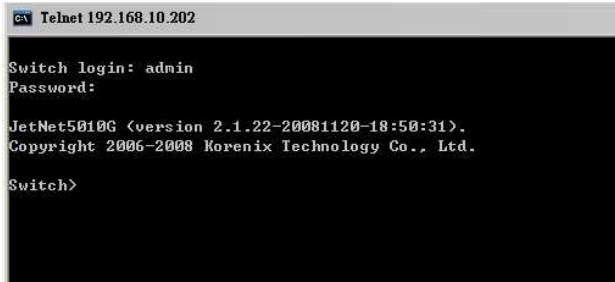
Press **Add MIB from file...** to add new MIB file. Load this new MIB file and then press **Rebuild MIB Tree...** to update **MIB Tree**.



7.5.3 Telnet

Korenix's network devices support Telnet console. You can connect to the switch by Telnet. The command lines are the same as what you see by RS232 console port.

You can use CLI command to configure your device.

A screenshot of a Telnet session window titled 'Telnet 192.168.10.202'. The window has a black background with white text. The text shows the login process: 'Switch login: admin', 'Password:', and then the device's version and copyright information: 'JetNet5010G (version 2.1.22-20081120-18:50:31). Copyright 2006-2008 Korenix Technology Co., Ltd.'. The prompt 'Switch>' is visible at the bottom.

```
Telnet 192.168.10.202

Switch login: admin
Password:

JetNet5010G (version 2.1.22-20081120-18:50:31).
Copyright 2006-2008 Korenix Technology Co., Ltd.

Switch>
```

7.5.4 SSH (Secure Shell)

Korenix's network devices also support SSH console. You can remotely connect to the switch by command line interface. The SSH connection can secure all the configuration commands you sent to the switch.

SSH is a client/server architecture where network devices are considered as the SSH server. When you want to make SSH connection with the switch, you should download the SSH client tool first.

7.5.5 Ping

This ping function can confirm your host access to Korenix's network devices via network. Ping the selected device to verify a normal response time.

8 Event and Alarm Management

Following topics are covered in this section:

8.1 Event Management

8.2 SNMP Trap

8.3 Alarm and Action

8.1 Event Management

Administrators can identify the event threshold (OK, Warning, Error, No Status) by the color. Notifications based on any event (Node up, Node down, Link up, Link down, Remote Access Client mode, etc.) can be generated. Besides, notifications can be sent via email, SNMP trap and this JetView Pro program. For the event settings refer to section 9.1.

In the case of red background icon on Topology tab, relevant fields in the event line of **Event Management** tab are colored as red (see in the following screen). According to the event message, users can identify what occurs to the devices with red background.

The screenshot displays the JetView Pro software interface. The top section shows a network topology with two devices connected by a link. The device on the left is labeled '192.168.10.20' and has a green status icon. The device on the right is labeled '192.168.10.10' and has a red status icon. The link between them is also red. The bottom section shows the 'Event Management' tab with a table of events.

ID	Ack	Type	Category	Receive Time	Source	Component	Message
199	☐	Warning	Status Worse	2009-10-15 18:36:47	192.168.10.10	Protocols/Protocol PING	Status ERROR(Reachability=No)
198	☐	Warning	Status Worse	2009-10-15 18:36:45	192.168.10.20	Protocols/SNMP	Port 1 Link Down
197	☐	OK	Status Better	2009-10-15 18:35:43	192.168.10.10	Protocols/Protocol PING	Status OK(Reachability=Yes)
196	☐	OK	Status Better	2009-10-15 18:35:15	192.168.10.20	Protocols/SNMP	Port 1 Link UP
195	☐	Warning	Status Worse	2009-10-15 18:29:47	192.168.10.10	Protocols/Protocol PING	Status ERROR(Reachability=No)
194	☐	Warning	Status Worse	2009-10-15 18:29:15	192.168.10.20	Protocols/SNMP	Port 1 Link Down
193	☐	OK	Status Better	2009-10-15 18:17:43	192.168.10.10	Protocols/Protocol PING	Status OK(Reachability=Yes)
192	☐	OK	Status Better	2009-10-15 18:16:58	192.168.10.10	Protocols/Protocol PING	Status OK(Reachability=Yes)

Ack This column is to check the status of each event and confirm these events for network manager. After checking Ack, the corresponding links or device icons in the topology are restored to the normal color. This is also to recognize updated status in the topology.

Use mouse to click checkbox to check.

Event Management		SNMP Trap Receiver		All Events		Filter	Ack All
ID	Ack	Type	Category	Receive Time	Source	Component	Message
4	☐		Application Info	2009-08-28 15:15:57	JetView Pro Service	Remote Access	Authentication is success in Edit mode. From:/192.168.10.80
3	☐		Application Info	2009-08-28 15:14:21	JetView Pro Service	Remote Access	Authentication is success in Monitor mode. From:/192.168.10.80
2	☐		Application Info	2009-08-28 15:14:16	JetView Pro Service	License	License file is not exist!
1	☐		Application Info	2009-08-28 15:14:16	JetView Pro Service		JetView Pro Started

Ack for the green link, for example:

JetView Pro Network Management v0.1.16-en

File Management Configuration Help

Find Edit Mode Web Browser SNMP Browser Scan Network Fast Scan Preferences Zoom 70

Map

- 192.168.10.103
- 192.168.10.104

Topology All Devices

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192.168.10.104 port 2 port 2 192.168.10.103

Event Management SNMP Trap Receiver All Events Filter Ack All

ID	Ack	Type	Category	Receive Time	Source	Component	
505	☐		Status Better	2009-12-22 16:40:09	192.168.10.103	Protocols/SNMP	Port 2 Link UP
504	☐		Status Better	2009-12-22 16:40:09	192.168.10.104	Protocols/SNMP	Port 2 Link UP
503	☐		Status Worse	2009-12-22 16:39:09	192.168.10.104	Protocols/SNMP	Port 2 Link Down
502	☐		Status Worse	2009-12-22 16:39:09	192.168.10.103	Protocols/SNMP	Port 2 Link Down

While you check the Ack of ID 504 and 505, the link color will restore from green to gray.

JetView Pro Network Management v0.1.16-en

File Management Configuration Help

Find Edit Mode Web Browser SNMP Browser Scan Network Fast Scan Preferences Zoom 70

Map

- 192.168.10.103
- 192.168.10.104

Topology All Devices

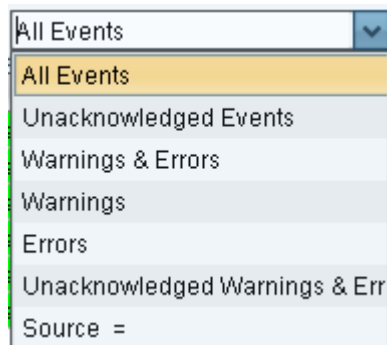
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192.168.10.104 port 2 port 2 192.168.10.103

Event Management SNMP Trap Receiver All Events Filter Ack All

ID	Ack	Type	Category	Receive Time	Source	Component	
505	☒		Status Better	2009-12-22 16:40:09	192.168.10.103	Protocols/SNMP	Port 2 Link UP
504	☒		Status Better	2009-12-22 16:40:09	192.168.10.104	Protocols/SNMP	Port 2 Link UP
503	☐		Status Worse	2009-12-22 16:39:09	192.168.10.104	Protocols/SNMP	Port 2 Link Down
502	☐		Status Worse	2009-12-22 16:39:09	192.168.10.103	Protocols/SNMP	Port 2 Link Down

Event Filter You can choose to use All Events, Unacknowledged Events, Warnings & Errors, Warnings, Errors, Unacknowledged Warnings & Errors and Source = ,so that show the event status you want to see. While choosing “Source =”, you must append the IP address(ex, 192.168.10.1) behind the “Source = “ string and press Filter button to filter the events matched by Source column,



8.1.1 Link up/down Events

While the link failure happens, JetView Pro will issue a **Link Down** event in Event Management tab page and update the Topology Map. (Figure: link down event). This event will show “Port1 Link Down” Message.

ID	Ack	Type	Category	Receive Time	Source	Component	Message
199	☐	Status Worse		2009-10-15 18:36:47	192.168.10.10	Protocols/Protocol PING	Status ERROR(Reachability=No)
198	☐	Status Worse		2009-10-15 18:36:45	192.168.10.20	Protocols/SNMP	Port 1 Link Down
197	☐	Status Better		2009-10-15 18:35:43	192.168.10.10	Protocols/Protocol PING	Status OK(Reachability=Yes)
196	☐	Status Better		2009-10-15 18:35:15	192.168.10.20	Protocols/SNMP	Port 1 Link UP
195	☐	Status Worse		2009-10-15 18:29:47	192.168.10.10	Protocols/Protocol PING	Status ERROR(Reachability=No)
194	☐	Status Worse		2009-10-15 18:29:15	192.168.10.20	Protocols/SNMP	Port 1 Link Down
193	☐	Status Better		2009-10-15 18:17:43	192.168.10.10	Protocols/Protocol PING	Status OK(Reachability=Yes)
192	☐	Status Better		2009-10-15 18:16:58	192.168.10.10	Protocols/Protocol PING	Status OK(Reachability=Yes)

Figure: link down event

While the link restores, JetView Pro will issue a **Link Up** event in Event Management tab page and update the Topology Map. (Figure: link up event). This event will show “Port1 Link UP” Message.

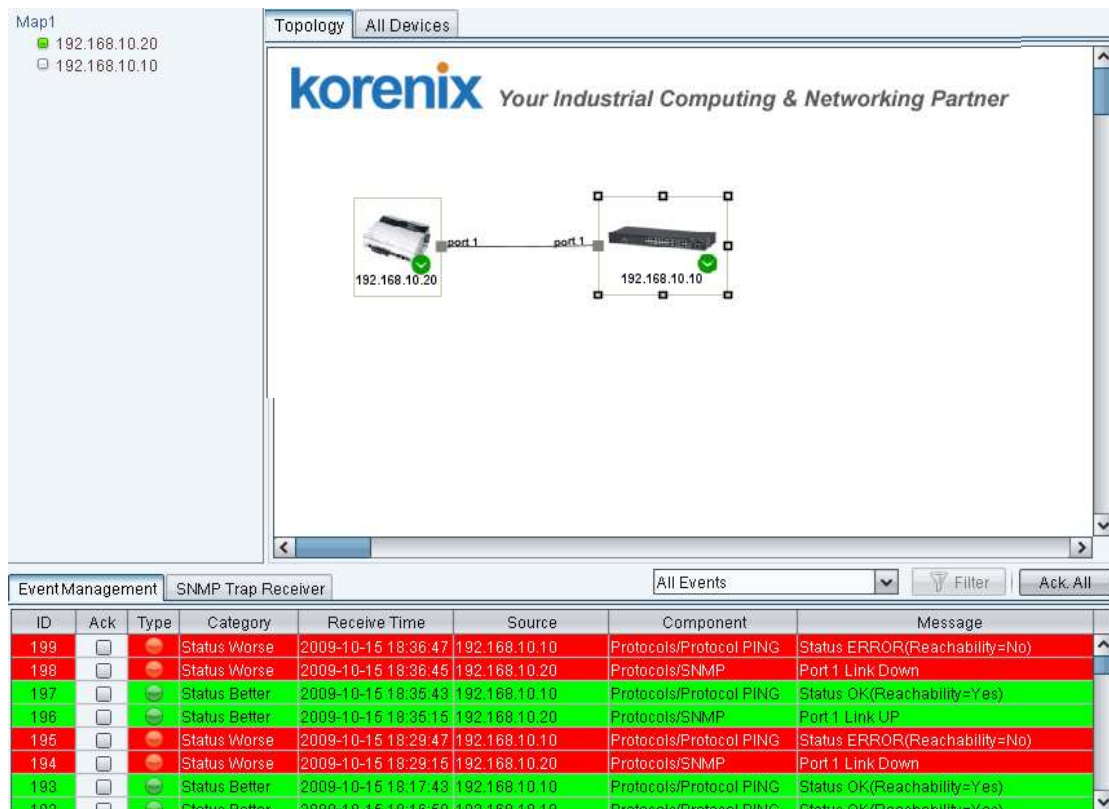


Figure: link up event

8.1.2 Node up/down Events

While the node failure happens, JetView Pro will issue a **Node down** event in Event Management tab page and update the Topology Map. (Figure: node down event). This event will show “Status ERROR(Reachability=No)” Message.

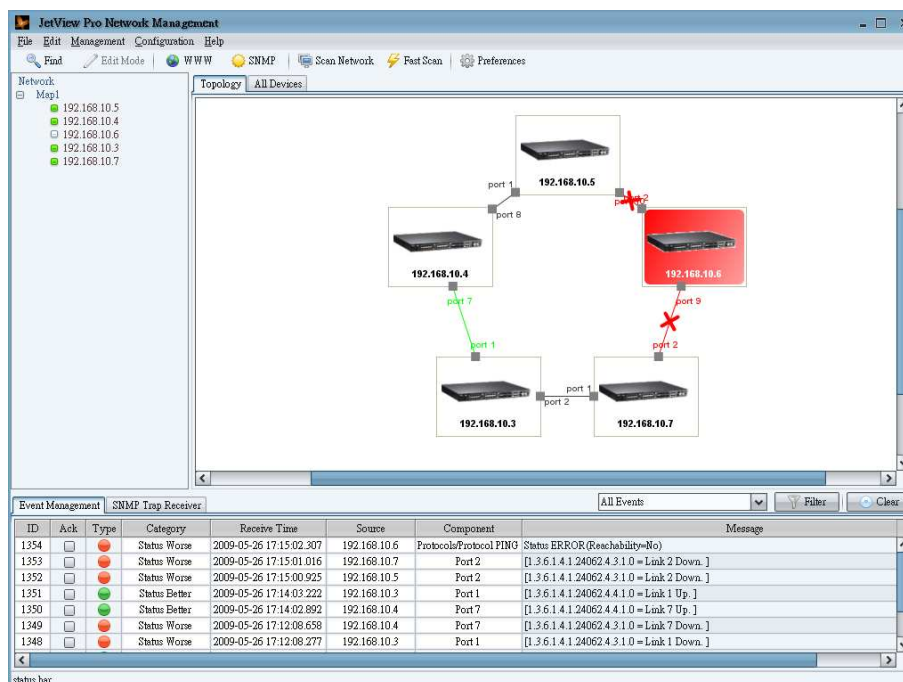


Figure: node down event

While the node restores, JetView Pro will issue a **Node up** event in Event Management tab page and update the Topology Map. (Figure: node up event). This event will show “Status OK(Reachability=Yes)” Message.

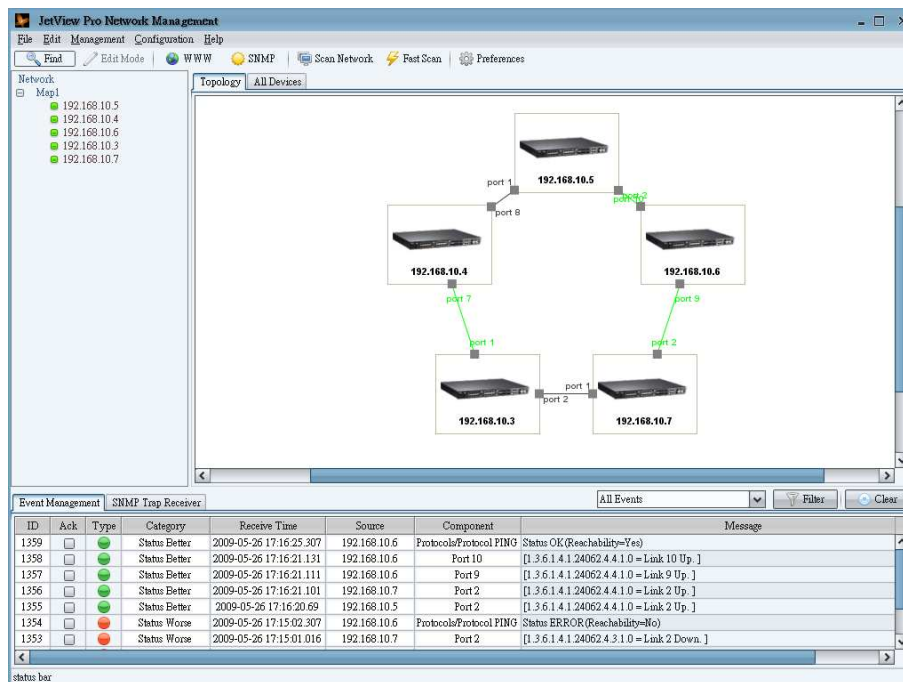


Figure: node up event

8.2 SNMP Trap

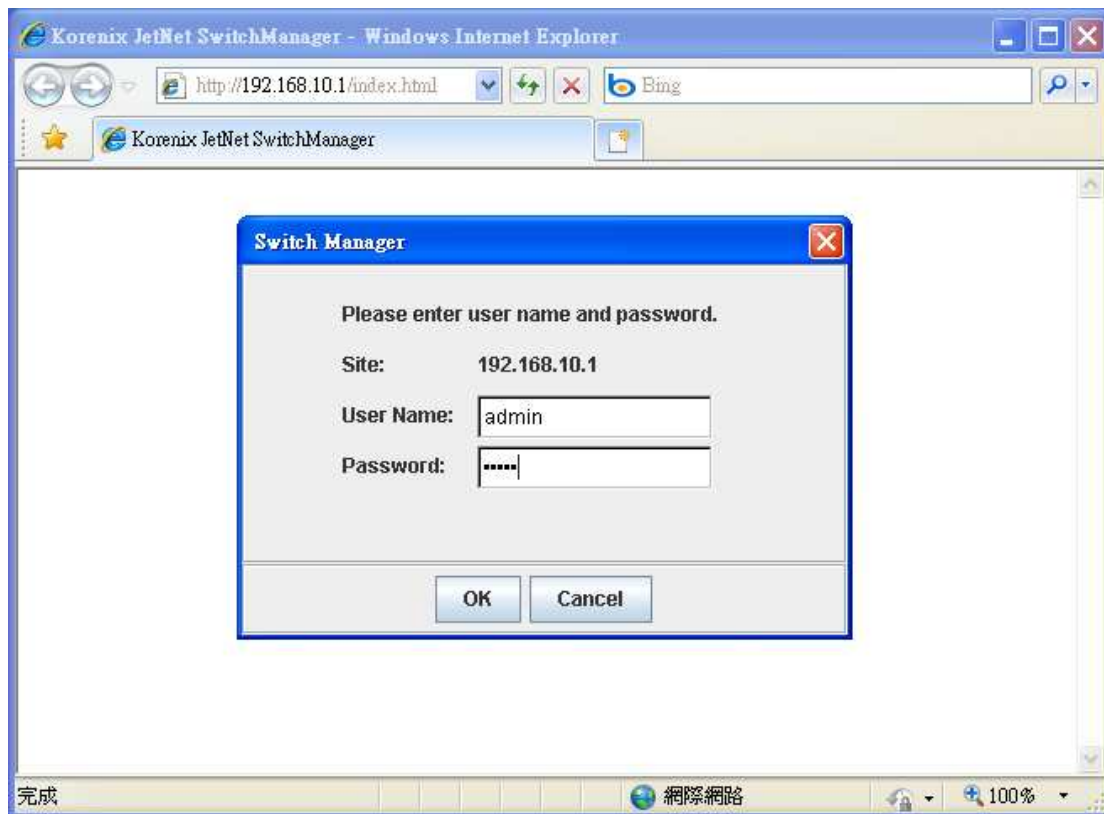
SNMP Trap is the notification feature defined by SNMP protocol. All the SNMP management applications can understand such trap information. So you don't need to install new application to read the notification information. The SNMP Trap Receiver of JetView Pro supports SNMP v1/v2c traps receiving.

The following sections illustrate SNMP Trap with Link down and up event.

8.2.1 Enable Link-down and Link-up Event

To enable link-down and link-up event, you must enable SNMP Trap Server and Link down and up event. Enter Web screen to configure these settings.

1. Use mouse to select one device on the **Topology** tab which you want to enable link down and up event.
2. Mouse right-click the selected device and click on the Web Browser menu-item of pop-up menu.
3. When the login screen appears, login with the user name and password. The default login User Name and Password: admin/admin



4. Click on the tree node **SNMP Traps**. Enable SNMP Trap, and set SNMP Trap Server IP address on the machine where the JetView Pro is installed.

JetNet5628G

- System
- Basic Setting
- Port Configuration
- Network Redundancy
- VLAN
- Traffic Prioritization
- Multicast Filtering
- SNMP
 - SNMP Configuration
 - SNMP V3 Profile
 - SNMP Traps
- Security
- Warning
- Monitor and Diag
- Device Front Panel
- Save
- Logout

SNMP Trap

SNMP Trap

Enable ▾

Apply

SNMP Trap Server

Server IP	192.168.10.80
Community	public
Version	☒ V1 ☐ V2c

Add

Trap Server Profile

Server IP	Community	Version
192.168.10.80	public	V1
Remove Reload		

- Click on the tree node **Event Selection**. Enable the specified port for link-down and link-up event (ex. Set Port 1 as Both).

- Basic Setting
- Port Configuration
- Network Redundancy
- VLAN
- Traffic Prioritization
- Multicast Filtering
- SNMP
- Security
- Warning
 - Fault Relay
 - Event & Email Warning
 - Event Selection**
 - Syslog Configuration
 - SMTP Configuration
- Monitor and Diag
- Device Front Panel
- Save
- Logout

System Event Selection

☐ Device Cold Start

☐ Device Warm Start

☐ Power 1 Failure

☐ Power 2 Failure

☐ Authentication Failure

☐ Time Synchronize Failure

☐ Fault Relay

☐ Super Ring Topology Change

☐ SFP DDM Failure

☐ DI1 Change ☐ DI2 Change

Port Event Selection

Port	Link State
1	Both ▼
2	Disable ▼
3	Disable ▼
4	Disable ▼
5	Disable ▼
6	Disable ▼
7	Disable ▼
8	Disable ▼
9	Disable ▼
10	Disable ▼

8.2.2 Receive SNMP Trap

- Click on **Start** on the **SNMP Trap Receiver** tab.

Event Management
SNMP Trap Receiver

Agent IP Address: All Traps ▼

ID	Agent address/Port	Transport	Protocol	Timestamp	Enterprise	Community	

- While plugging in or out the network line (ex. RJ45) on the port 1 of device (ex.192.168.10.1), it will display as follows:

ID	Agent address/Port	Transport	Protocol	Timestamp	Enterprise	Community	Bindings
2	192.168.10.1/1024	SNMPv1	UDP	2009-09-04 11:15:07	1.3.6.1.4.1.24062	public	[1.3.6.1.2.1.2.2.1.1 = 1, 1.3.6.1.4.1.24062.4.4.1.0 = Link 1 Up.]
1	192.168.10.1/1024	SNMPv1	UDP	2009-09-04 11:14:43	1.3.6.1.4.1.24062	public	[1.3.6.1.2.1.2.2.1.1 = 1, 1.3.6.1.4.1.24062.4.3.1.0 = Link 1 Down.]

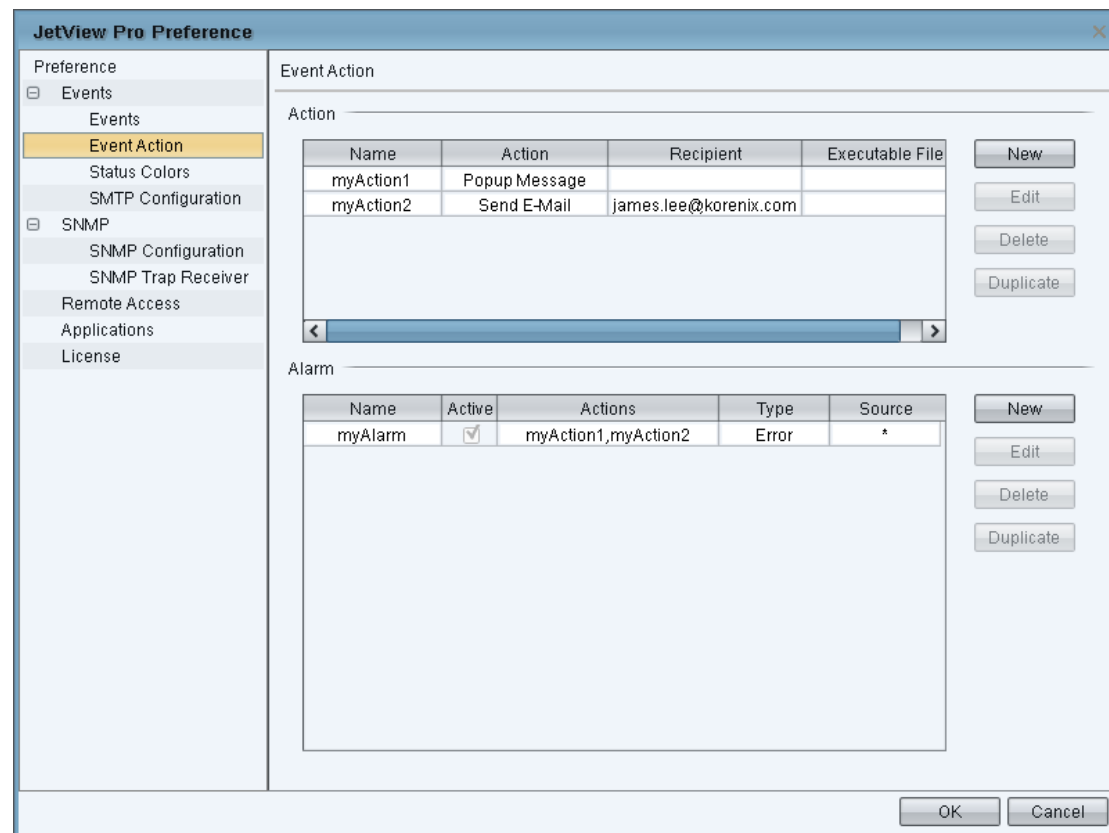
8.3 Alarm and Action

When event or SNMP trap are produced. They in addition to display in event management or SNMP Trap Receiver, and they can trigger some alarms and do some actions. The alarm can be triggered by type or other field of event. The actions of JetView Pro supported are Popup Message, E-mail and Run Executable File.

The following sections illustrate how to use alarm and action.

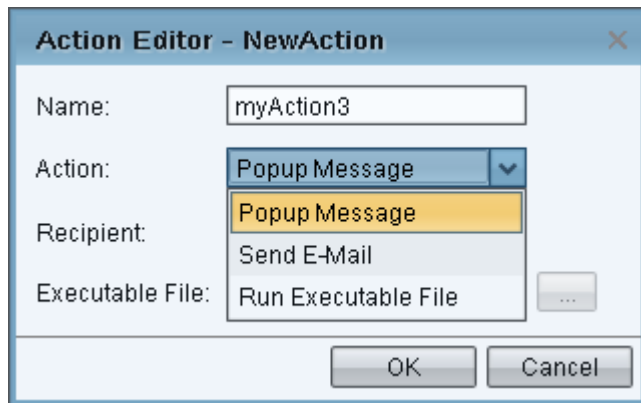
8.3.1 Create an Action

Open JetView Pro Preference, select Event Action and new an action.



Press New button the Action Editor window will be opened. You need input action name and select an action type (Popup Message, Send E-Mail or Run Executable File) to create a new action.

Or you can manage actions via Edit, Duplicate or Delete functions.

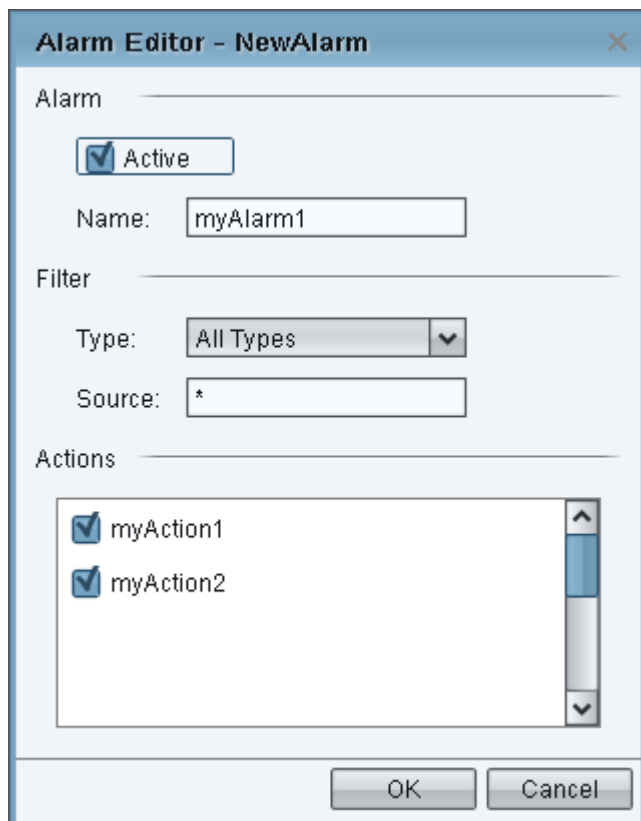


8.3.2 Create an Alarm

Open JetView Pro Preference, select Event Action and new an alarm.

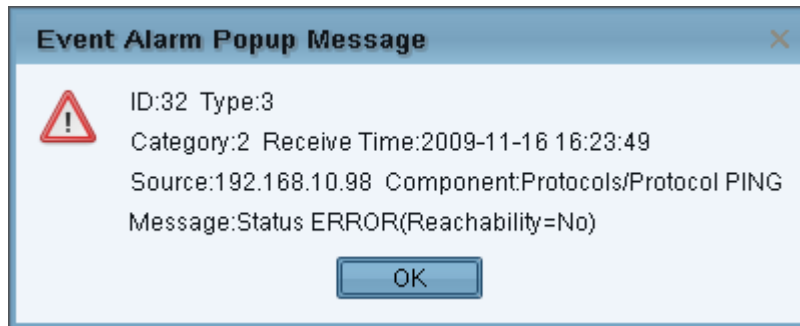
Press New button the Alarm Editor window will be opened. You need input action name and select actions to create a new alarm. Select Active option to activate this alarm. Change Filter Type or Source to filter what event that you want to trigger. Select actions to decide what action will be executed when this alarm is triggered.

Or you can manage actions via Edit, Duplicate or Delete functions.



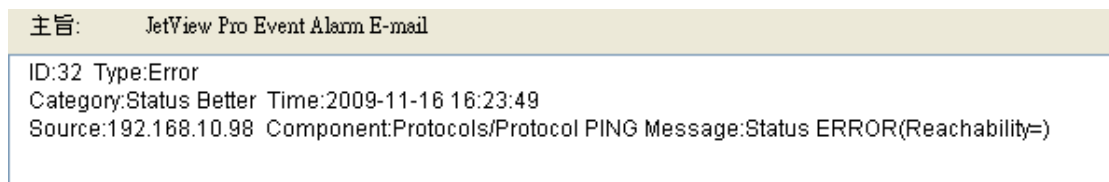
8.3.3 Popup Message Action

When a Popup Message action is executed, all JetView Pro clients will popup a message as follows:



8.3.4 E-mail Action

When a Send E-mail action is executed, the JetView Pro will send an alarm e-mail to your e-mail account (configured in Preference->SMTP configuration). The e-mail could show as follows:



8.3.5 Run Executable File Action

When a Run Executable File action is executed, the user specified executable file will be executed.

9 Performance Management

If you want to monitor the traffic of your local network for a period of time, JetView Pro can give you an indication of the network traffic for the connections in a time context. It is useful as a quick reference for determining the amount of network bandwidth being consumed.

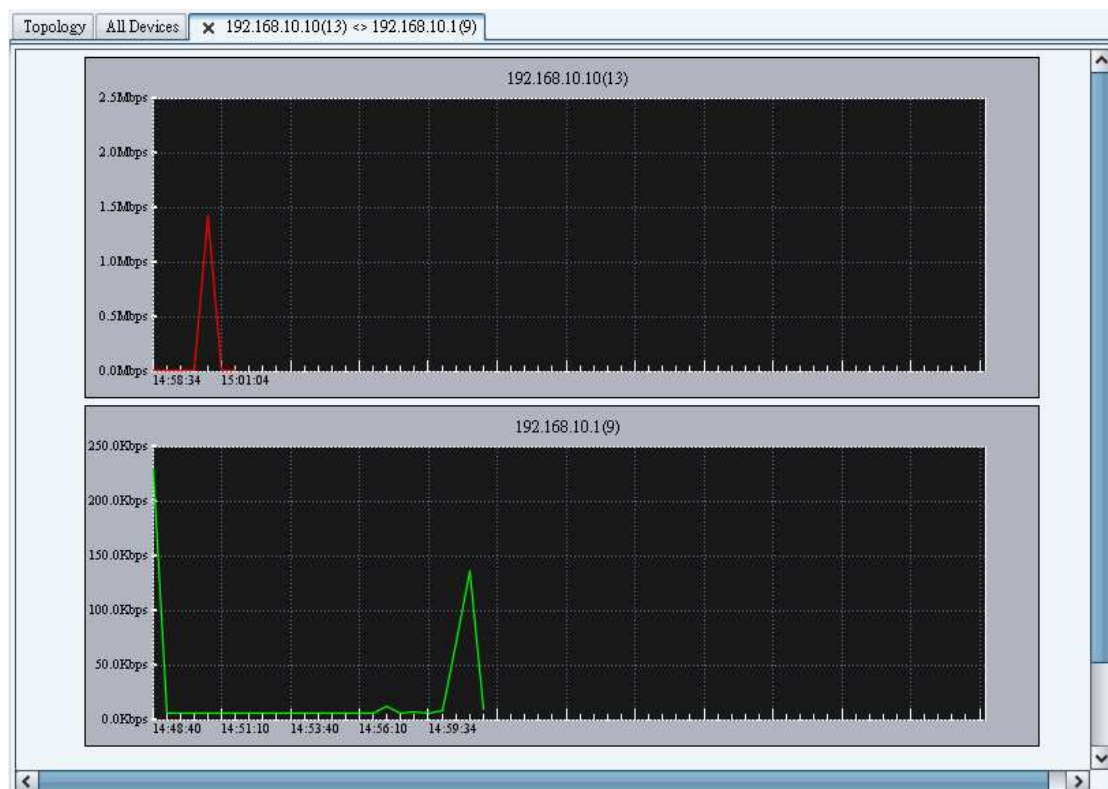
The following topics are covered in this section:

9.1 Traffic Report

9.1 Traffic Report

JetView Pro monitor and report selected connection statistics. The tab name of the current traffic history shows two connected devices' IP address and port -- Port 13 on the device (192.168.10.10) connects to port 9 on the other device (192.168.10.1). The data was collected by through SNMP's polling. The default sampling rate is set to 30 seconds.⁸

The figure below indicates network load for the specified port. In order to show a visible line on the graph for network traffic on any interface, the view automatically scales to magnify the Y-axis's unit of traffic. The X-axis is time. The Y-axis means the total number of bytes sent on the connection in the polling time interval. The maximum number of entries can be recorded in 30 minutes. When the maximum number of entries is reached, JetView Pro throws out the oldest entry when a new one is recorded.



⁸ The JetView Pro can be centrally deployed to reduce network traffic cause by JetView Pro server gathering devices' SNMP statistics

To view the traffic report

- Mouse **Double-Click** on the line between the two devices.
- The traffic report only available if the network connection is present.
- The traffic tab provides an indication of the network traffic for the connection.

10 Preferences

Following topics are covered in this section:

10.1 Event

10.2 SNMP

10.3 Remote Access

10.4 External Applications

10.1 Event

10.1.1 Events

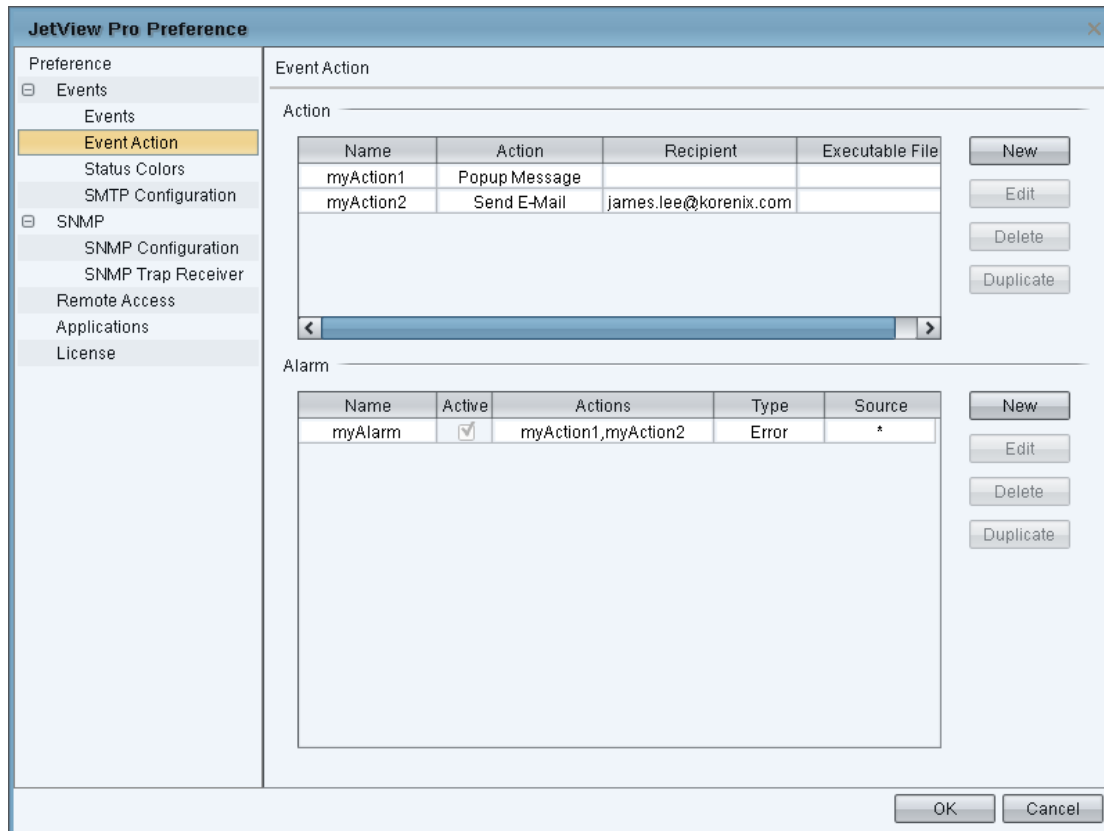
This page allows you to record events into the log file. You can change maximum number of traps, trap log to file and trap log directory.

The screenshot shows the 'JetView Pro Preference' dialog box with the 'Events' tab selected. The left sidebar lists various preference categories: Preference, Events, Event Action, Status Colors, SMTP Configuration, SNMP, SNMP Configuration, SNMP Trap Receiver, Remote Access, Applications, and License. The 'Events' tab is highlighted. The main area contains the following settings:

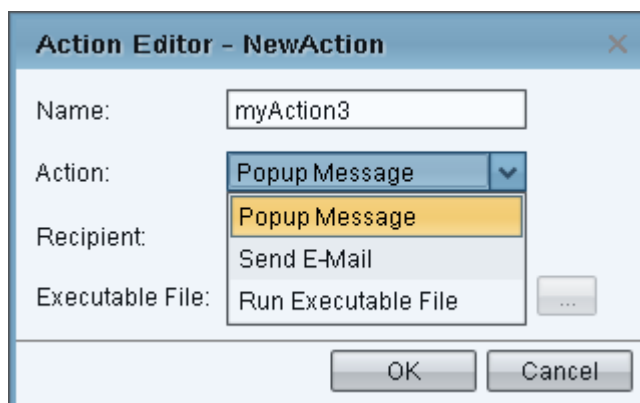
- Events**: A section header.
- Max. Number of Events**: A dropdown menu set to '1000'.
- Event Log to File**: A checkbox labeled 'Enable Log to File' which is currently unchecked.
- Trap Log Directory**: A text input field followed by a browse button ('...').
- Reset to Defaults**: A button at the bottom left of the main area.
- OK** and **Cancel**: Buttons at the bottom right of the dialog box.

10.1.2 Events Action

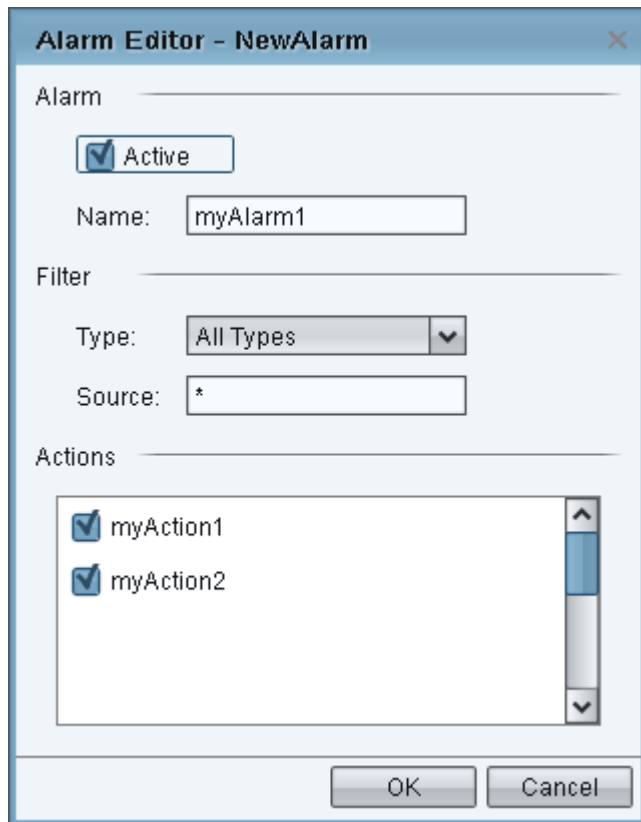
This page allows you to manage Actions and Alarms; the management functions include New, Edit, Delete and Duplicate.



If you press New, Edit, Delete or Duplicate of Action, the Action Editor will popup for Action configuring.



If you press New, Edit, Delete or Duplicate of Alarm, the Alarm Editor will popup for Alarm configuring.



Alarm Editor - NewAlarm

Alarm

☒ Active

Name:

Filter

Type: ▼

Source:

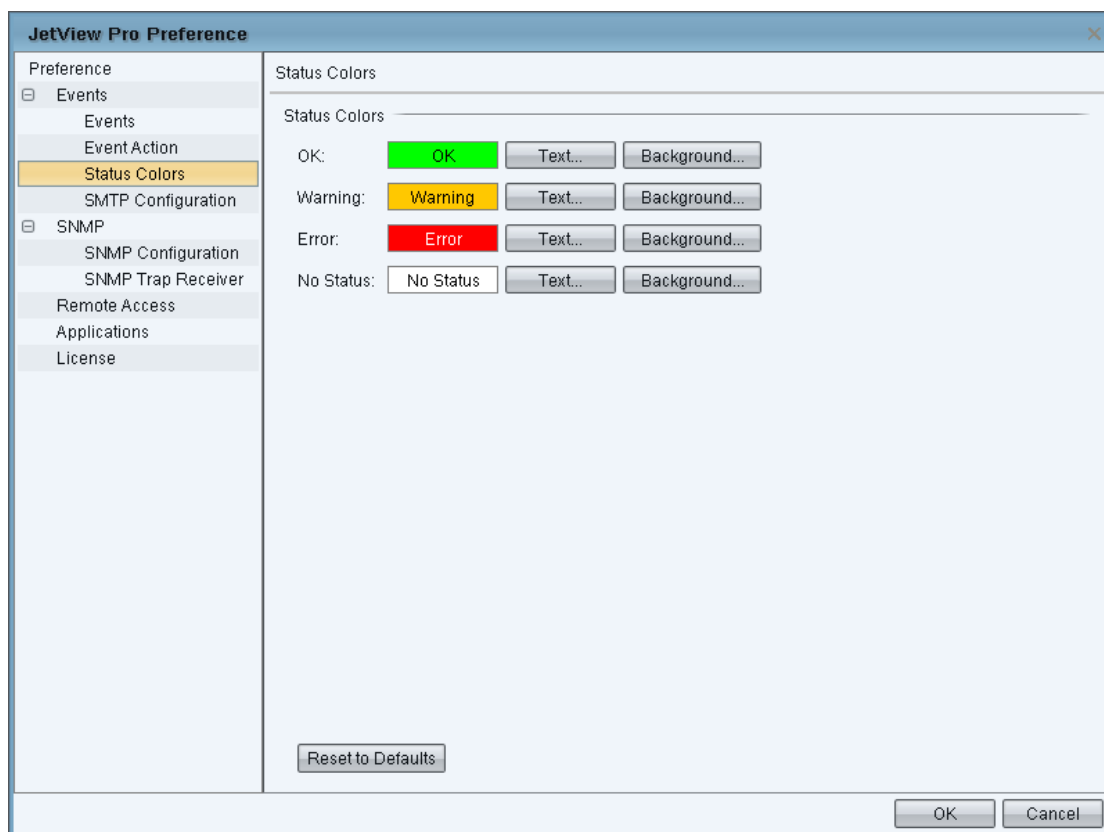
Actions

- ☒ myAction1
- ☒ myAction2

OK Cancel

10.1.3 Status Colors

This page allows you to assign a color to each status. You can change text and background color of 4 types status.



JetView Pro Preference

Preference

- [-] Events
 - Events
 - Event Action
 - Status Colors**
 - SMTP Configuration
- [-] SNMP
 - SNMP Configuration
 - SNMP Trap Receiver
- Remote Access
- Applications
- License

Status Colors

Status Colors

OK:	OK	Text...	Background...
Warning:	Warning	Text...	Background...
Error:	Error	Text...	Background...
No Status:	No Status	Text...	Background...

Reset to Defaults

OK Cancel

10.1.4 SMTP Configuration

While you use to send Email function for Event Action, you must set SMTP Configuration. If SMTP server requests you to authorize first, you can also set up the username and password in this page. And you can press “Test SMTP configuration” to test your configuration after you finish this configuration.

The screenshot shows the 'JetView Pro Preference' dialog box. On the left is a tree view under 'Preference' with categories: Events (containing Events, Event Action, Status Colors, and SMTP Configuration), SNMP (containing SNMP Configuration, SNMP Trap Receiver, Remote Access, Applications, and License), and License. The 'SMTP Configuration' item is selected and highlighted in yellow. The main area on the right is titled 'SMTP Configuration' and contains the following fields: 'SMTP Server:' with a text box, 'Mail Account:' with a text box, an unchecked checkbox for 'Authentication', 'User Name:' with a text box, 'Password:' with a text box, and 'Retype Password:' with a text box. Below these fields is a button labeled 'Test SMTP Configuration'. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

10.2 SNMP

10.2.1 SNMP Configuration

The JetView Pro will add a default SNMP agent profile for discovered devices. You can use this page to new, edit, delete or duplicate a profile. The configurations of profile include agent listening port (default is 161), SNMP version (support v1/v2c/v3), read/write community, retry numbers and timeout (in second(s)).

JetView Pro Preference

Preference

- Events
 - Events
 - Event Action
 - Status Colors
- SMTP Configuration
- SNMP**
 - SNMP Configuration**
 - SNMP Trap Receiver
- Remote Access
- Applications
- License

SNMP Configuration

SNMP Agent Profile

IP Address	Port No.	Version	Community	Retries	Timeout (s)
192.168.10.5	161	SNMPv1	public,private	1	2
192.168.1.173	161	SNMPv1	public,private	1	2
192.168.16.10	161	SNMPv1	public,private	1	2
192.168.10.99	161	SNMPv1	public,private	1	2
192.168.10.18	161	SNMPv1	public,private	1	2
192.168.10.17	161	SNMPv1	public,private	1	2
192.168.10.53	161	SNMPv1	public,private	1	2
192.168.10.1	161	SNMPv1	public,private	1	2
192.168.10.105	161	SNMPv1	public,private	1	2
192.168.10.100	161	SNMPv1	public,private	1	2

New Edit Delete Duplicate

OK Cancel

10.2.2 SNMP Trap Receiver

This page allows you to configure SNMP Trap Receiver and record SNMP Trap into the log file. You can enable the SNMP Trap Receiver on system starting, change listening port, change maximum number of traps, trap log to file and trap log directory.

The screenshot shows the 'JetView Pro Preference' dialog box. On the left is a tree view with categories: Preference, Events, SMTP Configuration, SNMP, Remote Access, Applications, and License. Under 'SNMP', 'SNMP Trap Receiver' is selected and highlighted in yellow. The main area on the right is titled 'SNMP Trap Receiver' and contains two sections: 'SNMP Trap Receiver' and 'SNMP Traps'. In the 'SNMP Trap Receiver' section, there is a checkbox for 'Enable On Starting' (which is unchecked) and a text field for 'SNMP Trap Listening Port' containing the value '162'. In the 'SNMP Traps' section, there is a dropdown for 'Max. Number of Traps' set to '1000', a checkbox for 'Trap Log to File' (unchecked), and a text field for 'Trap Log Directory' followed by a browse button (...). At the bottom left of the main area is a 'Reset to Defaults' button. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

Category	Sub-category	Setting
Preference	Events	Events, Event Action, Status Colors, SMTP Configuration
SNMP	SNMP Configuration	SNMP Trap Receiver (selected)
Remote Access		
Applications		
License		

SNMP Trap Receiver Configuration:

- Enable On Starting: ☐ Enable On Starting
- SNMP Trap Listening Port: 162
- Max. Number of Traps: 1000
- Trap Log to File: ☐ Enable Log to File
- Trap Log Directory: [Text Field] [Browse Button (...)]

Buttons: Reset to Defaults, OK, Cancel

10.3 Remote Access

Due to the access synchronization, we only allow one client to enter the **Edit** mode at the same time and the other clients on **Monitor** mode. The allowed default password for entering two modes is “korenix”. The **Monitor** mode can only allow viewer to browse the topology. **Edit** mode can use all functions. The maximum number of remote client is default 5. You can setup new passwords on **Monitor** and **Edit** mode.

The screenshot shows the 'JetView Pro Preference' dialog box with the 'Remote Access' tab selected. The left sidebar contains a tree view with the following items: Preference, Events (expanded), Event Action, Status Colors, SMTP Configuration, SNMP (expanded), SNMP Configuration, SNMP Trap Receiver, Remote Access (selected), Applications, and License. The main area is titled 'Remote Access' and contains the following settings:

- Properties**
 - Max. Number of Remote Client: 5 (dropdown menu)
- Password for Monitor Client**
 - Password: [masked with 7 dots]
 - Retype Password: [masked with 7 dots]
- Password for Edit Client**
 - Password: [masked with 7 dots]
 - Retype Password: [masked with 7 dots]

At the bottom left of the main area is a 'Reset to Defaults' button. At the bottom right are 'OK' and 'Cancel' buttons.

10.4 External Applications

JetView Pro uses external applications for the functions. This page allows you to assign specified programs or use default application to run the functions.

The screenshot shows the 'JetView Pro Preference' dialog box with the 'Applications' tab selected. The left sidebar contains a tree view with the following items: Preference, Events, Event Action, Status Colors, SMTP Configuration, SNMP, SNMP Configuration, SNMP Trap Receiver, Remote Access, Applications (highlighted), and License. The main area is titled 'Applications' and contains a section 'External Applications' with four rows: 'Telnet' with 'telnet.exe' and a checked 'Use Default' checkbox; 'SSH' with an empty field and an unchecked checkbox; 'WEB Browser' with 'iexplore.exe' and a checked checkbox; and 'Ping' with 'ping.exe' and a checked checkbox. The 'PDF Viwer' row has 'AcroRd32.exe' and a checked checkbox. Each row has a button with three dots to the left of the checkbox. At the bottom left of the main area is a 'Reset to Defaults' button. At the bottom right are 'OK' and 'Cancel' buttons.

Function	Application Path	Use Default
Telnet	telnet.exe	☒
SSH		☐
WEB Browser	iexplore.exe	☒
Ping	ping.exe	☒
PDF Viwer	AcroRd32.exe	☒

10.5 License

By the steps to use license, follow the instructions.

1. Check whether the version of JetView Pro is 1.0. If no, download JetView Pro 1.0 version (only support for 16 nodes) and install.
(<http://www.korenix.com/support-jetview-software.htm>)
2. Fill out JetView Pro registration form and we will send authentication code (support for 64 nodes) to your filled E-mail address.
(<http://www.korenix.com/support-jetviewpro-registration.htm>)

JetView Pro Registration Form

Your e-mail address must be entered properly and must be valid as the authentication code of JetView Pro! It will be sent to this address. Please, re-check the entered e-mail address before submitting the form.

* Company	
* First Name	
* Last Name	
* Email Address	
* Re-type Email	
City	
State/Province	
Country	
Note	
* Type the characters you see in the picture right.	

(* All starred fields are required)

3. After receiving the E-mail letter, go to JetView Pro> Preference> License.

JetView Pro Preference

Preference

- Events
 - Event Action
 - Status Colors
 - SMTP Configuration
- SNMP
 - SNMP Configuration
 - SNMP Trap Receiver
- Remote Access
- Applications
- License**

License

Name:

Company:

Authorization Code: [Get Authorization Code...](#)

Discovery Limitation:

4. Fill out Name, Company, and Authorization Code based on the content of E-mail letter. And then press Register button.

JetView Pro Preference

Preference

- Events
 - Event Action
 - Status Colors
 - SMTP Configuration
- SNMP
 - SNMP Configuration
 - SNMP Trap Receiver
- Remote Access
- Applications
- License**

License

Name:

Company:

Authorization Code: [Get Authorization Code...](#)

Discovery Limitation:

Status: Verify authorization code success, Please press OK to apply license.

5. Finally, press OK to apply license.