D-Link
Quick Installation Guide

This product can be set up using console port or SSH connection
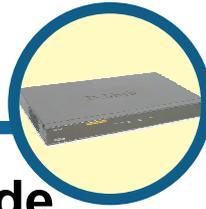
DFL-2100/2400
Intrusion Detection System

About This Guide

This Quick Installation Guide provides instruction for installing the DFL-2100/DFL-2400 and Policy Server configuration. The former will show how to connect DFL-2100/DFL-2400 with other Network equipments and Network configuration of DFL-2100/DFL-2400. The latter is a description for configuring Policy Server to make sure the intrusion detection system will protect your network and servers.

Check Your Package Contents

These are the items included with your DFL-2100/2400 purchase:
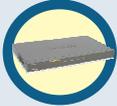
- **DFL-2100/2400 Intrusion Detection System**

- **CD-ROM (containing Manual and Warranty)**

- **Quick Installation Guide**

- **Ethernet (CAT5 UTP/Cross-Over) Cable**

- **Console Cable**

- **Power cord**

If any of the above items are missing, please contact your reseller.

Installing DFL-2100/DFL-2400

A. Attach the brackets to the device using the screws provided with the Bracket Mounting.

B. Mount the device onto the rack, using four rack-mounting screws.

C. Attach the power cord to the backend of the DFL-2100/DFL-2400, the AC INPUT 90V~264V.

D. Check the target device
  - ➢ Network Devices (like switching router, switch, hub...)
    If DFL-2100/DFL-2400 connects with Network Devices, generally you use "through" UTP patch core.
  - ➢ CPE (like router, Desktop PC, notebook…)
    If DFL-2100/DFL-2400 connects to CPE devices, you must use "cross-over" line (included with the device)

E. Attach the line to the front of the DFL-2100/DFL-2400.
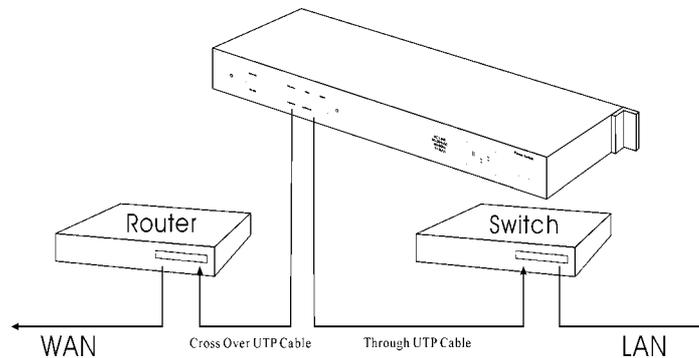
② Configure the DFL-2100/DFL-2400

Before you can begin to manage the DFL-2100/DFL-2400 device (i.e. protect your network and servers), it must be initialized first. This procedure is accomplished through the IDS Command Shell, which resides in the IDS device. Access to the Command Shell can be made either through SSH or from a terminal (or terminal emulator) connected directly to the IDS device. These methods are described below.

Accessing Command Shell with SSH

DFL-2100/DFL-2400 is pre-configured with the default IP address of 192.168.168.201. To access the Command Shell, it is necessary to temporarily change the IP address of your workstation to an address in the same subnet as the DFL-2100/DFL-2400 device.

Changing Your Workstation IP Address

Change your workstation's IP address to 192.168.168.202, and the subnet mask to 255.255.255.0. Be sure to record your workstation's original IP address and subnet mask, as you will need to restore these values after DFL-2100/DFL-2400 is initialized.

SSH to DFL-2100/DFL-2400

DFL-2100/DFL-2400 is using the IP address 192.168.168.201. The DFL-2100/DFL-2400 Command Shell will respond with a password prompt.

Login as: admin
admin@192.168.168.201's Password:
D-Link IDS – Protect your network and servers!
(Default login ID：admin；password：DLink)

Terminal

Using the supplied RS-232 cable, connect the PC's serial port with the male DB-9 serial port on the backend panel of the DFL-2100/DFL-2400. Either COM1 or COM2 can be used on your workstation device. Following is terminal settings:

Terminal Emulation	Dumb Terminal, VT-100, ANSI, or auto
Bits per second	9600
Data Bits	8
Stop Bits	1
arity	None
Flow Control	None

Tip: You can use HyperTerminal, which is included with Windows 95/98/NT/2000/XP. It is located in the Accessories program group.

Starting DFL-2100/DFL-2400 Command Shell

Once you have accessed the Command Shell with Telnet or a terminal connection, press any key and the following prompt will appear:

Login as: admin
admin@192.168.168.201's Password:
D-Link IDS -- Protect your network and servers!
Please enter the login ID（Login：admin）and password（Password: DLink）
Login successful user can see the prompt.
（user can key help to get the setting information）
>>help
help   - This message.
get   - Get system information.
set   - Set system parameters.
ping   - Ping utility
arp   - Show & handle arp table.
netstat- Show system network status.
reset - Reset system configurations to manufacturing defaults.
reboot - Reboot system.

Setting System Parameters

Setting DFL-2100/DFL-2400 Device IP
>> set system ip <Device IP>

Setting DFL-2100/DFL-2400 Gateway IP
>> set system gateway xxx.xxx.xxx.xxx
(XXX.XXX.XXX.XXX is your gateway IP)

Setting DFL-2100/DFL-2400 Network mask
>> set system mask xxx.xxx.xxx.xxx
(xxx.xxx.xxx.xxx is your network mask)

Setting DFL-2100/DFL-2400 Policy Server IP
>> set psserver ip <Policy Server IP>

Note: **If Policy Server set behind the firewall, the IP address shouldn't the IP address of "real Policy Server". Please check your network status before you enter the IP address.**
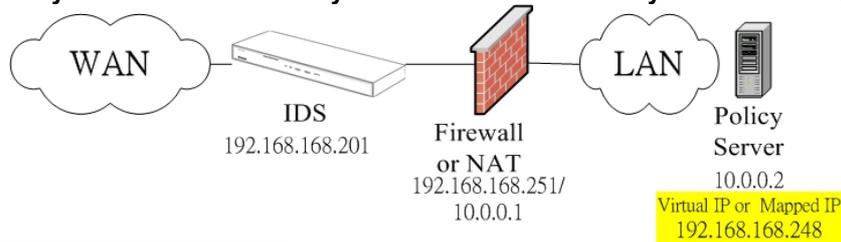
set psserver ip 192.168.168.248

The Firewall or NAT must reconfigure Port mapping as:

192.168.168.248:7595	10.0.0.2:7595	TCP
192.168.168.248:7596	10.0.0.2:7596	UDP

Port 7595 and 7596 are private ports for DFL-2100/DFL-2400 Management System.

③ Policy Server Installation

Policy Server Hardware and Operating System Requirement

Before we install the DFL-2100/DFL-2400 Policy Server, we must understand a few points about the DFL-2100/DFL-2400 Policy Server.
The Operation System should be Windows 2000, Windows XP or Windows NT with service pack 6.0 and above.
The Host can support Internet access.
DFL-2100/DFL-2400 will send the log data to Policy Server and Policy Server will save it in hard disk. Therefore, we recommend user to have 10GB hard disk free space.
We suggest your CPU would be Pentium III 1000 and memory would be 256 MB or more.

Installation Procedure

Step 0. Install NT service pack 6.0
Step 1. Install Policy Server
Step 1-1 Install Java Run Time Environment（JRE）
Step 1-2 Install MySQL database server
Step 1-3 Install Apache Web server for Win32
Step 1-4 Install Policy Server software
Step 2. Auto Configuration
Step 3. Close and reboot

Step 0 Install NT Service Pack 6

IF User already uses Windows 2000 or XP, please skip this step. You can download the Service Pack 6.0 form the Microsoft Web Site or buy it from local Microsoft Agent.

Step 0-1 Auto Run

When you put the DFL-2100/DFL-2400 administrator Utility CD, the program will auto run. If it doesn't show, you can go to the directory where your CD ROM is. Find the file named"setup.exe" and execute it .

Step 1 Install Policy Server

The DFL-2100/DFL-2400 Policy Server is a server that is responsible for managing the DFL-2100/DFL-2400 and getting the report. It needs some software support, include JRE(Java Runtime Environment), MySQL database server, Apache web server and Policy server. In our install procedure, you just click "Install Policy Server".

Step 1-1 Installing the Java Runtime Environment（JRE）

Our program is a java application. Therefore we need the Java Runtime Environment (JRE). The version of JRE we suggest is 1.4.0 or higher. When you click "Install Policy Server", it will install JRE first. If it can't work, you can find it on the Administrator Utility CD named "j2re-1_4_0-win-i.exe" and execute it.

Step 1-2 Installing the MySQL

When the DFL-2100/DFL-2400 detects an attack, it will send an event to Policy Server and save it. Therefore, we need a database server. We use MySQL Server as our database. The version we suggest is 3.23 or newer version.

Step 1-3 Install Apache Web server for Win32

Policy server requires web server support. After install JRE and MySQL, the procedure will start the Apache Server installation process. Apache 1.3.26 for Win 32 is the recommended web server. Please make sure that Apache web server version 1.3.26 is completely install before proceeding to Policy Server Software installation.

*You can download the Apache Web Server for Win32 on http://www.apache.org/ or find it on

Step 1-3-1
Apache installation welcome message.
Apache installation window

Note
1. **Please select default setting**
2. **Make sure the Apache version is 1.3.26.**

Step 1-3-2
Apache license windows
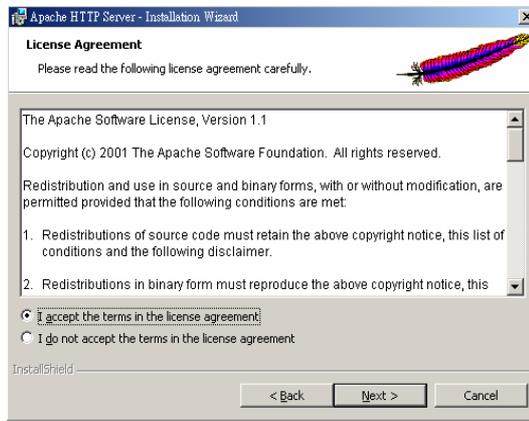
Step 1-3-3
Apache Server information windows :

Step 1-3-4
Install completed
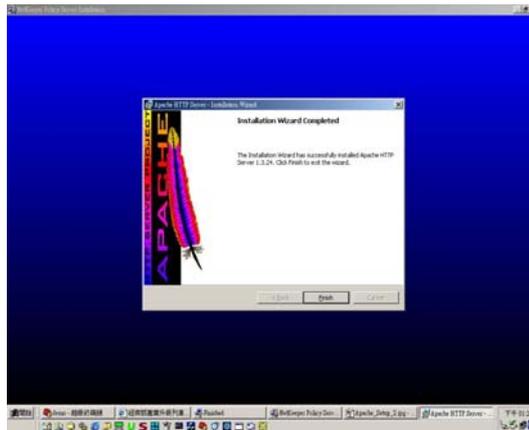
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Step 1-4 Install Policy Server

The DFL-2100/DFL-2400 Policy Server is a server that is responsible for managing the DFL-2100/DFL-2400 and getting the report.

Step 1-4-1
The welcome message.
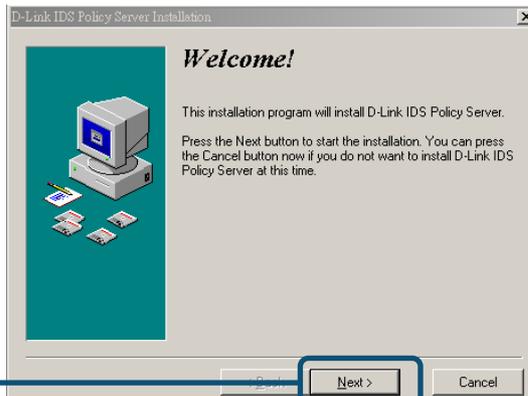
Click Next

Step 1-4-2
Select destination directory that you want to install the policy server
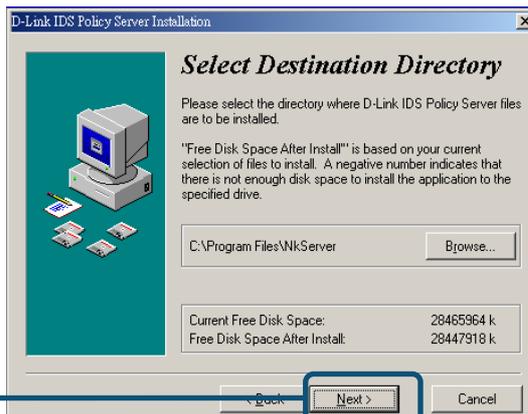
Click Next

Step 1-4-3

Select the directory that you want to put the web files. You don't have to consider the setting of Apache Server. The "Auto Configuration" will change the path to this directory.

Click Next

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Step 1-4-4
 Select the MySQL directory where you installed. This step is helping user to initial the database. The file "mysql.exe" should be at the ~\mysql\bin.

Click Next

Step 1-4-5
Enter the policy server IP address.

Click Next
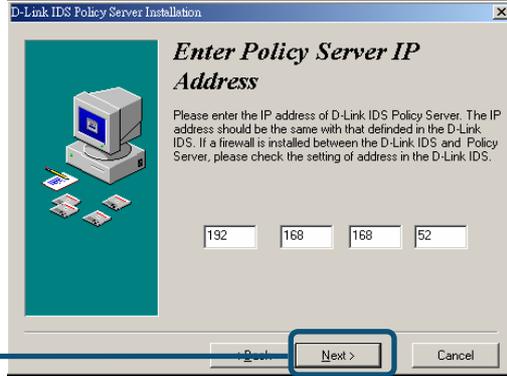
Step 1-4-6
System will be ready to install.

Click Next
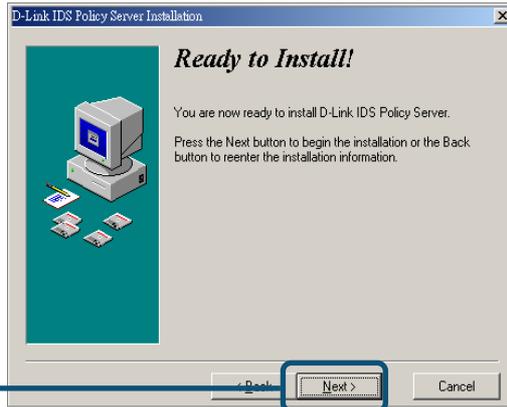
Step 1-4-7
Run the MySQL Server as service
After we finished installing the MySQL, we have to run it as service. We can go to the MySQL's directory and find the "mysqladmin.exe" file. Run this file, and system will ask to enter a user and password. We just enter the name "test" and password "test", Then the MySQL server run successfully.

Step 1-4-8
When the installation completed, system will tell you to close the program.
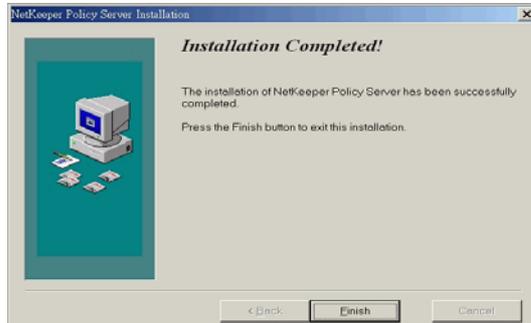
Step 2 Auto Configuration

Click Auto Configuration
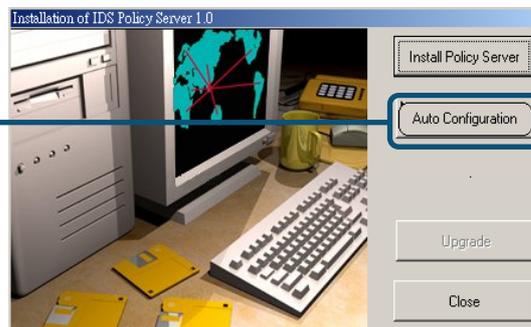
Step 3 Close
When we finish all the setting of policy server, we can click the close button. System will ask us to restart our computer. We suggest user to restart the computer in order to let system work normally.

Click OK

Manage DFL-2100/DFL-2400

Start DFL-2100/DFL-2400 Management System

Select Manager from the DFL-2100/DFL-2400 Main Page, the following login dialog will appear.

Type "admin" for the user ID and Password "admin"

Add New DFL-2100/DFL-2400

Click Add IDS button

Enter the Alias Name and IP address of the IDS
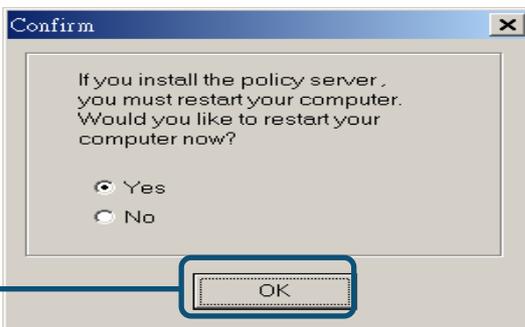
Load latest attack pattern

The policies are the most important information in the IDS Management System. Policies indicate to IDS for how to detect an attack and how to response when an attack is detected. You need to load latest defense policies.

Select "Add" button
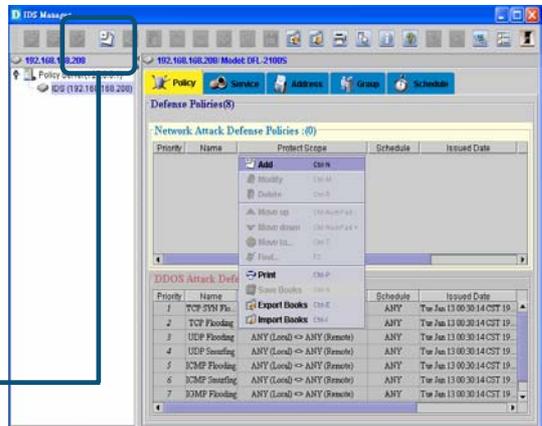
Click Update
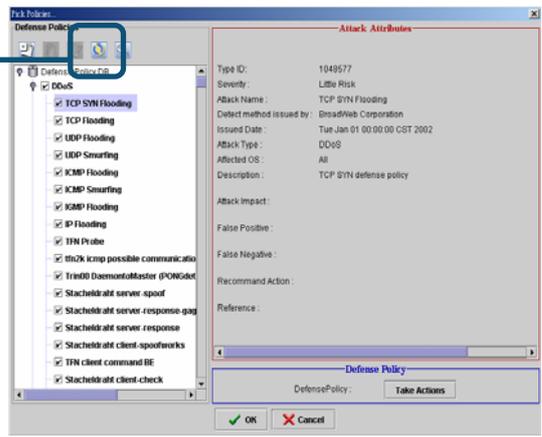
There is a default policy database on the DFL-2100/DFL-2400 Policy Server, administrator must select

Download latest attack pattern from Administrator Utility CD "~/Policy Server/ PolicyDB/policyXXX.ptn"

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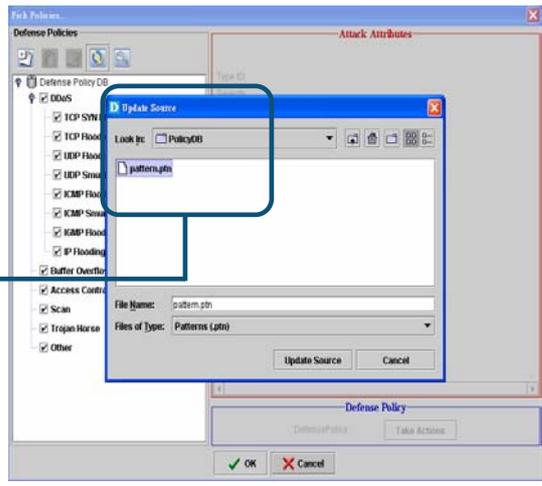
You can find new defense policies in the policy list when you finish the update
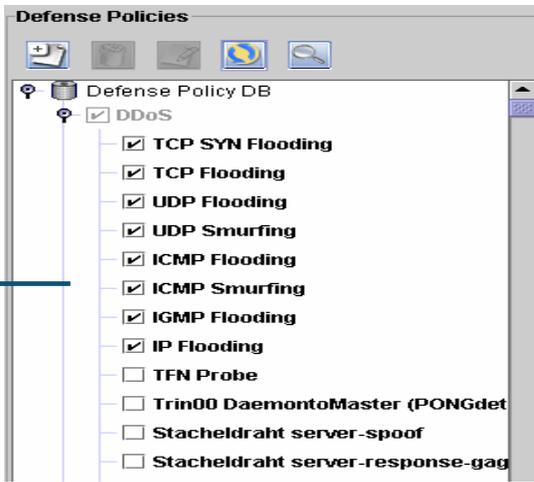
All the changes to the defense policies will not take effect until the Confirm button clicked.

Clicked Confirm button

to take effect
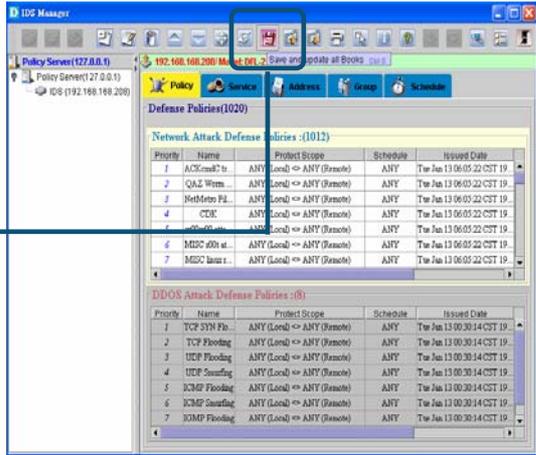
Summary of Steps
In summary, you can make sure your DFL-2100/DFL-2400 have protected your servers and networks.

Connecting
Connecting your DFL-2100/DFL-2400 Policy Server via your browser.

Manage
Manage your DFL-2100/DFL-2400 via your Policy Server management windows.

Download
The latest attack pattern and make sure the defense policies to take effect.