## **Detailed Instructions.**

- **1.** Setup SSH Private/Public Key Authentication between your Nagios Server and the IPCOP Box.
  - Run "ssh-keygen -t dsa" on your Nagios server as the nagios user, leave the password prompts blank.
  - On your IPCOP box, run the following commands:
    - groupadd nagios
    - mkdir /home/nagios
    - mkdir /home/nagios/.ssh
    - useradd nagios -g nagios -d /home/nagios/
    - passwd nagios (Enter same password as nagios user on nagios server.)
    - chown nagios:nagios /home/nagios
    - chmod 775 /home/nagios
  - Modify the following line in the file "/etc/ssh/sshd-config:
    - "#AuthorizedKeysFile ....." must read "AuthorizedKeysFile /nagios/.ssh/id\_dsa.pub"
  - Copy your public key and plugin from your Nagios Server to your IPCOP Box
    - scp -P 222 /home/nagios/.ssh/id\_dsa.pub nagios@ipcop ip address:/home/nagios/.ssh/id\_dsa.pub
    - scp -P 222 check\_bandwidth.sh nagios@ipcop ip address:/home/nagios/check\_bandwidth.sh
  - Download VNSTAT plugin for IPCOP (http://www.ipadd.de/binary.html) & copy to IPCOP box using same procedure as above.
  - On IPCOP box, extract plugin using tar -xzf *archive\_name*.tar.gz and install by opening directory and typing "./install -i"
  - Create databases for all the interfaces you want to monitor with the following command: ----> vnstat -i *if\_name* -u (EG. vnstat -i ppp0 -u)
  - Run this command: "chmod 777 /var/lib/vnstat"
  - Add this command to your Nagios Commands file:

```
define command {
    command_name check_ipcop_bandwidth
    command_line $USER1$/check_by_ssh -H
$HOSTADDRESS$ -p 222 -t 50 -C "/home/nagios/check_bandwidth.sh $ARG1$"
}
```

- Use "check ipcop bandwidth" as your check command when setting up services.
- I suggest only using the -s and -tr parameters, as the others are garbled.
- Reboot the IPCOP machine to apply changes to SSH Server Config.