

Network Interface Checks

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Network Interface Checks

These checks are for the network interface cards (NIC) on the remote computer. Depending on your Operating System (OS) the NIC will be named differently, here are some examples:

- CentOS 6 = eth0
- CentOS 7 = ens32
- Windows = Ethernet0

Nagios Plugins

Nagios Plugins does not provide NIC checking capabilities.

NCPA

NCPA includes an interfaces module. There are several check types available depending on what you want to monitor. The interface metrics are an increasing number, hence the delta `-d` and `-d` data.

Bytes Sent / Bytes Received

Unit: k

Warning: 10kB/s

Critical: 100kB/s

Commands:

```
./check_ncpa.py -H 10.25.14.10 -t 'StrongT0k3n' -P 5693 -M 'interface/Ethernet0/bytes_sent' -d -u k -w 10 -c 100
./check_ncpa.py -H 10.25.14.10 -t 'StrongT0k3n' -P 5693 -M 'interface/Ethernet0/bytes_recv' -d -u k -w 10 -c 100
```

Output:

```
OK: Bytes_sent was 0.26 kB/s | 'bytes_sent'=0.26;10;100;
OK: Bytes_recv was 1.46 kB/s | 'bytes_recv'=1.46;10;100;
```

The following nodes are also available:

- packets_sent / packets_recv
- dropin / dropout
- errin / errout

NSClient++ via check_nt

NSClient++ via `check_nt` does not include a NIC module.

An alternative method is to query a performance counter, for example:

```
\Network Interface(Intel[R] PRO_1000 MT Network Connection)\Bytes Received/Sec
```

More information about performance counters can be found in the [Performance Counter Checks](#) KB article.

NSClient++ via check_nrpe

NSClient++ via `check_nrpe` includes a `check_network` module however it doesn't seem to report any data, it's likely this module is still in a development stage (tested with 0.5.2.20). An example:

Command:

```
./check_nrpe -H 10.25.14.2 -c check_network
```

Output:

```
: Intel(R) PRO/1000 MT Network Connection >0 <0 bps|'Intel(R) PRO/1000 MT Network Connection_total'=0;10000;100000
```

An alternative method is to query a performance counter, for example:

```
\Network Interface(Intel[R] PRO_1000 MT Network Connection)\Bytes Received/Sec
```

More information about performance counters can be found in the [Performance Counter Checks](#) KB article.

WMI

Check WMI Plus includes a `checknetwork` module and produces a lot of output.

Bytes Sent / Bytes Received

Unit: Bytes

Warning: 10000B/s

Critical: 100000B/s

Commands:

```
./check_wmi_plus.pl -H 10.25.14.10 -u wmiagent -p Str0ngP@ssw0rd -m checknetwork -a 'Ethernet0' -w _BytesSentPersec=10000 -w _BytesR
```

Output:

```
OK (Sample Period 262 sec) - Number of Interfaces=1. Interface Details - OK - Interface:Ethernet0, IP Address:(10.25.14.10, fe80::88a2001:44b8:3132:25:10:25:254:f440, 2001:44b8:3132:25:10:25:14:10), MAC Address 00:50:56:AB:AD:9D, Speed:1Gbit/s, DHCPEnabled=False, By Packet Send Rate=1packet/sec, Packet Receive Rate=9packet/sec, Output Queue Length=0, Packets Received Errors=0 |'Ethernet0 Bytes 'Ethernet0 BytesReceivedPersec'=1718;10000;100000; 'Ethernet0 Receive Utilisation'=0.00%; 'Ethernet0 PacketsSentPersec'=1; 'Ethernet
```

If your Windows OS is older than Server 2012 or Windows 8 then you may require the `-o legacy` argument.

The following thresholds are also available:

- CurrentBandwidth
- _PacketsSentPersec / _PacketsReceivedPersec
- OutputQueueLength
- PacketsReceivedErrors
- _SendBytesUtilisation / _ReceiveBytesUtilisation

SNMP

Monitoring NICs using SNMP can be done using MRTG. It is a powerful program and you should refer to the official website on how to get it up and running:

<https://oss.oetiker.ch/mrtg/>

If you are using Nagios XI then you simply run the **Network Switch / Router** configuration wizard. This uses MRTG in the backend and the wizard does all the configuring for you. Even th

Final Thoughts

For any support related questions please visit the [Nagios Support Forums](#) at:

<http://support.nagios.com/forum/>

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Online URL: <https://support.nagios.com/kb/article/network-interface-checks-781.html>