

Notes and Results for NetXen NX3-20GSR

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General Notes and Observations

These tests were all run with the NetXen-provided sysctl settings, and with MTU 9000. None of the NetXen tools were used to configure offloading or other extra features. These tests represent the bare configuration of the NIC.

The switched tests were performed through a Blade Network Technologies RackSwitch G8124, ports 9 and 13.

IRQ Balancing was turned off on both servers. /etc/sysconfig/cpuspeed was set with GOVERNOR=performance.

Test Summaries

Back-to-Back 5 min single stream tests

Test 1	7.57 Gbits/sec
Test 2	7.77 Gbits/sec
Test 3	7.61 Gbits/sec
Average	7.65 Gbits/sec

Back-to-Back 5 min 4 stream tests

Test 1	9.90 Gbits/sec
Test 2	9.90 Gbits/sec

Test 3	9.89 Gbits/sec
Average	9.89 Gbits/sec

Back-to-Back 1 hour single stream tests

Test 1	7.46 Gbits/sec
Test 2	7.60 Gbits/sec
Test 3	7.62 Gbits/sec
Average	7.56 Gbits/sec

Back-to-Back 1 hour 4 stream tests

Test 1	9.90 Gbits/sec
Test 2	9.90 Gbits/sec
Test 3	9.90 Gbits/sec
Average	9.90 Gbits/sec

Switched 5 min single stream tests

Test 1	7.61 Gbits/sec
Test 2	7.56 Gbits/sec
Test 3	7.61 Gbits/sec
Average	7.59 Gbits/sec

Switched 5 min 4 stream tests

Test 1	9.91 Gbits/sec
Test 2	9.91 Gbits/sec
Test 3	9.91 Gbits/sec
Average	9.91 Gbits/sec

Switched 1 hour single stream tests

Test 1	7.73 Gbits/sec
Test 2	7.61 Gbits/sec
Test 3	7.56 Gbits/sec
Average	7.63 Gbits/sec

Switched 1 hour 4 stream tests

Test 1	9.91 Gbits/sec
--------	----------------

Test 2	9.91 Gbits/sec
Test 3	9.91 Gbits/sec
Average	9.91 Gbits/sec

GridFTP Tools tests

HPN-SSH tests

We were unable to complete the HPN-SSH tests due to the card overheating and shutting down.

Raw Test Data

Back-to-Back 5 min single stream tests

```

Fri Mar 13 14:46:52 MDT 2009
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
[ 3] local 10.1.1.2 port 49144 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-300.0 sec  264 GBytes  7.57 Gbits/sec
Fri Mar 13 14:53:34 MDT 2009
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
[ 3] local 10.1.1.2 port 59800 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-300.0 sec  271 GBytes  7.77 Gbits/sec
Fri Mar 13 15:00:05 MDT 2009
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
[ 3] local 10.1.1.2 port 57482 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-300.0 sec  266 GBytes  7.61 Gbits/sec

```

```

[root@thud sa]# sar -f /var/log/sa/sa13
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/13/2009

11:23:17 AM          LINUX RESTART

11:30:01 AM          CPU          %user      %nice      %system    %iowait    %steal     %idle
02:40:01 PM          all           0.01       0.00       0.02       0.03       0.00      99.94
02:50:01 PM          all           0.16       0.00       8.75       0.02       0.00     91.07
03:00:01 PM          all           0.37       0.00      18.76       0.01       0.00     80.86
03:10:01 PM          all           0.39       0.00      27.37       0.01       0.00     72.23

```

Back-to-Back 5 min 4 stream tests

Fri Mar 13 15:06:41 MDT 2009

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

[5] local 10.1.1.2 port 42491 connected with 10.1.1.3 port 5001
[4] local 10.1.1.2 port 42488 connected with 10.1.1.3 port 5001
[3] local 10.1.1.2 port 42490 connected with 10.1.1.3 port 5001
[6] local 10.1.1.2 port 42489 connected with 10.1.1.3 port 5001
[ID] Interval Transfer Bandwidth
[5] 0.0-300.0 sec 85.4 GBytes 2.44 Gbits/sec
[ID] Interval Transfer Bandwidth
[3] 0.0-300.0 sec 87.5 GBytes 2.50 Gbits/sec
[ID] Interval Transfer Bandwidth
[6] 0.0-300.0 sec 88.4 GBytes 2.53 Gbits/sec
[ID] Interval Transfer Bandwidth
[4] 0.0-300.0 sec 84.6 GBytes 2.42 Gbits/sec
[SUM] 0.0-300.0 sec 346 GBytes 9.90 Gbits/sec
Fri Mar 13 15:13:12 MDT 2009

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

[6] local 10.1.1.2 port 56314 connected with 10.1.1.3 port 5001
[5] local 10.1.1.2 port 56313 connected with 10.1.1.3 port 5001
[4] local 10.1.1.2 port 56312 connected with 10.1.1.3 port 5001
[3] local 10.1.1.2 port 56311 connected with 10.1.1.3 port 5001
[ID] Interval Transfer Bandwidth
[5] 0.0-300.0 sec 85.3 GBytes 2.44 Gbits/sec
[ID] Interval Transfer Bandwidth
[4] 0.0-300.0 sec 85.8 GBytes 2.46 Gbits/sec
[ID] Interval Transfer Bandwidth
[3] 0.0-300.0 sec 88.6 GBytes 2.54 Gbits/sec
[ID] Interval Transfer Bandwidth
[6] 0.0-300.0 sec 86.3 GBytes 2.47 Gbits/sec
[SUM] 0.0-300.0 sec 346 GBytes 9.90 Gbits/sec
Fri Mar 13 15:19:08 MDT 2009

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

[6] local 10.1.1.2 port 35993 connected with 10.1.1.3 port 5001
[4] local 10.1.1.2 port 35989 connected with 10.1.1.3 port 5001
[5] local 10.1.1.2 port 35992 connected with 10.1.1.3 port 5001
[3] local 10.1.1.2 port 35990 connected with 10.1.1.3 port 5001
[ID] Interval Transfer Bandwidth
[6] 0.0-300.0 sec 86.5 GBytes 2.48 Gbits/sec
[ID] Interval Transfer Bandwidth
[3] 0.0-300.0 sec 86.0 GBytes 2.46 Gbits/sec
[ID] Interval Transfer Bandwidth
[4] 0.0-300.0 sec 86.2 GBytes 2.47 Gbits/sec
[ID] Interval Transfer Bandwidth
[5] 0.0-300.0 sec 86.9 GBytes 2.49 Gbits/sec
[SUM] 0.0-300.0 sec 346 GBytes 9.89 Gbits/sec

```
[root@thud sa]# sar -f /var/log/sa/sa13
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/13/2009
```

```
11:23:17 AM LINUX RESTART
```

	CPU	%user	%nice	%system	%iowait	%steal	%idle
11:30:01 AM	all	0.37	0.00	18.76	0.01	0.00	80.86
03:00:01 PM	all	0.39	0.00	27.37	0.01	0.00	72.23
03:10:01 PM	all	0.47	0.00	48.26	0.01	0.00	51.25
03:20:01 PM	all	0.28	0.14	27.44	0.01	0.00	72.13

Back-to-Back 1 hour single stream tests

```
Fri Mar 13 15:45:32 MDT 2009
```

```
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
```

```
[ 3] local 10.1.1.2 port 36055 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 3358886944768 bits 7.46 Gbits/sec
Fri Mar 13 16:45:33 MDT 2009
```

```
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
```

```
[ 3] local 10.1.1.2 port 56123 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 3420192653312 bits 7.60 Gbits/sec
Fri Mar 13 17:45:34 MDT 2009
```

```
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
```

```
[ 3] local 10.1.1.2 port 38157 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 3429006868480 bits 7.62 Gbits/sec
```

```
[root@thud sa]# sar -f /var/log/sa/sa13
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/13/2009
```

```
11:23:17 AM LINUX RESTART
```

	CPU	%user	%nice	%system	%iowait	%steal	%idle
11:30:01 AM	all	0.02	0.00	0.02	0.01	0.00	99.95
03:40:01 PM	all	0.23	0.00	10.98	0.01	0.00	88.79
03:50:01 PM	all	0.48	0.00	24.53	0.00	0.00	74.99
04:00:01 PM	all	0.49	0.00	24.52	0.00	0.00	74.99
04:10:01 PM	all	0.47	0.00	24.53	0.00	0.00	75.00
04:20:01 PM	all	0.47	0.14	24.54	0.01	0.00	74.84
04:30:01 PM	all	0.47	0.00	24.54	0.00	0.00	74.99
04:40:01 PM	all	0.47	0.00	24.54	0.00	0.00	74.99
04:50:01 PM	all	0.47	0.00	24.54	0.00	0.00	74.99
05:00:01 PM	all	0.50	0.00	24.55	0.01	0.00	74.95
05:10:01 PM	all	0.47	0.00	24.55	0.00	0.00	74.98
05:20:01 PM	all	0.46	0.00	24.54	0.00	0.00	74.99
05:30:01 PM	all	0.46	0.14	25.34	0.01	0.00	74.05
05:40:01 PM	all	0.46	0.00	24.54	0.00	0.00	74.99
05:50:01 PM	all	0.46	0.00	24.50	0.00	0.00	75.04
06:00:01 PM	all	0.46	0.00	24.55	0.00	0.00	74.98
06:10:01 PM	all	0.46	0.00	25.48	0.00	0.00	74.06
06:20:01 PM	all	0.46	0.00	27.99	0.01	0.00	71.55
06:30:01 PM	all	0.45	0.14	24.58	0.00	0.00	74.83
06:40:01 PM	all	0.46	0.00	24.55	0.00	0.00	74.98
06:50:01 PM	all	0.52	0.00	40.59	0.02	0.00	58.87

Back-to-Back 1 hour 4 stream tests

Fri Mar 13 18:45:35 MDT 2009

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 6] local 10.1.1.2 port 41837 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 41834 connected with 10.1.1.3 port 5001
[ 3] local 10.1.1.2 port 41835 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 41836 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-3600.0 sec 1108249624576 bits 2.46 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-3600.0 sec 1120501571584 bits 2.49 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-3600.0 sec 1113482051584 bits 2.47 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 1114392027136 bits 2.48 Gbits/sec
[SUM] 0.0-3600.0 sec 4456625274880 bits 9.90 Gbits/sec
Fri Mar 13 19:45:36 MDT 2009
```

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 332 KByte (default)

```
[ 5] local 10.1.1.2 port 37221 connected with 10.1.1.3 port 5001
[ 6] local 10.1.1.2 port 37219 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 37218 connected with 10.1.1.3 port 5001
[ 3] local 10.1.1.2 port 37220 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-3600.0 sec 1108742250496 bits 2.46 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 1110985957376 bits 2.47 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-3600.0 sec 1128166113280 bits 2.51 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-3600.0 sec 1108484980736 bits 2.46 Gbits/sec
[SUM] 0.0-3600.0 sec 4456379301888 bits 9.90 Gbits/sec
Fri Mar 13 20:45:38 MDT 2009
```

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 6] local 10.1.1.2 port 42819 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 42818 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 42817 connected with 10.1.1.3 port 5001
[ 3] local 10.1.1.2 port 42816 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-3600.0 sec 1128602066944 bits 2.51 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 1104552615936 bits 2.45 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-3600.0 sec 1121954234368 bits 2.49 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-3600.0 sec 1101117317120 bits 2.45 Gbits/sec
[SUM] 0.0-3600.0 sec 4456226234368 bits 9.90 Gbits/sec
```

```
[root@thud sa]# sar -f /var/log/sa/sa13
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/13/2009
```

```
11:23:17 AM LINUX RESTART
```

	CPU	%user	%nice	%system	%iowait	%steal	%idle
06:40:01 PM	all	0.46	0.00	24.55	0.00	0.00	74.98
06:50:01 PM	all	0.52	0.00	40.59	0.02	0.00	58.87
07:00:01 PM	all	0.57	0.00	60.79	0.02	0.00	38.62
07:10:01 PM	all	0.58	0.00	60.93	0.02	0.00	38.48
07:20:01 PM	all	0.58	0.00	61.09	0.02	0.00	38.31
07:30:01 PM	all	0.59	0.16	61.23	0.02	0.00	38.00
07:40:01 PM	all	0.58	0.00	60.97	0.01	0.00	38.44
07:50:01 PM	all	0.59	0.00	61.11	0.01	0.00	38.29
08:00:01 PM	all	0.60	0.00	61.14	0.01	0.00	38.24
08:10:01 PM	all	0.60	0.00	61.37	0.01	0.00	38.01
08:20:01 PM	all	0.60	0.00	61.44	0.02	0.00	37.94
08:30:02 PM	all	0.60	0.16	61.55	0.03	0.00	37.66
08:30:02 PM	CPU	%user	%nice	%system	%iowait	%steal	%idle
08:40:01 PM	all	0.60	0.00	61.36	0.02	0.00	38.01
08:50:01 PM	all	0.61	0.00	60.93	0.02	0.00	38.44
09:00:01 PM	all	0.58	0.00	60.96	0.01	0.00	38.45
09:10:01 PM	all	0.58	0.00	61.21	0.01	0.00	38.21
09:20:01 PM	all	0.58	0.00	61.09	0.02	0.00	38.31
09:30:01 PM	all	0.57	0.15	61.04	0.02	0.00	38.21
09:40:01 PM	all	0.57	0.00	61.10	0.02	0.00	38.30
09:50:02 PM	all	0.33	0.00	34.30	0.03	0.00	65.34

Switched 5 min single stream tests

```
Mon Mar 16 12:23:23 MDT 2009
```

```
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
```

```
-----
[ 3] local 10.1.1.2 port 49791 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-300.0 sec  266 GBytes  7.61 Gbits/sec
Mon Mar 16 12:28:24 MDT 2009
```

```
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
```

```
-----
[ 3] local 10.1.1.2 port 58556 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-300.0 sec  264 GBytes  7.56 Gbits/sec
Mon Mar 16 12:33:25 MDT 2009
```

```
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
```

```
-----
[ 3] local 10.1.1.2 port 40352 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-300.0 sec  266 GBytes  7.61 Gbits/sec
```

```
[root@thud sa]# sar  
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/16/2009
```

	CPU	%user	%nice	%system	%iowait	%steal	%idle
12:00:01 AM	all	0.27	0.00	14.23	0.01	0.00	85.49
12:30:01 PM	all	0.34	0.14	16.27	0.01	0.00	83.25
12:40:01 PM	all	0.48	0.00	24.45	0.00	0.00	75.07

Switched 5 min 4 stream tests

Mon Mar 16 16:48:58 MDT 2009

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 6] local 10.1.1.2 port 39571 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 39567 connected with 10.1.1.3 port 5001
[ 3] local 10.1.1.2 port 39568 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 39570 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-300.0 sec  86.6 GBytes  2.48 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-300.0 sec  86.1 GBytes  2.47 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-300.0 sec  86.1 GBytes  2.46 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-300.0 sec  87.2 GBytes  2.50 Gbits/sec
[SUM] 0.0-300.0 sec   346 GBytes  9.91 Gbits/sec
Mon Mar 16 16:53:59 MDT 2009
```

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 6] local 10.1.1.2 port 50275 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 50274 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 50273 connected with 10.1.1.3 port 5001
[ 3] local 10.1.1.2 port 50272 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-300.0 sec  85.9 GBytes  2.46 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-300.0 sec  87.1 GBytes  2.49 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-300.0 sec  89.7 GBytes  2.57 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-300.0 sec  83.4 GBytes  2.39 Gbits/sec
[SUM] 0.0-300.0 sec   346 GBytes  9.91 Gbits/sec
Mon Mar 16 16:59:00 MDT 2009
```

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 6] local 10.1.1.2 port 56968 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 56967 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 56966 connected with 10.1.1.3 port 5001
[ 3] local 10.1.1.2 port 56965 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-300.0 sec  86.8 GBytes  2.49 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-300.0 sec  87.3 GBytes  2.50 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-300.0 sec  85.7 GBytes  2.46 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-300.0 sec  86.2 GBytes  2.47 Gbits/sec
[SUM] 0.0-300.0 sec   346 GBytes  9.91 Gbits/sec
```

[root@thud iperf-results]# sar
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/16/2009

12:00:01 AM	CPU	%user	%nice	%system	%iowait	%steal	%idle
04:40:02 PM	all	0.35	0.00	28.45	0.01	0.00	71.19
04:50:01 PM	all	0.54	0.00	53.10	0.01	0.00	46.34
05:00:01 PM	all	0.60	0.00	60.81	0.02	0.00	38.57

Switched 1 hour single stream tests

```
Mon Mar 16 12:38:26 MDT 2009
-----
Client connecting to 10.1.1.3,TCP port 5001
TCP window size: 256 KByte (default)
-----
[ 3] local 10.1.1.2 port 33375 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-3600.0 sec 3479369302016 bits 7.73 Gbits/sec
Mon Mar 16 13:38:27 MDT 2009
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
[ 3] local 10.1.1.2 port 56622 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-3600.0 sec 3423901925376 bits 7.61 Gbits/sec
Mon Mar 16 14:38:28 MDT 2009
-----
Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)
-----
[ 3] local 10.1.1.2 port 55400 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer    Bandwidth
[ 3] 0.0-3600.0 sec 3403893473280 bits 7.56 Gbits/sec
```

```
[root@thud iperf-results]# sar
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/16/2009

12:00:01 AM      CPU      %user   %nice   %system  %iowait  %steal   %idle
12:30:01 PM      all      0.34    0.14    16.27    0.01    0.00   83.25
12:40:01 PM      all      0.48    0.00    24.45    0.00    0.00   75.07
12:50:01 PM      all      0.49    0.00    24.53    0.00    0.00   74.98
01:00:01 PM      all      0.49    0.00    24.53    0.00    0.00   74.98
01:10:01 PM      all      0.49    0.00    24.65    0.00    0.00   74.87
01:20:01 PM      all      0.48    0.00    32.09    0.01    0.00   67.41
01:30:01 PM      all      0.49    0.17    32.12    0.01    0.00   67.21
01:30:55 PM      all      0.56    0.00    32.15    0.01    0.00   67.28
01:40:01 PM      all      0.49    0.00    30.72    0.02    0.00   68.78
01:50:01 PM      all      0.49    0.00    24.52    0.00    0.00   74.98
02:00:01 PM      all      0.50    0.00    24.53    0.00    0.00   74.97
02:10:01 PM      all      0.48    0.00    27.30    0.01    0.00   72.21
02:20:01 PM      all      0.49    0.00    31.89    0.02    0.00   67.60
02:30:01 PM      all      0.49    0.16    31.93    0.02    0.00   67.40
02:40:01 PM      all      0.49    0.00    30.71    0.01    0.00   68.79
```

Switched 1 hour 4 stream tests

Mon Mar 16 17:04:01 MDT 2009

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 3] local 10.1.1.2 port 49876 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 49873 connected with 10.1.1.3 port 5001
[ 6] local 10.1.1.2 port 49874 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 49875 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-3600.0 sec 1019 GBytes 2.43 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-3600.0 sec 1128263393280 bits 2.51 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-3600.0 sec 1115265810432 bits 2.48 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 1120811933696 bits 2.49 Gbits/sec
[SUM] 0.0-3600.0 sec 4458257760256 bits 9.91 Gbits/sec
Mon Mar 16 18:04:02 MDT 2009
```

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 6] local 10.1.1.2 port 36983 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 36980 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 36982 connected with 10.1.1.3 port 5001
[ 3] local 10.1.1.2 port 36981 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-3600.0 sec 1124125310976 bits 2.50 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-3600.0 sec 1104939671552 bits 2.46 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-3600.0 sec 1113225248768 bits 2.47 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 1116015648768 bits 2.48 Gbits/sec
[SUM] 0.0-3600.0 sec 4458305880064 bits 9.91 Gbits/sec
Mon Mar 16 19:04:03 MDT 2009
```

Client connecting to 10.1.1.3, TCP port 5001
TCP window size: 256 KByte (default)

```
[ 3] local 10.1.1.2 port 55983 connected with 10.1.1.3 port 5001
[ 4] local 10.1.1.2 port 55981 connected with 10.1.1.3 port 5001
[ 6] local 10.1.1.2 port 55982 connected with 10.1.1.3 port 5001
[ 5] local 10.1.1.2 port 55980 connected with 10.1.1.3 port 5001
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.0-3600.0 sec 1109645967360 bits 2.47 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 5] 0.0-3600.0 sec 1111615168512 bits 2.47 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 6] 0.0-3600.0 sec 1115130961920 bits 2.48 Gbits/sec
[ ID] Interval      Transfer      Bandwidth
[ 3] 0.0-3600.0 sec 1121919000576 bits 2.49 Gbits/sec
[SUM] 0.0-3600.0 sec 4458311098368 bits 9.91 Gbits/sec
```

```
[root@thud iperf-results]# sar -f ./sar/sa16-march16
Linux 2.6.18-128.1.1.el5 (thud.chpc.utah.edu) 03/16/2009
```

	CPU	%user	%nice	%system	%iowait	%steal	%idle
12:00:01 AM	all	0.60	0.00	60.81	0.02	0.00	38.57
05:10:01 PM	all	0.58	0.00	61.30	0.02	0.00	38.11
05:20:01 PM	all	0.59	0.00	61.04	0.01	0.00	38.36
05:30:01 PM	all	0.59	0.16	61.14	0.01	0.00	38.10
05:40:01 PM	all	0.60	0.00	61.09	0.01	0.00	38.30
05:50:02 PM	all	0.58	0.00	61.10	0.01	0.00	38.30
06:00:01 PM	all	0.59	0.00	61.23	0.02	0.00	38.17
06:10:01 PM	all	0.60	0.00	61.20	0.02	0.00	38.18
06:20:01 PM	all	0.62	0.00	61.39	0.02	0.00	37.97
06:30:01 PM	all	0.63	0.16	61.54	0.02	0.00	37.66
06:40:01 PM	all	0.63	0.00	61.53	0.02	0.00	37.83
06:50:01 PM	all	0.61	0.00	61.50	0.01	0.00	37.87
07:00:01 PM	all	0.62	0.00	61.38	0.01	0.00	37.98
07:10:01 PM	all	0.61	0.00	61.15	0.02	0.00	38.22
07:20:01 PM	all	0.59	0.00	60.81	0.02	0.00	38.58
07:30:01 PM	all	0.59	0.15	61.02	0.03	0.00	38.21
07:40:01 PM	all	0.60	0.00	61.07	0.02	0.00	38.31
07:50:01 PM	all	0.59	0.00	61.01	0.01	0.00	38.38
08:00:02 PM	all	0.59	0.00	61.01	0.01	0.00	38.39
08:10:01 PM	all	0.25	0.00	24.45	0.02	0.00	75.28
08:20:01 PM	all	0.01	0.00	0.02	0.03	0.00	99.94
08:30:01 PM	all	0.02	0.14	0.03	0.03	0.00	99.78

GridFTP Tools tests

HPN-SSH tests

For comments or questions, email Tom Ammon at tom.ammon@utah.edu