IEEE 802 Plenary Session

San Antonio Grand Hyatt, San Antonio, Texas

End-of-Session Network Services Report

November 10, 2016

Verilan, Inc. is providing comprehensive network services for the IEEE 802 November Plenary session at the San Antonio Grand Hyatt in San Antonio, Texas. We are pleased to report that after a full infrastructure deployment, the network remained stable and consistent throughout the meeting.

The Verilan Network Help Desk located on the Fourth Floor Foyer provided support throughout the week during scheduled hours. All Help Desk client support requests have been addressed and fully resolved by the Verilan staff.

We utilized two connections provided by the hotel, both of which were combined on the same 1Gbps subnet as the hotel guest room network. These connections performed as expected.

Comprehensive LAN and WLAN infrastructure including managed layer 3 switches were configured and deployed by Verilan in the MDF, five IDFs and 33 meeting rooms.

Peak inbound Internet bandwidth recorded during this session was on Wednesday morning, at approximately 220Mb/s. Our sustained average was about 80Mb/s throughout the week but as you can tell, there were periods where traffic clearly peaked above 100Mb/s.

Internet usage for the last 24-hour period is shown in Figure 1, and usage for the week is shown in Figure 2.
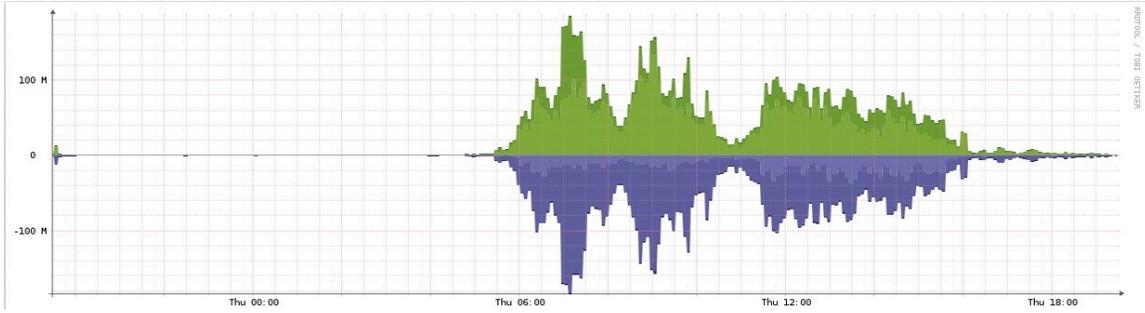
Bits/s		Now	Avg	Min	Max	Total
🟩 eth0.16	Rx	4.92k	268.16k	0.00	3.00M	11.47GB
🟦 secure	Tx	5.89k	397.16k	427.29	6.23M	16.99GB
🟩 eth7	Rx	709.22k	22.31M	16.61k	135.86M	241.75GB
🟦 To Internet	Tx	122.47k	6.60M	6.12k	38.47M	71.57GB
🟩 eth0	Rx	143.01k	9.00M	8.66k	103.65M	97.51GB
🟦 LAN	Tx	719.96k	24.53M	16.40k	169.66M	265.87GB

Figure 1. Internet Usage: 24-hour period (Thursday, Nov. 10, 2016)

Bits/s		Now	Avg	Min	Max	Total
🟩 eth0.16	Rx	4.92k	268.16k	0.00	3.00M	11.47GB
🟦 secure	Tx	5.89k	397.16k	427.29	6.23M	16.99GB
🟩 eth7	Rx	388.25k	28.46M	16.61k	167.30M	1.22TB
🟦 To Internet	Tx	61.73k	7.76M	6.12k	47.09M	332.01GB
🟩 eth0	Rx	85.47k	10.59M	8.66k	115.56M	453.08GB
🟦 LAN	Tx	403.93k	31.09M	16.40k	214.04M	1.33TB

Figure 2. Internet Usage: Sunday 11/4/16 – Thursday 11/10/16)

Connectivity & Help Desk Issues

We are pleased to report that there have been no service interruptions and no significant network problems. We did have a report of "sluggish" speeds on Wednesday Nov. 9th, so we conducted speed tests Texas D, as well as adjoining rooms. Our speed tests, AP association counts, and port checks didn't indicate any actionable items. The results of my speed tests are posted below:

```
837AM TexA 47d, 49u
840AM TexD 48d, 12u // 853AM 35d, 22u
843AM TexE  58d, 19u
845AM TexF 56d, 35u
851AM TexB 76d, 81u
```

Staffing

Questions or comments regarding this report can be addressed to:

James Dishongh   jdishongh@verilan.com

On behalf of everyone at Verilan, I wish to thank you again for your business; it was a pleasure working with you and we hope to have the opportunity to do so again in the future.

Your team in San Antonio:

Bret Plumb   bplumb@verilan.com

Reid Kells   rkells@verilan.com

James Dishongh   jdishongh@verilan.com

The network deployment map is shown on the next page.

Network Deployment & Coverage

Verilan deployed a full Gigabit Ethernet LAN, including 56 enterprise-grade tri-modal IEEE 802.11a/g/n wireless access points throughout the IEEE 802 meeting space. Verilan is providing a secure (WPA2-PSK) network for all registered attendees. The location of WAP deployments is shown in Figure 3.

Figure 3. Network Deployment Map