



## **IEEE 802 Plenary Session**

Hyatt Regency Vancouver & The Fairmont Hotel Vancouver, Vancouver, B.C.

### **Mid-Session Network Services Report**

March 11, 2009

#### **Summary**

VeriLAN Event Services, Inc. (VeriLAN) is providing comprehensive network services for the IEEE 802 March 2009 Plenary meeting at the Hyatt Regency Vancouver and the Fairmont Hotel Vancouver in Vancouver, British Columbia. We are pleased to report only a few minor issues and that the network is stable across both properties and currently supporting in excess of 1000 wireless clients.

**Issue:** Power issues in the Regency Ballrooms C and D at the Hyatt Regency caused brief network outages on Monday morning.

**Resolution:** VeriLAN's real time network monitoring system notified our engineers of the outages the moment they took place, allowing us to take steps to bring effected hardware back online. The access point deployment model ensured that disconnected clients roamed to other online WAP's and direct wall power was run during the lunch break.

The VeriLAN Network Help Desk is providing support for all attendees during scheduled meeting hours. All Help Desk support requests were addressed and fully resolved by VeriLAN staff.

The property is fed by a 100Mbps fiber optic connection to the Internet. We were given unrestricted access to the bandwidth, which is shared with the guest rooms and administrative offices. The shared Internet bandwidth was provided at no charge to IEEE guest rooms over the hotel's wired and wireless network. Network traffic statistics are shown in Figure 1. Internet usage for the last 24 hour period is shown in Figure 2. Internet usage for the last seven days is shown in Figure 3.



**Traffic statistics - Tue Mar 10 17:33:00 2009**

Interface	Period	Direction	Current rate	Hour	Day	Week	Month
EXTERNAL	Current	In	0.0 bit/s	7.3 GB	82.6 GB	222.6 GB	222.6 GB
		Out	0.0 bit/s	3.6 GB	58.3 GB	187.0 GB	187.0 GB
	Previous	In		9.6 GB	83.9 GB	45.0 GB	0.0 KB
		Out		8.5 GB	21.9 GB	912.1 MB	0.0 KB
MANAGEMENT	Current	In	0.0 bit/s	364.5 MB	13.3 GB	101.8 GB	101.8 GB
		Out	0.0 bit/s	68.1 MB	6.3 GB	52.9 GB	52.9 GB
	Previous	In		3.6 GB	2.2 GB	1.0 GB	0.0 KB
		Out		381.9 MB	2.1 GB	44.2 GB	0.0 KB
open	Current	In	0.0 bit/s	3.2 GB	34.3 GB	74.1 GB	74.1 GB
		Out	0.0 bit/s	6.9 GB	74.6 GB	164.5 GB	164.5 GB
	Previous	In		4.8 GB	19.5 GB	57.0 MB	0.0 KB
		Out		9.1 GB	79.1 GB	1.0 GB	0.0 KB
secure	Current	In	0.0 bit/s	110.0 MB	11.1 GB	11.6 GB	11.6 GB
		Out	0.0 bit/s	292.2 MB	1.7 GB	5.1 GB	5.1 GB
	Previous	In		66.3 MB	299.7 MB	5.6 MB	0.0 KB
		Out		182.3 MB	2.8 GB	5.1 MB	0.0 KB

Figure 1. Internet Traffic Statistics

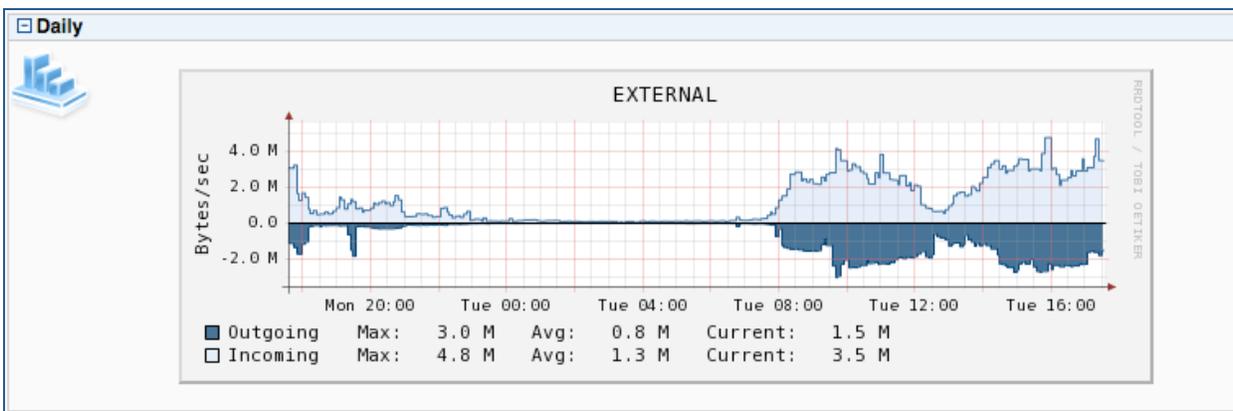


Figure 2. Internet Usage: past 24 hours (EST)

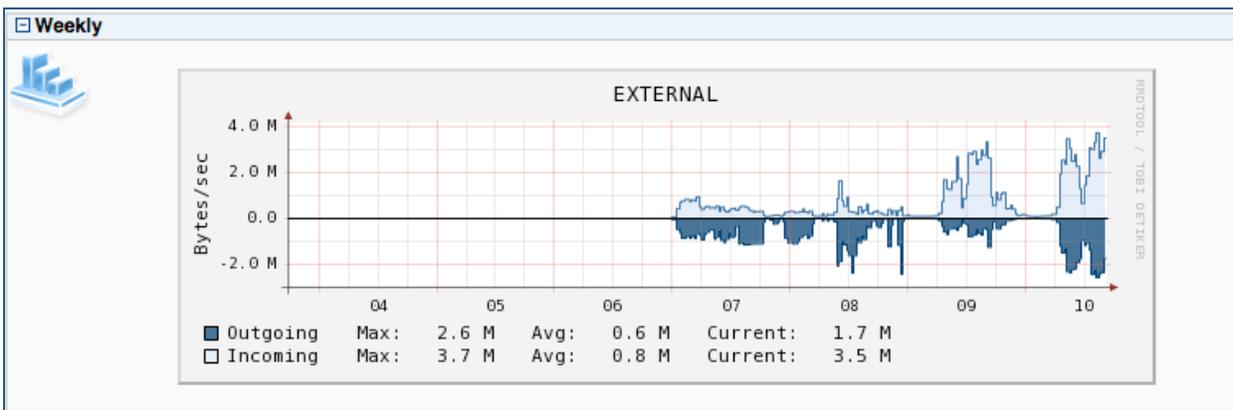


Figure 3. Internet Usage: past 7 days



### Network Deployment & Coverage

VeriLAN deployed 66 enterprise grade tri-modal IEEE 802.11a/b/g wireless access points throughout the Hyatt Regency Vancouver and Fairmont Hotel Vancouver to provide coverage for all meeting spaces. Target association density was 40 clients per WAP. VeriLAN is providing both Open and Secure (802.1x) networks to registered attendees. Figure 4 illustrates the location of the WAP deployments at the Fairmont. Figure 5 illustrates the location of the WAP deployments at the Hyatt.

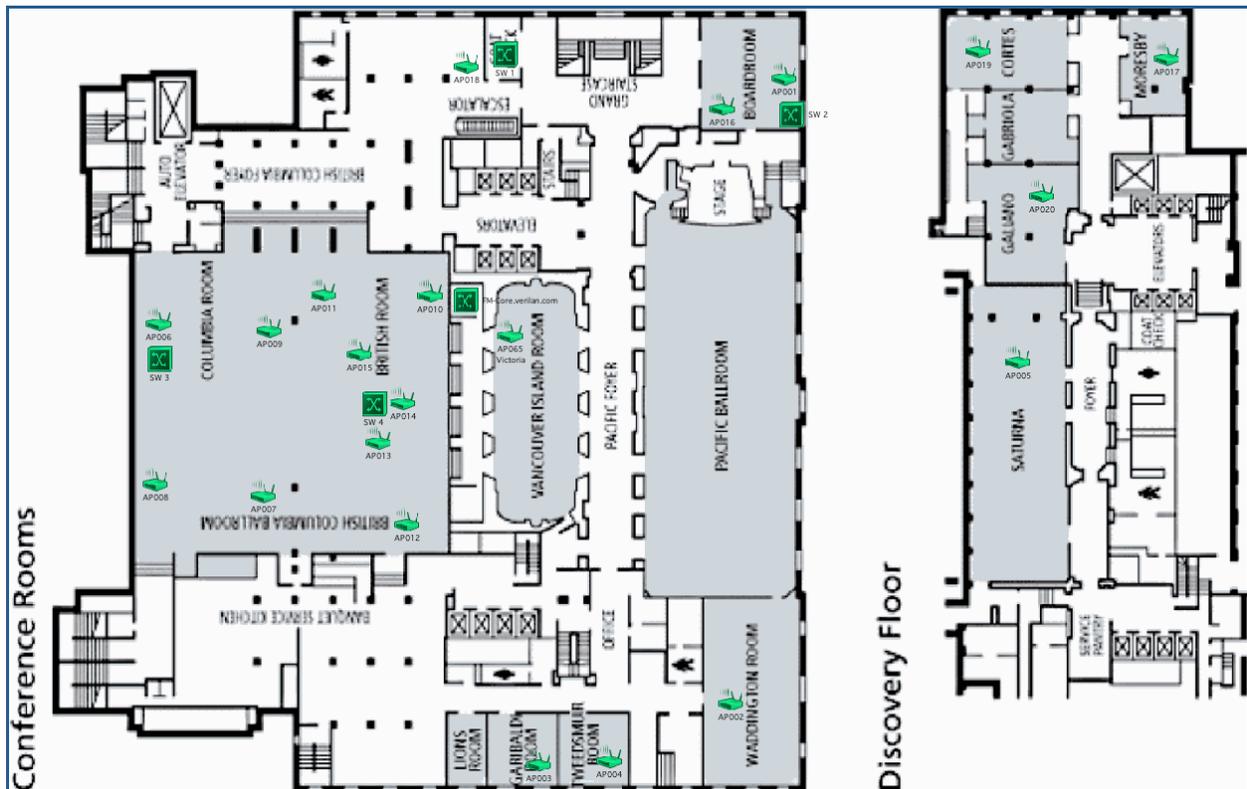


Figure 4. Wireless Access Point Deployment Plan – Fairmont Hotel Vancouver

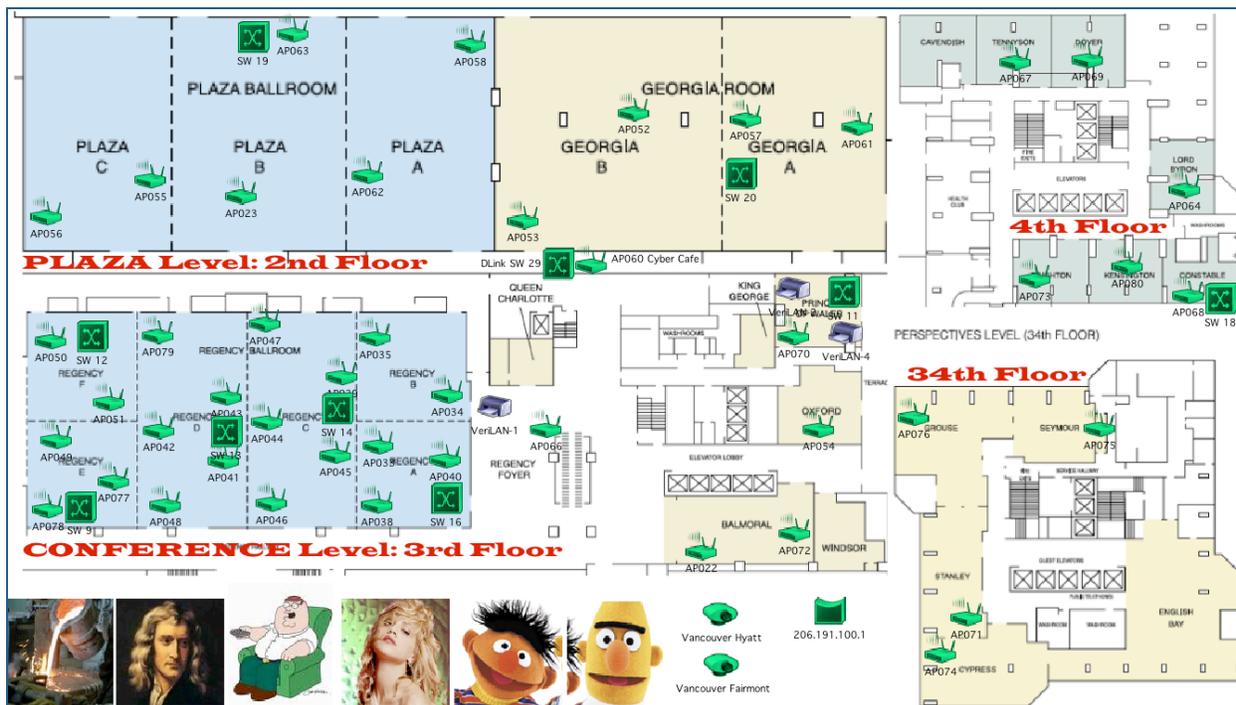


Figure 4. Wireless Access Point Deployment Plan – Hyatt Regency Vancouver

### Free-space Optical Link

Unique to this deployment is the use of an f-Sona Free-space Optical (FSO) link to connect the two hotels together. The FSO shot between the Constable room at the Hyatt and the Boardroom at the Fairmont spans roughly 250 meters and allows users at the Fairmont access to the common VeriLAN network, servers and the whole of the 100Mbps HSIA connection. The link itself has been extremely robust, maintaining a 100% optimized connection even through moderate snow. It is our hope that the ability to use the FSO solution to link properties will allow the IEEE 802 new options when considering future meeting locations. Figure 6 below shows the link status page from the FSO device at the Fairmont while figure 7 shows the link status page from the FSO at the Hyatt.

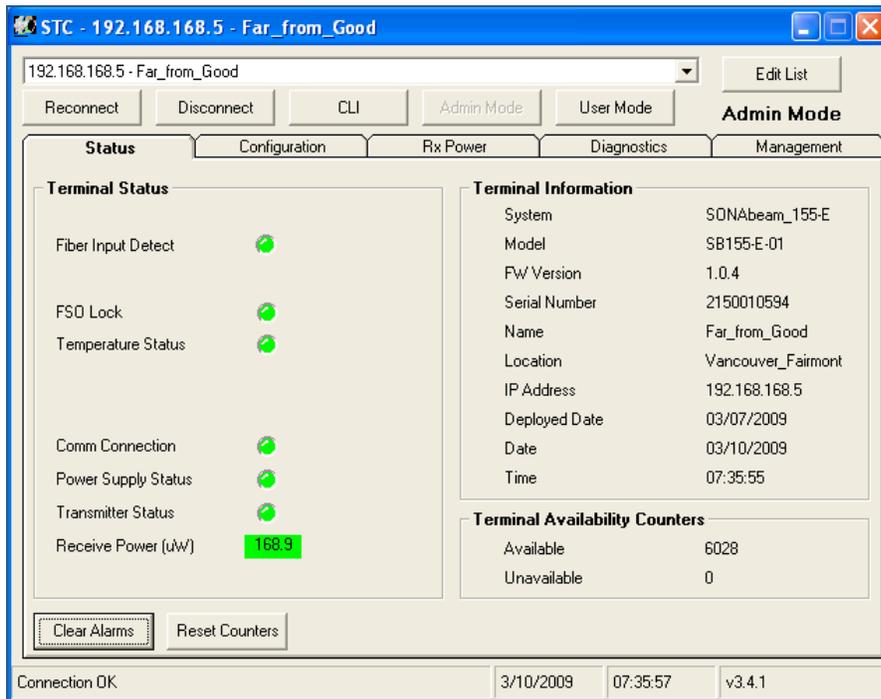


Figure 6. Free-space Optical link status at the Fairmont Hotel Vancouver

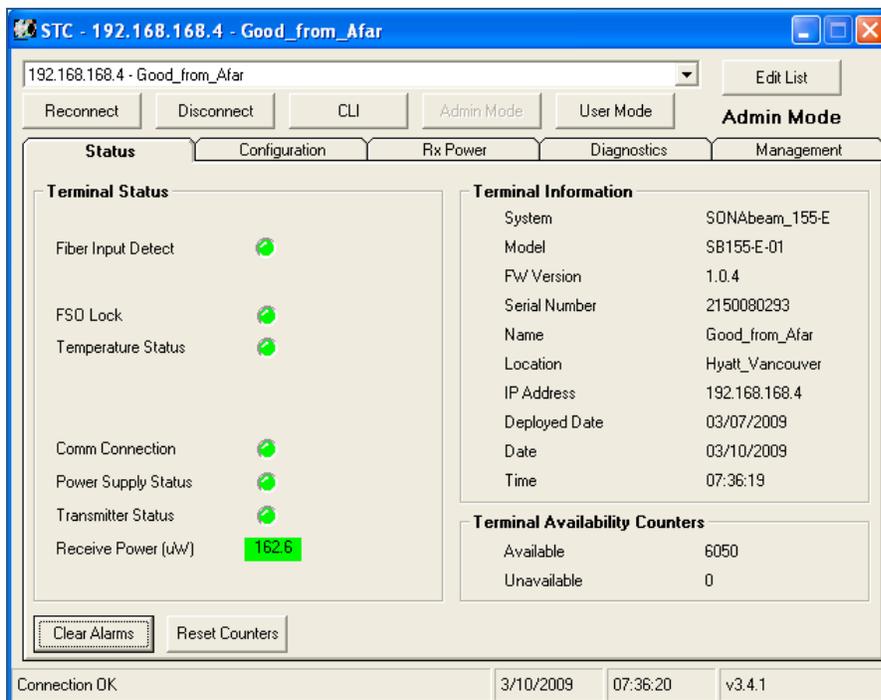


Figure 7. Free-space Optical link status at the Hyatt Regency Vancouver