



 festival ICT 
6 NOVEMBRE 2014

 ENTER



30 x Infinity 2N

Date: November 6, 2014

Location: Milano Mediolanum Forum, Milan, Italy

Information: The Festival ICT - B2B event links innovative companies "embedded" in different industries. The participants included both small and large global corporations such as Microsoft and Alcatel Lucent. It is an annual event with more than 15,000 attendees requiring reliable wireless connectivity during the show and conferences. Enter Srl., was selected as an the Internet service provider for the event and they came to LigoWave for a solid and reliable solution.

Challenges: With the huge number of tech-savvy participants attending the event more than 20,000 smart-phones, tablets, and notebooks could be expected to need Internet connectivity. Reliable and fast Internet connectivity was one of the key

measurements for the success of event. Limited channel availability, an RF intense environment within the deployment area and the need for precise network planning are the major obstacles that Internet service providers face when designing the networks and providing services for such events.

Solution: A total of 30 Infinity 2N dual-radio access points from LigoWave were used to cover the ground floor of the event. Even though the location of each AP was specifically chosen based on the integrated 3x3 omni-directional antenna characteristics, the utilization of features like auto-channel, automatic transmit power control and maximum user limitations helped to balance the load across the deployed devices.



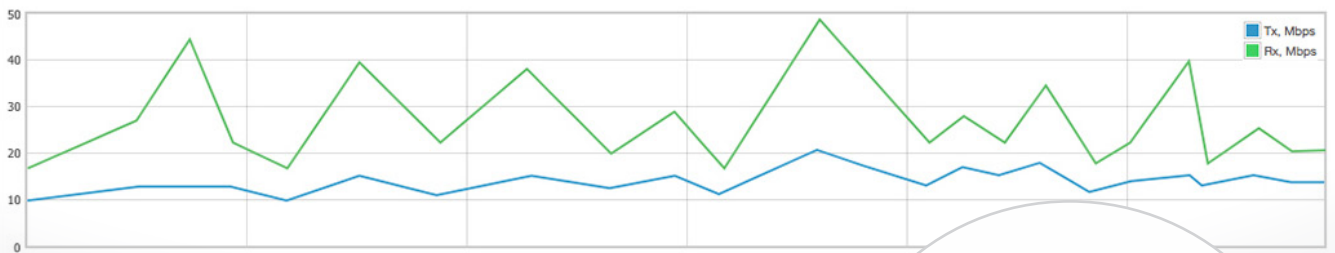
Uptime 20 hours 54 min. 39 sec.	CPU load (23 %) <div style="width: 23%;"></div>
LAN 1: 1000baseT/full	2G 22 stations 5G 45 stations

STATISTICS

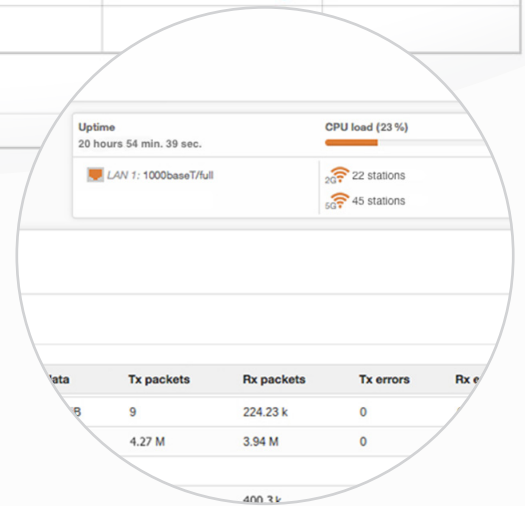
Interface counters

Interface	MAC address	Tx data	Rx data	Tx packets	Rx packets	Tx errors	Rx errors
br0	00:19:3b:04:52:8e	618 B	27.31 MiB	9	224.23 k	0	0
eth0 (eth0)	00:19:3b:04:52:8e	3.27 GiB	2.58 GiB	4.27 M	3.94 M	0	0
2.4 GHz (Radio 1)							
ath0 (FESTIVALICT_enterthecloud)	00:19:3b:04:52:8c	600.06 MiB	200.17 MiB	1.12 M	400.3 k	0	0
5 GHz (Radio 2)							
ath1 (FESTIVALICT_enterthecloud)	00:19:3b:04:52:8d	2.62 GiB	1.70 GiB	3.34 M	2.21 M	0	0

Wired (eth0) (last 5 min.)



2.4 GHz (Radio 1) (last 5 min.)



The screen shot above shows the average load on an Infinity NFT 2N access point during the Festival ICT event in Milano

Statistical information:

- Area covered: **2400 m²**
- Average number of users connected to a single AP: **60 - 80**
- Average number of concurrent users: **1800 - 2400**
- Average throughput generated: **50 - 70 Mbps**
- Average CPU load: **20 - 30 %**

“The LigoWave dual-radio / dual-frequency access point worked out to be a perfect solution for a such crowded and noisy event, allowing us to balance end-user devices on both 2.4 and 5 GHz frequencies. Auto-channel and automatic transmit power control makes the devices very easy to deploy with minimal configuration efforts required from the installers. We will definitely continue using Infinity NFT 2N devices in our future deployments as they have proven to perform well and saved us a lot of expenses comparing to other solutions available on the market today.”

Denis Beltramo, Network manager, Enter Srl.