Trends in 802.11ac: a look at adoption across industries

WildPackets commissioned a survey in order to determine the rate of adoption of 802.11ac across the enterprise and various industries. More than 200 individuals completed the State of 802.11ac Adoption survey. Respondents came from organizations of various industries and sizes. More than 60% of respondents worked in organizations with less than 1,000 people (20% from organizations with more than 10,000 people).

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Introduction

The move to 802.11ac gigabit Wi-Fi is picking up steam, seeing a 540% increase in the last year. This shift is for obvious reasons: 802.11ac is faster, more agile, and more robust than any of its predecessors. By providing Wi-Fi at the speed of wired networks, 802.11ac has revolutionized the way enterprises support the large quantity of devices connecting to their corporate networks.

Who Took the Survey?

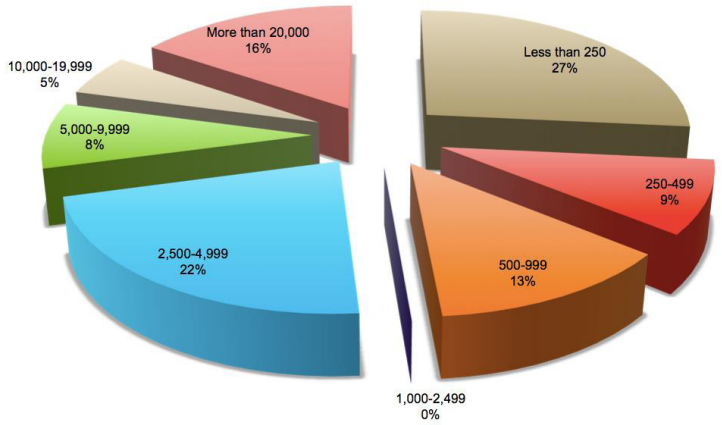
To gauge overall interest and adoption of 802.11ac across the enterprise, WildPackets commissioned a survey in order to determine the rate of adoption across various industries. More than 200 individuals completed the State of 802.11ac Adoption survey. Respondents came from organizations of various industries and sizes. More than 60% of respondents worked in organizations with less than 1,000 people (20% from organizations with more than 10,000 people).

Survey Highlights

- 215 Respondents
- More than 20% of respondents work in organizations with more than 10,000 people
- 63% of respondents work in organizations with less than 1,000 people
- 40% of respondents within three main industries: High Technology, Manufacturing, and Education
- 23% of respondents have already deployed 802.11ac
- 29% of respondents have no plans to deploy 802.11ac
- 41% of respondents said that less than 10% of their organization's current client devices supported 802.11ac. 25% did not know.

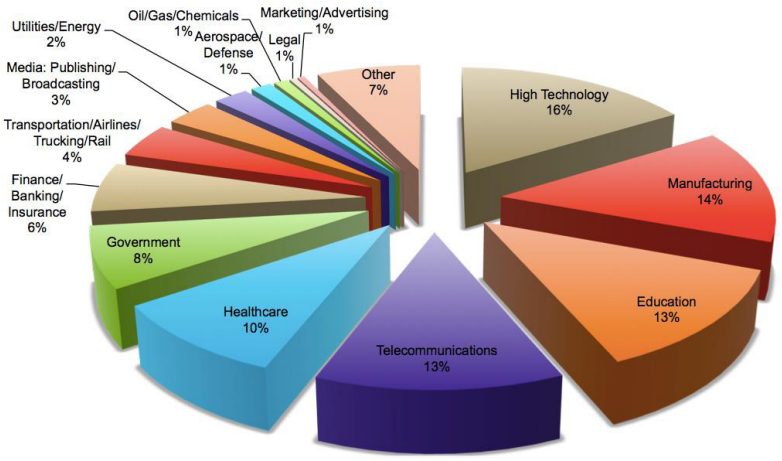
Question #1: How many employees are in your company worldwide?

The largest percentage of survey respondents (27%) worked at organizations with less than 250 people. Behind that, 22% worked for companies with between 2,500 and 5,000 employees. 16% of survey respondents came from companies with more than 20,000 employees. In broader terms, while 30% of those of filled out the survey come from companies with at least 5,000 employees, 70% of answers come from those working in smaller companies with less than 5,000 employees.



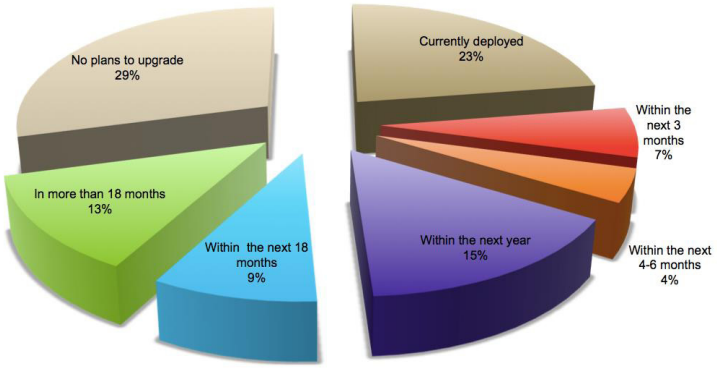
Question #2: Which of the following best describes your company's industry?

Survey respondents came from a wide variety of industries. While 40% of respondents were within the high technology, manufacturing, and education verticals, there were statistically significant inputs from those working within government (8%), healthcare (10%), and telecommunications (13%) as well.

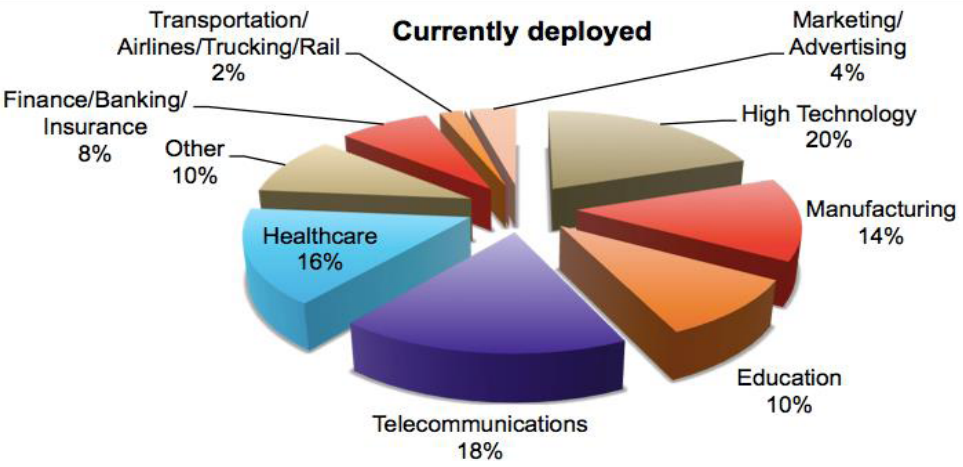


Question #3: What is your organization's plan for upgrading to the 802.11ac WLAN?

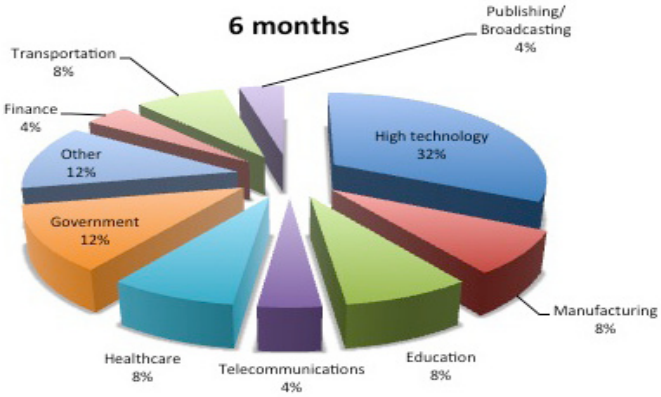
While 23% of respondents have already deployed 802.11ac, 29% indicated no plans to upgrade at this time. More than a quarter of surveys (26%) indicate plans to upgrade within the next 12 months, meaning that by the end of 2015 almost 50% will have 802.11ac deployed.



Of the 23% of respondents that indicated that 802.11ac was currently deployed, the largest industry sectors included high technology (20%), telecommunications (18%), healthcare (%16), manufacturing (14%), and education (10%).

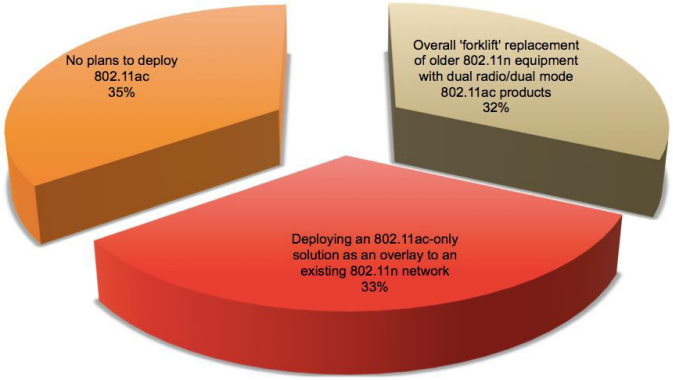


Of respondents who indicate a plan to deploy 802.11ac within 6 months the largest group (32%) is the high technology vertical. The second largest sector is government (12%). The next largest sector is split between education (8%), healthcare (8%), transportation (8%) and manufacturing (8%).



Question #4: How do you plan to deploy 802.11ac and provide continued support of 2.4GHz devices?

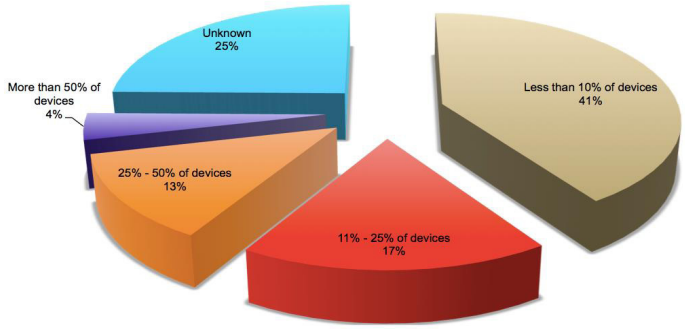
Survey respondents were almost equally divided among their deployment plans for 802.11ac. 33% plan to deploy an 802.11ac-only solution as an overlay to an existing 802.11n network while 32% are opting for an overall 'forklift' replacement of older 802.11n equipment with dual radio/dual mode 802.11ac products. The remaining 33% have no plans to deploy 802.11ac



Of the 33% of survey respondents that are deploying an 802.11ac-only solution as an overlay to an existing 802.11n network, the following industries sectors led the list: high technology (17%), education (13%), telecommunications (11%) and Government. Of the 32% of respondents that are deploying an overall 'forklift' replacement of older 802.11n equipment with dual radio/ dual mode 802.11ac products, the manufacturing industry led the pack (20%) while high technology (18%), telecommunications (13%) and education (13%) also represented well.

Question #5: What percentage of your current client devices support 802.11ac?

The key takeaway from this question is that for a majority of respondents (41%), less than 10% of the client devices within their organization support the new 802.11ac standard. Also, of interest, one quarter of responses indicate that they simply don't know. Only 4% indicated that more than half of their organization's client devices support 802.11ac.



Conclusion

In the year since 802.11ac was officially deployed, there has been a large amount of discussion about its capabilities and its effect on networking at the enterprise level. Simultaneously, more and more organizations have been relaxing BYOD policies and allowing countless employee-owned devices (some capable of handling 802.11ac) to access their corporate networks.

This survey confirms that while 802.11ac adoption is off to a strong start, there is much work to be done when it comes to client devices that support 802.11ac. WLANs are only as fast as their clients, so in order to reap the full benefits of the 802.11ac network a critical mass of 802.11ac clients is necessary. Until then, slower clients running on the older 802.11n standard will reduce the efficiencies gained by switching to 802.11ac.

It also appears that the majority of those already using 802.11ac come from industries that use networking technology more frequently (high tech, telecommunications, and education) or depend on fast networks to complete automated tasks (manufacturing, healthcare). Although the number of 802.11ac client devices is still small, this number is growing rapidly, with most new cell phones, tablets, and laptops supporting 802.11ac. When this question is asked again, we believe the number of 802.11ac clients will be approaching critical mass, and organizations will be very happy that they upgraded their wireless infrastructure to 802.11ac.