

A current wireless networking trend

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Wireless Networking Technology: Wi-Fi (Section) Due) Computer networking technology has undergone a lot of revolutions and developments concerning the media of transfer of information and data from wired LANs to wireless technologies for local area networks within an enterprise as well as organizations. Wireless technology tends to improve the short comings of wired networks such as security, coverage and installation costs. Wireless networking technology is subjective to improvements in order to meet the ever changing and ever growing demands of enterprises and organizations. The paper analyses Wi-Fi CERTIFIED as the latest in wireless networking technology suitable for small size enterprise presenting its advantages and weaknesses as well as its contribution to the wireless security.

Introduction

Wi-Fi CERTIFIED addresses the significant requirements of an enterprise that the previous wireless technologies did not cater for. Voice over-Wi-Fi, for instance, is a valuable and fundamental enterprise application. (Bertrand, 2012) Wi-Fi CERTIFIED as a wireless networking technology supports data and voice simultaneously as well as a more comprehensive coverage throughout the enterprise. The adoption of Wi-Fi CERTIFIED by an enterprise will ensure a high and unpredictable user density as compared to the previous low scale Wi-Fi technologies which are basically data oriented and support low user densities.

As companies expand their wireless networks and embrace voice applications, the need for a more advanced Wi-Fi technology such as Wi-Fi CERTIFIED becomes a fundamental priority in order to keep up with the competition given its advantages over the previous wireless networking

technologies. (Bertrand, 2012)

Wi-Fi CERTIFIED eliminates the limited coverage presented by the previous wireless networking technology. The wide coverage presented by Wi-Fi CERTIFIED is sufficient for continuous connectivity required by the voice applications hence seamless mobility which allows users staying connected without the need of disconnection even when they are on the move. (Gast, 2005)

In addition to improved coverage and capacity as discussed, Wi-Fi CERTIFIED also enables voice support that improves the quality of service, an enterprise requirement neglected by the previous Wi-Fi technologies. Wi-Fi CERTIFIED has the ability to distinguish between data traffic and voice traffic. It does this by not prioritizing voice packets over data packets, but equally transmitting the two packets at the same time ensuring that voice clients receive their medium when required. (Gast, 2005)

Furthermore, there is an improved throughput (real world performance for application level data transmission) with the adoption of Wi-Fi CERTIFIED, which reduces overhead and improve transmission efficiency, by enterprises in addition to range, security and reliability. Wi-Fi CERTIFIED enables the use of wider channels as well as several other techniques which ensures fast data rates. (Bertrand, 2012)

Just like any other technology, Wi-Fi CERTIFIED has its drawbacks despite its rapid acceptance. One major disadvantage of this technology is that one has to be within the range of the access point or hot spot for better service, unlike wide area mobile broadband.

Conclusion

Wireless networking technology is known to be insecure with a lot of security risks involved. Wi-Fi CERTIFIED uses Wi-Fi Protected Access II (WPA2) for encryption, as compared to WEP encryption used by the previous Wi-Fi technologies. WPA2 as a security protocol addresses the loop holes present in WEP such as too short keys and easily spoofed authentication keys. This makes Wi-Fi CERTIFIED more secure as compared to previous Wi-Fi technologies.

References

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