




Wi-Fi Alliance 


Wi-Fi is  
**everywhere!**

**Introducing WPA2™  
and WMM™**

Media Briefing  
September 1<sup>st</sup>, 2004

 **▶ Agenda**

- Government and Enterprise grade security is here today: Products Wi-Fi CERTIFIED™ for WPA2™ are now available
- Wi-Fi CERTIFIED for WMM™ (QoS) will enable a new class of CE products
- Wi-Fi certification is now more important than ever to consumers and enterprises

Wi-Fi Alliance, 9/01/04 



2



Wi-Fi Alliance 

Wi-Fi is  
**everywhere!**

**Introducing WPA2™**

 **WPA2™** 

- Security requirements are not stationary
- WPA2 (Wi-Fi Protected Access 2™) puts the industry two generations beyond WEP
- WPA2 is based on the final IEEE 802.11i amendment to the 802.11 standard
- WPA2 provides government grade security by implementing the National Institute of Standards and Technology (NIST) FIPS 140-2 compliant AES encryption algorithm
- Network administrators are assured that only authorized users can access the network
- The first round of products have passed testing for Wi-Fi CERTIFIED™ for WPA2 – September 1<sup>st</sup>

4

## ▶ More on WPA™ and WPA2™



- Personal and Enterprise WPA2 versions
- WPA2 is backwards compatible with WPA
- The primary difference between WPA and WPA2 is the type of encryption used – RC4 and AES respectively
- WPA remains a strong, viable security solution for home and enterprise Wi-Fi® users – 600+ products Wi-Fi CERTIFIED™ for WPA
- Finally, WPA and WPA2 are more secure than WEP and should be considered when needed

A promotional graphic for the Wi-Fi Alliance. On the left, a blurred image of a woman in a green shirt sitting at a desk with a laptop and a Wi-Fi router. On the right, a dark blue background with white text. The text includes the Wi-Fi Alliance logo at the top right, the slogan "Wi-Fi is everywhere!" in a large font, and the announcement "Introducing WMM™" followed by "Quality of Service (QoS) for Consumer Electronic Products Using Wi-Fi®" in a smaller font.

Wi-Fi Alliance ▶

Wi-Fi is  
**everywhere!**

**Introducing WMM™**

Quality of Service (QoS) for  
Consumer Electronic Products  
Using Wi-Fi®

## ▶ Wi-Fi® Enters the Mainstream



- It's not just for laptops anymore
- Wi-Fi is moving quickly into consumer electronics products, phones, etc.
- Demand for CE connectivity is expected to increase by 5x by 2007 to \$150 MM (Parks Associates)



Wi-Fi Alliance, 6/28/04

7

## ▶ Introducing WMM™



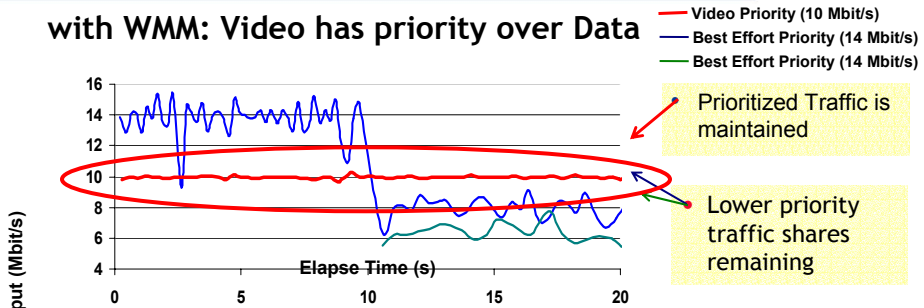
- Wi-Fi Multimedia
- Improves user experience for audio, video and voice applications over a Wi-Fi® network.
- Prioritizes streams of “content” and optimizes the way the network allocates bandwidth among competing applications
- Wi-Fi CERTIFIED™ for WMM is based upon IEEE 802.11e standard
- First products Wi-Fi CERTIFIED for WMM to be announced in September

8

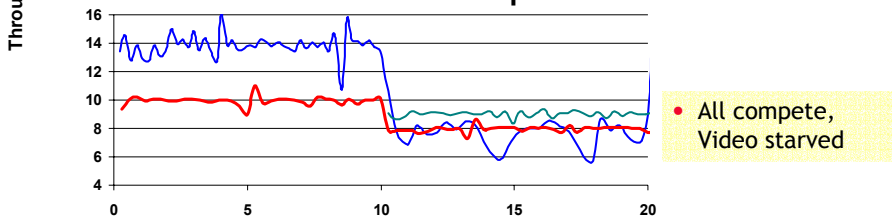
# ▶ WMM™ In Action



## with WMM: Video has priority over Data



## no WMM: new data streams impacts video



Wi-Fi Alliance ▶

Wi-Fi is everywhere!

Wi-Fi® Certification

## Updated Wi-Fi® Interoperability Certificate



Wi-Fi® Interoperability Certificate Certification ID: W000000

This certificate represents the capabilities and features that have passed the interoperability testing governed by the Wi-Fi Alliance. Detailed descriptions of these features can be found at [www.wi-fi.org/certificate](http://www.wi-fi.org/certificate)

**Wi-Fi CERTIFIED a b g**

Certification Date: June 28, 2004  
Category: Name of Category  
Company: Name of Company  
Product: Name of Product  
Model/SKU #: #####

This product has passed Wi-Fi certification testing for the following standards:

IEEE Standard	Security	Multimedia
802.11a 802.11b 802.11g	WPA™ - Personal WPA2™ - Enterprise WPA2™ - Personal WPA2™ - Enterprise	WMM™

For more information: [www.wi-fi.org/certificate](http://www.wi-fi.org/certificate)

11

## Wi-Fi® Certification is More Important Than Ever



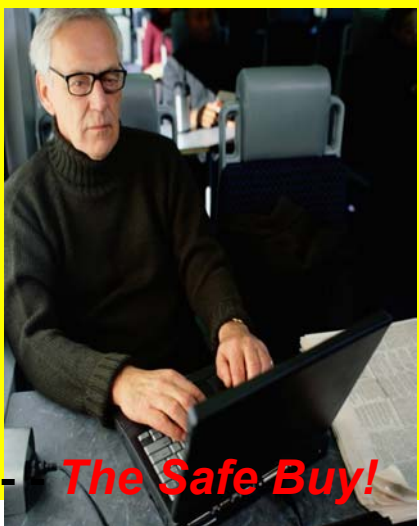
- **Product complexity is increasing** - The number of standards is increasing – 802.11b, 802.11g, dual band products, WPA2™ Security, WMM™ with more standards to come
- **More chip sets** and MAC implementations increase probability for interoperability failure
- **Different brands** used at many different locations - home, work and public access venues – increases interoperability challenge

12

## ▶ What the Customer Sees When a Product is Not Wi-Fi CERTIFIED™



- Products won't work together - even from the same vendor!
- Products work together intermittently
- Significantly reduced performance
- Dropped connections
- 25% of products fail initial certification tests



**Wi-Fi CERTIFIED™**

***The Safe Buy!***

Wi-Fi Alliance, 8/18/04

13

## ▶ Summary – Key Takeaways



- WPA2™ provides improved encryption with AES and a high level of assurance that only authorized users can access the network
- WPA2 able to meet government and enterprise security requirements
- WPA™ is still a very secure solution
- First WPA2 products announced on September 1<sup>st</sup>
- WMM™ enables a new class of consumer electronics products based on Wi-Fi®
- WMM provides users with enhanced multimedia capabilities based upon IEEE 802.11e standard
- First WMM products to be announced in September
- **Wi-Fi certification is more important than ever!**

14

## ▶ Additional Resources



- Wi-Fi Alliance Web site: [www.wi-fi.org](http://www.wi-fi.org)
- WPA2™ Information (includes white papers, press releases, Q&A, presentations and more):  
[www.wi-fi.org/OpenSection/protected\\_access.asp](http://www.wi-fi.org/OpenSection/protected_access.asp)
- Wi-Fi CERTIFIED™ Products:  
[www.wi-fi.org/certified\\_products](http://www.wi-fi.org/certified_products)