



Wi-Fi Alliance 

Wi-Fi is
everywhere!

**Wi-Fi Alliance
Announcing Extended
EAP Certification
Program
April 2005**

Frank D. Hanzlik
Managing Director



▶ WFA Leadership in Wireless Security



Wi-Fi Security Timeline

April 2003: Wi-Fi Alliance launches Wi-Fi Protected Access™ (WPA), based on a draft of 802.11i spec

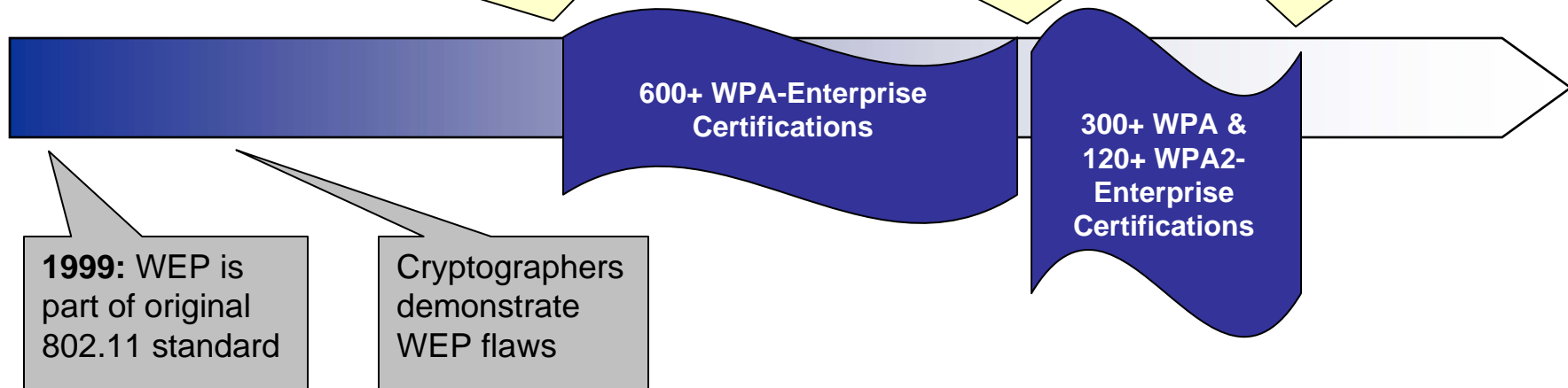
- Addresses issues of WEP, including enterprise-grade authentication, automatic key distribution and re-keying
- Remains a strong security solution today

September 2004: WFA launches WPA2 program

- Wi-Fi CERTIFIED™ version of the full 802.11i standard
- Adds AES-based encryption

April 2005: WFA announces Extended EAP program for WPA- and WPA2-Enterprise

- Three generations ahead of problems identified with WEP
- *Certification available 4/15/05*



1999: WEP is part of original 802.11 standard

Cryptographers demonstrate WEP flaws

600+ WPA-Enterprise Certifications

300+ WPA & 120+ WPA2-Enterprise Certifications



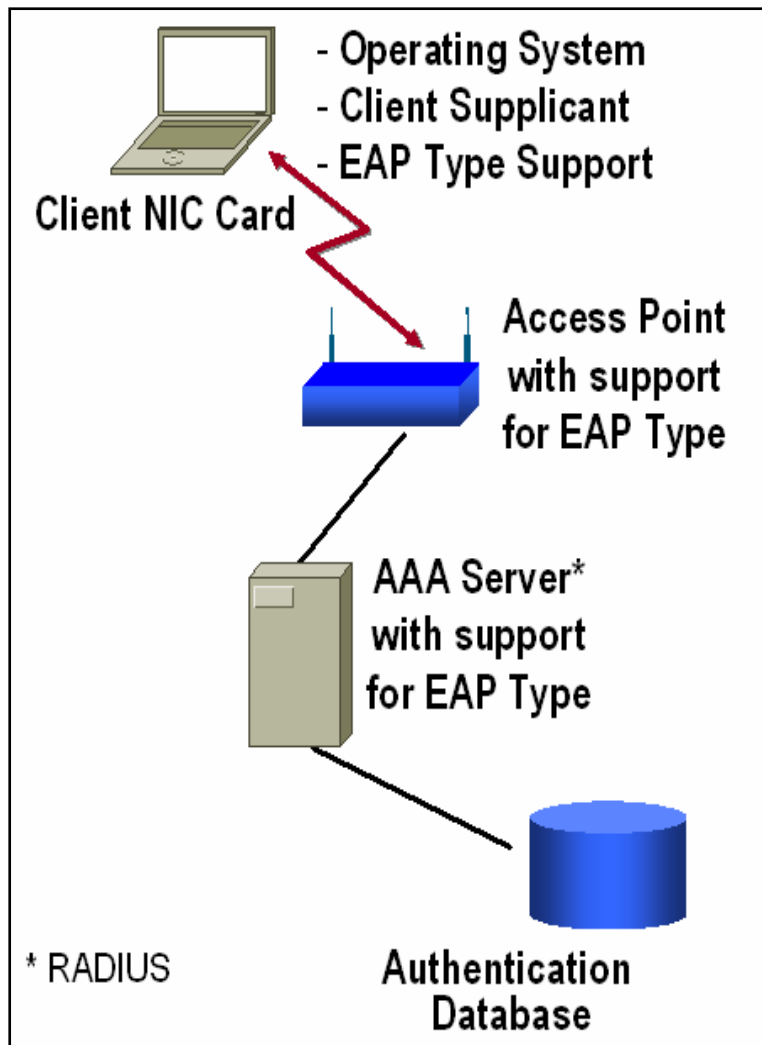
Expanded testing program for Wi-Fi Protected Access™



- WPA- and WPA2-Enterprise certification program expansion to include 4 additional widely-deployed EAP types, new supplicants and servers
- This strengthens the interoperability value of Wi-Fi CERTIFIED™ devices that go into larger managed networks, e.g., enterprise, government, and public access
- For IT managers, this means easier implementation and greater flexibility in choosing standards-based Wi-Fi network security solutions to support the enterprise's security infrastructure

EAP: Extensible Authentication Protocol, an authentication mechanism used to validate the identity of network devices

▶ Device interoperability is a critical part of network authentication



- Three main components to authentication in an enterprise deployment for either WPA or WPA2:
 - Client devices that are WPA- or WPA2-Enterprise Wi-Fi CERTIFIED
 - Access points that are WPA- or WPA2-Enterprise Wi-Fi CERTIFIED
 - Authentication server

▶ As Wi-Fi authentication matures, the WPA programs respond

- Increasing the number of EAP-types addresses evolving needs of enterprise and government IT managers for interoperability of diverse network and technology platforms
- Now 5 Extensible Authentication Protocol (EAP) types are included:
 - EAP-TLS (previously tested)
 - EAP-TTLS/MSCHAPv2
 - PEAPv0/EAP-MSCHAPv2
 - PEAPv1/EAP-GTC
 - EAP-SIM





Expanded test bed broadens interoperability verification



- Interoperability verification against a larger set of supplicants and servers found in managed network deployments
- Increasing the number of member products in the Wi-Fi test bed improves the robustness of the certification program
- Test bed now includes a total of four authentication servers and four supplicants

WFA Member Company	Supplicant	Server
Microsoft	Windows XP	.NET 2003
Funk Software	Funk Odyssey Client / Server – Version 2.01	
Devicescape (new)	Wi-Fi WPA2 Test Bed Supplicant for Windows	Wi-Fi WPA2 Test Bed RADIUS Server for Linux
Meetinghouse Data Communications (new)	MDC Client for Windows XP/2000	MDC AEGIS Server for Windows XP/2000



Wi-Fi Alliance: Enabling Wireless LAN Proliferation



- Wi-Fi CERTIFIED™
 - Based on IEEE 802.11 standards
 - Brings interoperability for enhanced user experience
 - Protects investments and enables industry growth
- 2,000+ products have been Wi-Fi CERTIFIED in 5 years
 - 70% increase in certified products in '03-'04
 - Twelve independent certification labs in six countries
 - 200+ member companies (www.wi-fi.org)



▶ Sample interoperability certificate



Wi-Fi® Interoperability Certificate **Certification ID: W003542**

 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

Certification Date: April 8, 2005
Category: Access Point
Company: WFA
Product: EAP AP Cat 3

This product has the following Wi-Fi Certifications:

IEEE Standard	Security	Multimedia
802.11a 802.11b 802.11g 802.11h 802.11d	WPA™ - Enterprise, Personal WPA2™ - Enterprise, Personal EAP Type(s) EAP-TLS EAP-TTLS/MSCHAPv2 PEAPv0/EAP-MSCHAPv2 PEAPv1/EAP-GTC EAP-SIM	WMM™

For more information: www.wi-fi.org/certified_products

▶ In Summary



- Wi-Fi Protected Access™ means secure, standards-based, interoperable networking
- The Extended EAP program is a response to the current authentication landscape and offers greater interoperability and more vendor choice
 - *Certifications begin April 15*
- The Wi-Fi Alliance will continue to expand certification programs to meet compelling security needs

