Cisco Compatible Extension Overview
Cisco Compatible Extension: overview

Strategy: Enable partners to provide WLAN devices and adapters:

- In all relevant form factors and on all critical operating systems
- With support for latest standards and Cisco innovations
- Tested as interoperable with Cisco Unified Wireless Network and associated Mobility Services such as voice or location for reliable business applications

Participation: Broad

- Over 120 vendor participants, including top five laptop vendors and 33 WLAN adapter and top silicon vendors
Cisco Compatible Extension: goals

Drive wireless LAN (WLAN) infrastructure adoption by:

- Defining and driving WLAN client innovations as required by Enterprise customers
- Enabling WLAN client interoperability with Cisco Unified Wireless Network ensuring a positive customer experience
- Supporting through a testing and branding program

Enable customers to identify client devices that:

- Support innovations that address enterprise customer requirements ahead of standards
- Are tested to fully leverage Cisco Unified Wireless Network advanced capabilities
Cisco Compatible Extension: an open program to enhance Wi-Fi capabilities

Launched in 2002, the CCX program is a license free technology initiative opened to all silicon and mobile device manufacturers.

**Goal:**
- accelerate technology while actively working with standard bodies
- enhance end to end security
- enhance IT administration and end user experience, across mobile device types
- enhance mobility services for reliable business applications

**Impact to date:**
- Over 120 vendors participants
- 70% of all features developed in the program have since achieved standard
- 90% of WiFi silicon is CCX certified.
Cisco Compatible Extension accelerating and enriching standards

Example: Security

- WPA support is prerequisite for Wi-Fi compliance
- WPA2 support is optional until March 2006
- Cisco Compatible Extensions makes WPA2 mandatory (for laptops)
## CCX key features and Evolution

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<tr>
<td>Management Frame Protection, Client Reporting</td>
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<td>Call admission control, UPSD, Voice metrics, MBSSIDs, Location, Link tests, NAC</td>
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<td>WME, Proxy ARP, EAP-FAST, &amp; WPA2, Single Sing-on</td>
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<td>AP assisted roam, CCKM Radio measurements, Transmit power control</td>
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<td>LEAP, WPA, 802.1x &amp; VLANs per AP, TKIP, WIFI</td>
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- **Client Troubleshooting “Diagnostic Channel”**
- **Client Reporting**
- **Roaming & Real-time Diagnostics**
- **Management Frame Protection**
- **Location Services (Optional)**
- **Expedited Bandwidth Request (Optional)**
- **Interpretation of status and result codes**
- **Performance**
- **Cisco Infrastructure IE**
- **Compliance with CCX v1-4**
Accelerating technology, across mobile device types

**Location**
- ID, telemetry

**Voice**
- Call admission control, voice metrics, CCKM

**WMM Power Save**

**Mobile Device Management**
- Diagnostic/troubleshooting of mobile device, link test, client reporting

**Enhanced Security**
- EAP Fast, NAC, Management Frame Protection

**Enhanced RF performances**
- RF Monitoring, Fast roaming

**WPA WPA2**
- EAP-TLS, TTLS, SIM

**802.11**
How Cisco Compatible Extension works

- **Laptops**
  - **Silicon Provider**
    - Writes driver and integrates supplicants
  - **Adapter reference design**
    - Third party test facility executes test plan
  - **Cisco Compatible Extensions reference design**
    - Laptop OEM
      - Puts reference design in device
      - Device
      - Third party test facility executes test plan
      - Passed Device

- **Cisco Compatible Extensions specification from Cisco**
  - **Specialized Device Maker**
    - Obtains adapter, modifies driver, and integrates supplicants
    - Device
    - Third party test facility executes test plan
    - Passed device
Cisco Compatible Extension devices include

Approved Suppliers

Silicon Suppliers

www.cisco.com/go/ciscocompatible/wireless
Cisco Compatible Extension summary

- Five-year track record of coordinated WLAN innovations
- Strong global participation: 95% of world’s Wi-Fi silicon is Cisco Compatible Extensions tested
- Offers customers peace of mind and first-to-market system features in a broad range of areas, including security, mobility, performance, QoS, and management

http://www.cisco.com/go/ciscocompatible/wireless
Check the Logo

Check if your Mobile Device vendor is Cisco CCX certified

www.cisco.com/go/ciscocompatible/wireless