The Avaya WLAN Access Point 9122 is a high performance 802.11n (2x2) Access Point (AP). It is part of the next generation Avaya wireless portfolio that delivers wired-like performance and predictability. It supports application QoS enforcement within the AP to provide a high quality user experience and ensure that business critical applications are not impacted by personal applications. Additionally, Avaya unified access offers automated provisioning of APs and end clients/users while extending Avaya's Fabric intelligence all the way to the APs.



# Avaya WLAN 9122 Access Point

(Regulatory Model WAP9102)

### Overview

The WLAN Access Point 9122 is an 802.11n (software upgradable to 802.11ac), Dual Radio, 2x2 Multiple Input / Multiple Output (MIMO) access point. With a power



Output (MIMO) access point. With a powerful integrated controller, application-level intelligence, automated provisioning and cloud management, the WLAN AP 9122 is the ideal solution for providing robust wireless connectivity for enterprise environments where users predominantly connect to wireless using tablets and smart phones which utilize 1x1 and 2x2 antenna technologies.

The Access Points are managed centrally by the Avaya WLAN Orchestration System.

# At A Glance

- Dual radio 2x2 802.11n AP with 600 Mbps total Wi-Fi bandwidth
- Two software programmable radios for mixed 2.4/5GHz or dual concurrent 5GHz operation
- Supports up to 240 users with 2 1Gbps uplinks
- Integrated Controller
- On-premise or cloud-based (future) management

## **Key Benefits**

#### Application Control

Firewall, apply QoS, and manage 1300+ individual or groups of applications under 15 categories using Layer 7 Deep Packet Inspection (DPI) and other contextual application detection techniques.

### 5GHz Optimization

With its 2.4GHz and 5GHz radios (both software programmable to either band), the WLAN AP 9122 will help you easily make the transition to a 5GHz centric network, when you are ready.

#### **Client Optimization**

The Avaya WLAN AP 9122 identifies station capabilities based on fingerprinting and automatically groups devices by performance. It works on all modes (802.11a/b/g/n) and bands (2.4GHz and 5GHz). This results in improved performance for every WLAN client and optimized use of wireless radio resources. WLAN AP 9122 considers factors including wireless band, number of spatial streams, 802.11n capability, and signal to noise ratio.

#### Bring Your Own Device (BYOD)

Integration with Avaya Identity Engines allows guests and employees alike to use personal wireless devices while the WLAN AP 9122 enforces appropriate access policies.

#### Bonjour Director Support

Extend Apple Bonjour protocols across Layer 3 boundaries for simple setup and configuration of commonly used shared Apple services such as Airplay and Airprint.

#### Automated Provisioning

Avaya's holistic Unified Access solution provides automated identification and provisioning of APs by extending its innovative Fabric technology to the wireless edge.

### **Configuration Specifications**

	WLAN 9122
Chassis Size	7.7"
Total Radios	2
Radio Type	Two Software Programmable Radios (2.4GHz or 5GHz)
Maximum Wi-Fi Bandwidth	600Mbps (With 802.11ac license the max bandwidth is 1.7Gbps)
Number of Integrated Antennas	4 integrated antennas
Max Wi-Fi Backhaul	867Mbps
Gigabit Ethernet Uplink Ports	2 ports supports 4 different operating modes: • IEEE 802.3ad link aggregation • Daisy chaining (bridge) • Port mirroring (traffic duplication) • Client connectivity (phone, printer etc.)
Maximum Associated Users	240 (120 per radio)
Maximum Associated Osers	240 (120 per raulo)



# **Technical Specifications**

FEATURE	SPECIFICATIONS			
CPU	400MHz Cavium CN6020 Pro	cessor with 2 MIPS-64 Cores		
Installed Memory	1GB			
RF Management	In-band per radio Spectrum Analysis Dynamic channel configuration Dynamic cell size configuration			
	Wired and wireless packet captures (including 802.11 headers)			
	Radio assurance for radio self test and healing			
	RF monitor			
	2.4 & 5.0GHz Honeypot Control – Increase available 2.4 and 5GHz wireless device density through management of spurious association traffic			
	Ultra Low Power Mode – Maximize wireless channel re-use and increase wireless device density through tight power controls			
Wireless Protocols	IEEE 802.11a, 802.11b, 802.11d,	802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11k, 802.11n		
Wired Protocols	IEEE 802.3 10-BASE-T, IEEE 802.3u 100BASE-TX, 1000BASE-T, IEEE 802.3ab 1000BASE-T			
	IEEE 802.1Q - VLAN Tagging			
	IEEE 802.1D - Spanning Tree			
	IEEE 802.1p - Layer 2 Traffic Prioritization			
	IPv6 Control - Increase wireless device density through control of unnecessary IPv6 traffic on IPv4-only networks			
	IEEE 802.3ad – Link Aggregation			
FEATURE	SPECIFICATIONS			
RFC Support	RFC 768 UDP	RFC 826 ARP		
	RFC 791 IP	RFC 1122 Requirements for internet hosts – communication layers		
	RFC 2460 IPV6	RFC 1542 BOOTP		
	(Bridging only)	RFC 2131 DHCP		
	RFC 792 ICMP			
	RFC 793 TCP			
Security	WPA	RFC 3280 Internet X.509 PKI certificate and CRL profile		
	IEEE 802.11i WPA2, RSN	RFC 4347 Datagram transport layer security		
	RFC 1321 MD5 Message- digest algorithm	RFC 4346 TLS protocol version 1.1		
	RFC 2246 TLS protocol version 1.0			
Encryption Types	Open, WEP, TKIP-MIC: RC4 40, 104 and 128-bit SSL v3.0 and TLS v1.0: RC4 128-bit and RDA 1024 and 2048-bit			

## Avaya WLAN 9122 Receive Sensitivity

RATE	2.4GHz RX SENSITIVITY (dBm)	5.0GHz RX SENSITIVITY (dBm)	RATE	2.4GHz RX SENSITIVITY (dBm)	5.0GHz RX SENSITIVITY (dBm)
802.11a			MCS 12	-83	-81
6Mbps		-92	MCS 13	-79	-77
9Mbps		-92	MCS 14	-78	-76
12Mbps		-91	MCS 15	-76	-75
18Mbps		-90	MCS 16	-92	-93
24Mbps		-87	MCS 17	-91	-90
36Mbps		-83	MCS 18	-89	-88
48Mbps		-79	MCS 19	-86	-85
54Mbps		-78	MCS 20	-82	-81
802.11b			MCS 21	-78	-77
1Mbps	-91		MCS 22	-77	-76
2Mbps	-91		MCS 23	-76	-75
5.5Mbps	-93		802.11n HT40		
11Mbps	-93		MCS 0	-93	-91
802.11g			MCS 1	-92	-88
6Mbps	-93		MCS 2	-90	-86
9Mbps	-93		MCS 3	-87	-83
12Mbps	-92		MCS 4	-84	-79
18Mbps	-91		MCS 5	-80	-75
24Mbps	-90		MCS 6	-78	-74
36Mbps	-88		MCS 7	-77	-73
48Mbps	-83		MCS 8	-92	-90
54Mbps	-80		MCS 9	-89	-87
802.11n HT20			MCS 10	-87	-85
MCS 0	-93	-93	MCS 11	-84	-82
MCS 1	-93	-90	MCS 12	-81	-78
MCS 2	-92	-88	MCS 13	-77	-74
MCS 3	-88	-85	MCS 14	-75	-73
MCS 4	-86	-81	MCS 15	-74	-72
MCS 5	-82	-77	MCS 16	-91	-90
MCS 6	-80	-76	MCS 17	-88	-87
MCS 7	-79	-75	MCS 18	-86	-85
MCS 8	-95	-93	MCS 19	-83	-82
MCS 9	-92	-90	MCS 20	-79	-78
MCS 10	-89	-88	MCS 21	-75	-74
MCS 11	-87	-85	MCS 22	-74	-73
	1	J	MCS 23	-73	-72

# Avaya WLAN 9122 Specifications

FEATURE	SPECIFICATIONS			
Authentication	802.1X Extensible Authentication Protocol	RFC 5281 EAP-TTLS		
	RFC 2548 Microsoft vendor-specific RADIUS	RFC 2284 EAP-GTC		
	attributes	RFC 4186 EAP-SIM		
	RFC 2716 PPP EAP-TLS	RFC 4187 EAP-AKA		
	RFC 2865 RADIUS Authentication	RFC 3748 LEAP Pass through		
	RFC 2866 RADIUS Accounting	RFC 3748 Extensible Authentication Protocol		
	RFC 2867 Tunnel Accounting	Web Page Authentication		
	RFC 2869 RADIUS Extensions	• WPR, Landing Page, Redirect		
	RFC 3576 Dynamic Authorizations extensions to RADIUS	• Support for Internal WPR, Landing Page and Authentication		
	RFC 3579 RADIUS Support for EAP	• Support for External WPR, Landing Page and		
	RFC 3748 EAP-PEAP	Authentication		
	RFC 5216 EAP-TLS			
Regulatory Compliance	UL 60950-1, CAN/CSA - C22.2 No. 60950-1, IEC 60950-1, EN 60950-1	EN 301 489-1/17		
	FCC Part 15, Subpart B, ICES 003, EN 55022/24	R & TTE Directive 1999/5/EC		
	Class B	EN 50385		
	FCC part 15C, FCC Part 15E, RSS-210	EN 60601-1-2 EN 301 893 V1.6.1		
	EN 300 328, EN 301 893	EN SUI 895 VI.6.1		
Physical Specifications	Dimensions (WxDxH): 1.96 x 7.70 x 7.70	Weight: 1.6lbs		
Environmental Specifications	Operating Temperature: 0-40C, 0-90% humidity, non-condensing, altitude 0-2000m			
	Non-Operating Temperature: 0-60C, 0-95% humidity, non-condensing			
Channel Support 2.4GHz (Exact channels available will be based on country code selected)	1 2 3 4 5 6 7 8 9 10 11 12 13 14			
Channel Support 5GHz	UNII-1 - Non DFS Channels	UNII-2C - DFS Channels		
(Exact channels available will be based on country code selected)	36 40 44 48	100 104 108 112 116 120 124 128 132 136 140		
	UNII-2A - DFS Channels	UNII-3 – Non DFS Channels		
	52 56 60 64	149 153 157 161 165		
Management Interfaces	Command Line Interface (CLI); Web Interface (HTTP and HTTPS)	WLAN Orchestration System (WOS)		
Management Protocols and Standards	SNMP v1	RFC 2674 Definitions of Managed Objects for		
	SNMPv2c as per RFCs 1901, 2580	Bridges with Traffic Classes, Multicast Filtering and Virtual LAN Extensions		
	SNMPv3 as per RFC 3410-3415	RFC 2819 Remote Network Monitoring		
	RFC 854 Telnet	Management Information Base		
	RFC 1155 Management Information for TCP/IP Based Internets	RFC 2863 The Interface Group MIB		
	RFC 1156 MIB RFC 1157 SNMP	RFC 3164 BSD Syslog Protocol		
	RFC 1212 Concise MIB Definitions	RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management		
	RFC 1213 SNMP MIB II	Protocol (SNMPv3)		
	RFC 1215 A Convention for Defining Traps for use with the SNMP	RFC 3416 Version 2 of the Protocol Operations for the Simple Network Management Protocol (SNMP)		
	RFC 1350 TFTP	RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP)		
	RFC 1643 Ethernet MIB	RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)		
	RFC 2030 Simple Network Time Protocol SNTP	RFC 3584 Coexistence between Version 1, Version		
	RFC 2578 Structure of Management Information Version 2 (SMIv2)	2, and Version 3 of the Internet-standard Network Management Framework		
	RFC 2579 Textual Conventions for SMIv2 RFC 2616 HTTP 1.1	RFC 3636 Definitions of Managed Objects for IEEE MIBs		
	RFC 2665 Definitions of Managed Objects for the Ethernet Like Interface Types	Integration with Splunk for accurate search and analysis of intra-organizational IT events		

### About Avaya

Avaya is a global provider of business collaboration and communications solutions, providing unified communications, contact centers, networking and related services to companies of all sizes around the world. For more information please visit **www.avaya.com**.



© 2014 Avaya Inc. All Rights Reserved.

Avaya and the Avaya logo are trademarks of Avaya Inc. and are registered in the United States and other countries. All other trademarks identified by ®, TM, or SM are registered marks, trademarks, and service marks, respectively, of Avaya Inc. 10/14 • DN7517-05

