



Juniper Aerohive Interoperability Testing

Juniper Networks and Aerohive deliver a simple, secure, and high performance wired and wireless solution. Aerohive cloud Wi-Fi solutions, available with an on premises deployment option, coupled with Juniper's high performance switches and routers help enterprises simplify wireless network planning, management, and deployment.

Interoperability Testing

Juniper and Aerohive have jointly validated the wired and wireless solution. To ensure compatibility and interoperability the following features/technologies have been identified for testing and validation:

- Power over Ethernet
- LLDP support
- Power negotiation using LLDP
- Link Aggregation with AP (dual 1-Gig ports)
- VLAN trunking
- Bonjour Gateway

Configuration

Interoperability testing was completed by Juniper and Aerohive Networks using the following wired and wireless equipment:

Juniper EX Series EX4300-24P JUNOS EX Software Suite [13.2X50-D15.3]	Aerohive Access Points: <ul style="list-style-type: none">• AP121 - 2x2:2 MIMO 802.11n Access Point• AP141 - 2x2:2 MIMO 802.11n Access Point• AP130 - 2x2:2 MIMO 802.11ac Access Point• AP230 - 3x3:3 MIMO 802.11ac Access Point• AP330/350 - 3x3:3 MIMO 802.11n Access Point• AP370/390 - 3x3:3 MIMO 802.11ac Access Point HiveManager VM Verion 6.6r1 VMware ESXi 5.1 Update 1
--	--

Test cases

The following tests were completed and interoperability confirmed:

Test Case 1: PoE Ensure that the AP plugged into a PoE enabled port on a Juniper switch is able to supply the required amount of power.	✓ Confirmed
Test Case 2: LLDP Most APs support LLDP; If the connected AP supports LLDP, ensure that the #show LLDP neighbors (detail) command shows the details of the connected AP on the Juniper switch command prompt.	✓ Confirmed
Test Case 3: Ensure that if the AP connected to the Juniper switch can negotiate power using LLDP, it is able to do so and the switch is responding accordingly.	✓ Confirmed
Test Case 4: Some APs support two Ethernet interfaces for link aggregation. No Juniper configuration is needed.	✓ Confirmed
Test Case 5: Some Wireless Controllers can also support LAG, ensure that LAG works in case of the connected Wireless Controller with the Juniper switch. (Aerohive is controller-less)	n/a
Test Case 6: Aerohive APs can support redundancy using two Ethernet interfaces connected to two different switches. Configure a two-switch stack, connect the AP's interfaces to two switches and ensure that if one of the switches fails or loses connectivity with the AP, the other one takes over.	✓ Confirmed
Test Case 7: Once the AP is up and running, ensure that clients can join the advertised SSID and access the network resources.	✓ Confirmed
Test Case 8: Repeat Test Case 7 with multiple clients in different VLANs based on their credentials. Example: Student and Teacher VLANs (dynamic assignment)	✓ Confirmed
Test Case 9: Bonjour gateway: Most AP's support this feature. Verify if this function works with a wireless client connecting to a wired Apple TV as well as wireless (wireless should work by default). Also, a wired client trying to use a wired Apple TV as well as a Wireless connected Apple TV.	✓ Confirmed

