

Aruba Networks Secure Mobility System

CFR Title 47 Part 2.944 Additional Information

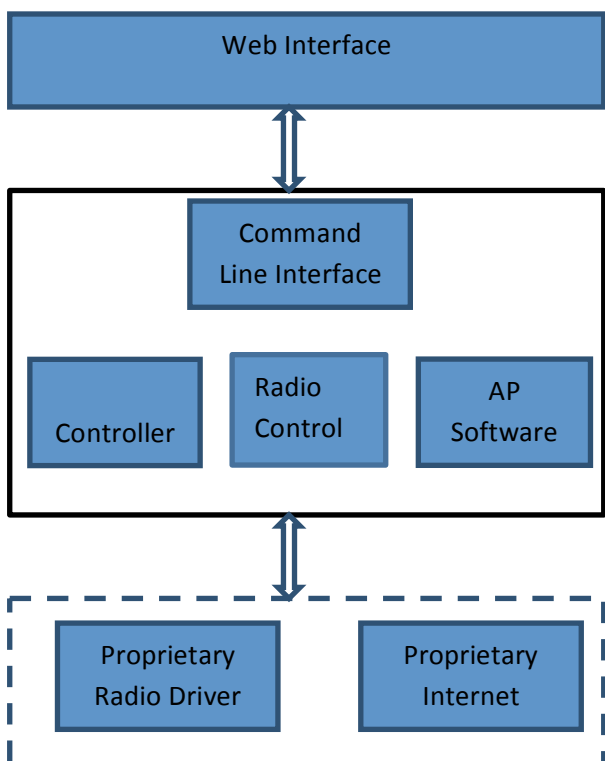
Security Description For Software Defined Radio Application

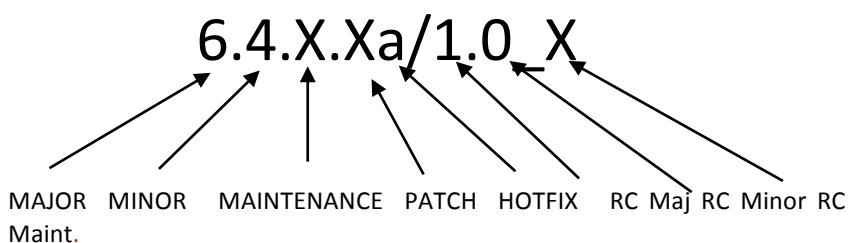
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General Description – The Aruba Networks Secure Mobility System is a master/slave Controller and Access Point (AP) architecture.

Category			ARUBA response
1.	Description Software [2.944 (c)]	1.1	The ArubaOS software is comprised of 2 parts. AOS Feature Functionality and Radio Control (RC) that provides wireless access service to standard 802.11-compliant client devices in the US regulatory domain. The hardware radio's channel and transmission power is controlled by ArubaOS Radio Control and is based on US Regulatory Domain settings as well as the software's own intelligence designed to avoid interference and optimize the limited airtime resources. Users are prevented from specifying any radio parameters that would violate the US regulatory domain.
		1.2	Transmission power and channel frequency
		1.3	 <pre> graph TD WI[Web Interface] <--> CLI[Command Line Interface] subgraph MainBox [] CLI C[Controller] RC[Radio Control] AS[AP Software] end MainBox <--> DashedBox subgraph DashedBox [] PRD[Proprietary Radio Driver] PI[Proprietary Internet] end </pre>

Category		ARUBA response	
2	Labeling	2.1	The device will have a single label
		2.2	<p>The software version can be verified via the Controller WebUI. Please refer to product specific user guide for more information.</p> <ol style="list-style-type: none"> 1. Determine the IP address of the Controller 2. Open the URL <a href="http://<Controller_ip>/">http://<Controller_ip>/ with a web browser 3. Log in the WebUI using the correct username and password 4. Click the “About” or “Maintenance” dialog within the WebUI
		2.3	<p>Only Radio Control (RC) Maintenance releases will reflect Class III permissive changes.</p> <p>ArubaOS software releases are defined as Major, Minor, Maintenance, Patch, and Hotfix , as follows:</p> <div data-bbox="591 705 1435 945" data-label="Diagram">  <p style="text-align: center;">6.4.X.Xa/1.0 X</p> <p style="text-align: center;">MAJOR MINOR MAINTENANCE PATCH HOTFIX RC Maj RC Minor RC Maint.</p> </div> <p>Figure 1: Software Release Naming Convention Example</p> <ul style="list-style-type: none"> ▪ A Major release contains significant new functionality, changes in the way configuration is performed, architectural changes, and in some cases incompatibility with previous Major releases. ▪ A Minor release contains new functionality but is built on the same architecture, uses the same configuration and operating methods, and is generally compatible with the previous Major release. ▪ A Maintenance release contains no or very limited new functionality, and consists primarily of bug fixes. Maintenance releases go through a full quality assurance process including full regression testing. ▪ A Patch release contains a small number of bug fixes or in some cases a single bug fix. Patches are issued approximately every two to four weeks, and are to be used only until the next Maintenance release is shipped. Patch releases do not go through full regression testing – only the specific bug fixes in the patch receive full testing. ▪ A Hotfix release (formerly known as an “emergency patch”) is issued by Aruba Customer Advocacy to a specific customer to solve a high-priority network problem. Hotfix releases are built on-demand and do not go through full regression testing – only the specific bug fixes in the release receive full testing. ▪ Radio Control (RC) is where the radio channel and power are

			controlled. Like the AOS maintenance release a Radio Control maintenance release will go through a full quality assurance process including full regression testing. The radio control release can only be installed by IT professionals.
Category			ARUBA response
3	Security	3.1	All hardware devices acting as a Controller sold in the US market is locked to the US regulatory domain at manufacturing time and cannot be modified by any third party through configuration changes or software upgrades. ArubaOS also does not permit the configuration of any radio parameter by the user that would violate the US regulatory domain policies.
		3.2	No third party has such ability.
		3.3	The regulatory domain information is written into each hardware device acting as a Controller at manufacturing time and is not distributed within any software updates. Therefore, no third party can modify the US regulatory domain by changing its software.
		3.4	All hardware devices acting as a Controller sold in the US market is locked to the US regulatory domain at manufacturing time and cannot be modified by any third party through configuration changes or software upgrades. ArubaOS also does not permit the configuration of any radio parameter by the user that would violate the US regulatory domain policies.
		3.5	The ArubaOS software does not differentiate based on regulatory domain, as the US country code is locked on each devices acting as a Controller sold in the US market.
		3.6	No third party has such ability.
Category			ARUBA response
4	Unauthorized changes (hack) to the software (Section 2.944)	4.1	ArubaOS does not contain any open source code that controls RF properties. The RF control logic is fully proprietary and the ArubaOS code is digitally signed using a X.509 certificate, which prevents it from being tampered or modified by third-party in the field.

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