



WIRELESS LAN ASSOCIATION

WLA STANDARDS COMMITTEE

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Wireless LAN Design Framework: Deploy

Implement the WLAN design

The following outline is a framework to assist in the “deploy” stage of creating and implementing a WLAN design. Please note that, because of the cyclical nature of this process, and considering the fact that not every project is a “greenfield” design, the WLAN professional may need to begin their process at, for example, the “diagnose” stage.

Not all items in this document will apply in every situation. The WLAN professional may need to adapt some of the items to meet the needs of their individual client, and/or the order in which select relevant tasks will be performed. However, the WLA believes that using the following framework will ensure accuracy, consistency, and efficiency, thus bringing the work of any WLAN industry professional who uses it, to a higher level.

The associated publication, which will explore and expand each of the points in this document will be published shortly.

1. Deployment Documentation

Throughout the deployment process, the documentation must be continuously updated and can include:

- 1.1. Document cabling
- 1.2. Document APs and antennas
- 1.3. Serial numbers / MAC address
- 1.4. Location / maps
- 1.5. Cable / switch port
- 1.6. Document WLAN system installation and configuration
- 1.7. Infrastructure equipment
- 1.8. Licensing
- 1.9. Configuration backup

2. Deployment Preparation

2.1. Site introduction / orientation

3. Software

This may include some, or all, of the following:

3.1. Software Preparation or Staging

3.1.1. AP

3.1.2. Channel / power / RRM as per design documentation

3.1.3. Controllers

3.1.4. Network devices

3.1.5. Implementing features (redundancy, proprietary features)

3.1.6. Implementing supporting services (DHCP, DNS, WNMS)

3.2. Software Validation

Based on the test plans defined in the design book:

3.2.1. Wireless infrastructure configuration

3.2.2. WLAN control and management appliances

3.2.3. Special features (prop, redundancy)

3.2.4. Network supporting services (DHCP, DNS, AAA, CP, web cache / filter)

3.2.5. Network configuration

4. Hardware

4.1. Physical Installation

This may include some or all of the following:

4.1.1. Cabling and patching

4.1.2. AP and antenna mounting / orientation

4.1.3. Physical / virtual WLAN control and management appliances

4.1.4. Network devices

4.2. Physical Validation:

Based on the test plans defined in the design book:

4.2.1. Cabling and patching

4.2.2. AP and antenna mounting / orientation

4.2.3. Physical / virtual WLAN control and management appliances

4.2.4. Network devices

5. Design Validation

Based on the test plans defined in the design book:

RF

5.1. Coverage (RSSI, primary, secondary coverage)

5.2. SNR

5.3. Co-channel interference

5.4. Spectrum

5.5. Channel plans

Performance

5.6. Application (iperf, Ixcharriot, or other simulations)

5.7. Connectivity

5.8. Roaming

6. Document installation and validation results

May include any or all of the following:

6.1. Test plan

6.2. Test results

6.3. Inventory

6.4. Backup configuration of any wired, wireless, or network services

6.5. Report template