

Aruba Advanced Network Design and Solutions, Rev. 20.22

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Course description

This advanced level course teaches participants how to plan and design complex multi-site enterprise Aruba campus wireless and wired network solutions. Through the hands-on labs, participants will gain experience with network design. This includes information gathering and high-level planning for detailed designs including RF planning, redundant high-density campus architecture, location services, small stadium (high density), and remote access branch office designs. This course covers Aruba's best practices for designing wireless networks in challenging RF environments such as auditoriums, lecture halls, small stadiums, hospitals, and retail and hospitality environments. Participants will be able to enhance their design skills for redundancy and high availability and will acquire the skills needed to assess and analyze a company's business requirements. This course is approximately 20% lecture and 80% hands-on lab exercises.

Objectives

After you successfully complete this course, expect to be able to:

- Review outline of a customer's needs for a complex multi-site, multi-vendor environment and determine the information required to create a solution.
- Evaluate the current network environment.
- Determine the appropriate wireless and wired customer requirements for the solution design in a complex multi-site, multi-vendor environment.
- Review scenario and select the appropriate products based on the customer's technical requirements for a complex multi-site, multi-vendor environment for complex integration.
- Review customer scenario for a complex multi-site, multi-vendor environment and generate the Bill of Materials (BoM)
- Create a detailed network management design per the customer scenario.
- Create a detailed network security design.
- Create and document a branch access solution design.
- Review the customer scenario and service level agreements and document the licensing and maintenance requirements.
- Deliver the solution and deliverables including BoM, RF plan, logical diagram, solution description.

Topics

Design Phase 1

- Gather information and analyze customer environment
- Evaluate the customer requirements in the scenario
- Produce a detailed design specification document to plan and design an Aruba solution per the customer requirements
- Explain support options
- Recommend the solution to the customer

Design Phase 2- Dorm Rooms

- Dorm Design Best Practices - Understand the complexity of dorms
- Gather and analyze current environment and document customer requirements
- Create a detailed design specification document to plan and design an Aruba solution per the customer requirements
- Recommend the solution to the customer

Design Phase 3- Small Stadium

- Review outdoor topologies
- Review designing outdoor AP coverage
- Gather and analyze current environment and document customer requirements
- Evaluate the customer requirements
- Produce a detailed design specification document to plan and design an Aruba solution per the customer requirements
- Recommend the solution to the customer

Design Phase 4- Hospital

- Gather and analyze current environment and document customer requirements
- Discuss features of a hospital that can pose challenges to the RF design
- Specialized device requirements
- Regulations
- Meet strict security requirements
- Meet strict availability requirements
- QoS requirements

Design Phase 5- Location Services

- Gather current environment and customer requirements
- Review design methodology for Aruba location services and oice
- Evaluate the customer requirements
- Produce a detailed design specification document to plan and design an Aruba solution per the customer requirements
- Recommend the solution to the customer

Design Phase 6– Remote Access (SD-WAN, VIA, IAP-VPN and RAP)

- Gather and analyze current environment and document customer requirements
- Review Remote Access practices - Understand the complexity of Remote Access
- Create a detailed design specification document to plan and design an Aruba solution per the customer requirements
- Recommend the solution to the customer

Design Phase 7- Retail Design – School bookstore and other retail shops (POS terminals, barcode scanners, PCI requirements)

- Gather and analyze current environment and document customer requirements
- Discuss particular challenges for retail environments
- Explain Multizone
- Create a detailed design specification document to plan and design an Aruba solution per the customer requirements
- Recommend the solution to the customer

Troubleshooting Network Designs

Troubleshoot an RF design

Mock ACDX Exam

Review scenario

Develop a design to meet the customer requirements and be prepared to defend your design

Provide a topology and cost for your solution