HCIP-WLAN V1.0

Training Content

HCIP-WLAN-CEWA Constructing Enterprise WLAN Architecture

1.WLAN WIDS Introduction(Optional)

- WLAN WIDS Introduction

- Wireless Intrusion Detection and Prevention

- Attack Detection

- WIDS Configuration

- Typical Application Scenarios

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- Deploy Agile Controller in Large-sized network

- Directory server

- Agile Controllers connects with external authentication source

- Application in Wireless Authentication

3.Mesh Principle and Configuration

- Mesh Overview

- Mesh Concept

- Mesh Architecture

- Establish Mesh Network

- Applicable Scenarios of Mesh

- Configure Mesh Network

4.Large-sized WLANs Introduction

- Typical WLAN Application of Large-sized Campus Network

- Configuring APs to Go Online

- VLAN Pool Introduction

- Large-sized WLAN Introduction

- Maintain WLAN Basic

5.WLAN Radio Resource Management

- WLAN Radio Resource Management Introduction

- Radio Calibration

- AP-based Load Balancing

- Band Steering

- User CAC

- Smooth Channel Switching

- Per Packet Power Adjustment

6.WLAN Roaming-Inter AC Roaming

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- Distinguish between Different Roaming

- Inter AC Roaming

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- Configure Layer 3 Roaming

7.WLAN Reliability Introduction—Dual-Link Backup

- WLAN Reliability Overview

- WLAN Dual-Link Backup Introduction

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8.Deploy Huawei Outdoor AP

- Applicable Scenarios of Deploying Outdoor AP

- WLAN Outdoor Coverage

- Fresnel zone

9.Huawei Outdoor AP and Antenna(Optional)

- Huawei Outdoor AP Introduction

- Huawei Antenna

- Antenna Selection

10.Deploy WLAN Secure Connectivity Services

- WLAN Access Authentication

- Agile Controller Introduction

- Agile Controller Typical Configuration

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- Hot-Standby Backup Introduction

- Hot-Standby Backup Principle

- Applicable Scenarios of Hot-Standby Backup

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12.WLAN Roaming- Smart Roaming

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- WLAN Optimization Overview

- WLAN Optimization Process

- WLAN Data Optimization

- Basic WLAN Parameter Calibration

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- Necessity of pre-sales network planning in the WLAN project

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- Precautions of pre-sales network planning in the WLAN project

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- Project Preparation

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- Typical Application Scenarios

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- Survey Preparations

- Site Survey

- Typical Scenarios

5.Brief WLAN Planning Scenario

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- Planning Discussion

- Detailed Planning

6.Introduction to WLAN Tester

- WLAN Tester Introduction

- WLAN Tester Usage Procedure

7.Clarifying Customer Requirements

- Basic Requirements

- High-level Requirements

8.PoE Planning

- PoE Components

- PoE Power Budget

- PoE Configuration

9.WLAN Campus Network Solution

- The Trend and Challenge of WLAN Campus Network

- Huawei WLAN Campus Network Solution

- Application Scenarios of WLAN Campus Network

10.WLAN HA Planning

- WLAN HA Overview

- AC Dual-Link Cold Standby

- AC Dual-Link Hot-Standby

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11.WLAN Coverage Optimization

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- WLAN Project LifecycleWLAN Planning Importance

- WLAN Planning Methods

- WLAN Optimization Methods

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- WLAN Network Planning in Typical Scenarios

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- WLAN Basics

- WLAN Application on Enterprise Networks: BYOD

- Huawei WLAN Devices and Models

- Usage Scenarios and Characteristics of WLAN on Industry Networks

- Carrier WLAN Situation

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- Project Preparation

- Product Selection

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- Typical Application Scenarios

17. WLAN Roaming Planning

- Basic Principles of Roaming

- Basic Concepts of Roaming

- Roaming Planning

18. WLAN Data Planning

- Hierarchical Network Design

- IP Address Planning

- VLAN and DHCP Planning

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19. WLAN Interference Optimization

- WLAN Interference Test

- WLAN Interference Sources

- Analysis of WLAN Interference Types

- WLAN Interference Optimization Examples

20. WLAN Design for Small- and Medium-scale Enterprises

- Application of WLAN in Small- and Medium-scale Enterprises

- Networking Modes of Small- and Medium-scale Enterprise WLANs

- Basic Planning of Small- and Medium-scale Enterprise WLANs

- Detailed Design of Small- and Medium-scale Enterprise WLANs

21. WLAN Architecture Design

- Basic WLAN Architectures and Components

- AC Forwarding and Deployment Modes

- AC Networking Modes and Layers

- Planning Typical WLAN Architectures

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22. Indoor Distributed WLAN Planning

- Indoor Distributed WLAN Planning

- Indoor Distributed Planning Overview

- Indoor Distributed Components

- Indoor Distributed Network Planning

- Indoor Distributed Solutions

- WOC Solution

23.Huawei WLAN High-density Venue Solution Introduction

- The Trend and Challenge of WLAN High-density Venue

- Huawei WLAN High-density Venue Solution

- Successful stories of WLAN High-density Venue

24.WLAN Network Design Overview

- Huawei Enterprise Service Lifecycle Model

- Basic Principles for WLAN Network Planning

- Huawei WLAN Networking Modes

25.WLAN HLD at the Early Stage

- Planning Scenarios

- WLAN Interference Sources

- AP Calculation

- Product Selection and Placement

- WLAN Planning Software

26.Indoor Settled WLAN Design Guide

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- Coverage Design

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