



CCDE Practical Exam v3.0

Workforce Mobility Technology List

Description: The technologies listed in this document are associated with the **Workforce Mobility area of expertise** of the CCDE Practical Exam v3.0. Candidates are expected to have a deep understanding of these technologies. Each of these technologies may appear in any delivery of the exam. If applicable for the technology candidates must expect content that is dual-stack by nature.

Note: The technologies listed here are in addition to the technologies listed in the CCDE Core Technology list.

1.0 Security

- 1.1 Network control and identity Management
 - 1.1.a Cisco ISE

2.0 Wireless

- 2.1 Enterprise wireless network
 - 2.1.a WLAN architectures
 - 2.1.a.i Centralized
 - 2.1.a.ii Distributed
 - 2.1.b Roaming optimizations
 - 2.1.c Mesh network architecture
 - 2.1.d RF and radio design
 - 2.1.d.i Channel planning
 - 2.1.d.ii Channel width
 - 2.1.d.iii Spatial streams
 - 2.1.d.iv Radio Resource Management
 - 2.1.d.v Client considerations, such as transmit power, RSSI, SNR
 - 2.1.e Antenna types
- 2.2 Regulatory domains
- 2.3 Site survey
 - 2.3.a Floor maps
 - 2.3.b Coverage requirements
 - 2.3.c Building materials

- 2.3.d Attenuation
- 2.3.e Interferences
- 2.3.f Capacity planning
- 2.3.g AP cell areas
- 2.3.h Wired network
 - 2.3.h.i PoE
 - 2.3.h.ii Switch port capacity
 - 2.3.h.iii Uplink capacity
- 2.3.i Outdoor/indoor locations
- 2.3.j Survey types
 - 2.3.j.i Walkthrough
 - 2.3.j.ii Predictive
 - 2.3.j.iii Active
 - 2.3.j.iv Passive
- 2.3.k Heat maps
- 2.4 Requirement gathering and analysis
 - 2.4.a Areas of coverage
 - 2.4.a.i Expected coverage per area
 - 2.4.a.ii Client density
- 2.5 Multicast over wireless
- 2.6 mDNS
- 2.7 Location services and solutions
 - 2.7.a RTLS
 - 2.7.b DNA Spaces
 - 2.7.b.i Analytics
- 2.8 Automation, Assurance, Insights, and Telemetry (Legacy and DNAc)
 - 2.8.a AVC/NetFlow
 - 2.8.b DNAc