

# Designing the FlexPod Solution v2.0

## Exam Topics for exam 500-173

This exam tests a candidate's knowledge of tools and standards for assessing computing solution performance characteristics and requirements.

In addition this exam will test a candidate's knowledge of hardware components associated with the FlexPod Solution and the process for selecting proper hardware for a given set of requirements.

The following topics are general guidelines for the content likely to be included on the exam. However, other related topics may also appear on any specific delivery of the exam. In order to better reflect the contents of the exam and for clarity purposes, the guidelines below may change at any time without notice.

- 25%**    **1.0**    **FlexPod Design**
  - 1.1    Describe FlexPod components based upon customer workloads
    - 1.1.a    Scale
    - 1.1.b    FlexPod rules
    - 1.1.c    Connectivity requirements
    - 1.1.d    Performance requirements
    - 1.1.e    Best practices
    - 1.1.f    Business outcomes desired
    - 1.1.g    Business Continuity
  - 1.2    Describe how to size a solution based on customer requirements in accordance with FlexPod best practices
    - 1.2.a    Scale
    - 1.2.b    FlexPod rules
    - 1.2.c    Connectivity requirements
    - 1.2.d    Performance requirements
    - 1.2.e    Best practices
    - 1.2.f    Business outcomes desired
    - 1.2.g    Business Continuity
  - 1.3    Describe the support options for FlexPod
    - 1.3.a    Cooperative support
    - 1.3.b    Partner support
    - 1.3.c    Solution support
  
- 20%**    **2.0**    **Compute**
  - 2.1    Describe the Cisco UCS components used within FlexPod designs
    - 2.1.a    B-Series
    - 2.1.b    C-Series
    - 2.1.c    Fabric Interconnects
    - 2.1.d    IOMs
    - 2.1.e    VICs

- 2.2 Demonstrate knowledge of how to configure the logical components used in a UCS server
  - 2.2.a VSANS
  - 2.2.b Templates
  - 2.2.c Profiles
  - 2.2.d HyperVisor
  - 2.2.e Databases

**18% 3.0 Storage**

- 3.1 Describe NetApp storage components used within FlexPod designs
  - 3.1.a FAS
  - 3.1.b AFF
  - 3.1.c Clustering
  - 3.1.d E-Series
- 3.2 Describe storage protocol considerations in FlexPod designs
  - 3.2.a SAN and NAS protocols
  - 3.2.b FC hardware
  - 3.2.c VSANS
- 3.3 Demonstrate knowledge of the features required for data protection or backup for FlexPod design
  - 3.3.a Data protection
  - 3.3.b Data backup
  - 3.3.c Restore
  - 3.3.d Data security

**18% 4.0 Networking**

- 4.1 Describe Cisco networking components used within FlexPod designs
  - 4.1.a ACI
  - 4.1.b Nexus
  - 4.1.c MDS
- 4.2 Demonstrate knowledge of FlexPod networking configurations
  - 4.2.a VLANs
  - 4.2.b VPCs

**9% 5.0 Security**

- 5.1 Describe access control methods for FlexPod solutions
  - 5.1.a LDAP
  - 5.1.b RADIUS
  - 5.1.c AD
- 5.2 Describe the considerations in building a secure multitenancy design
  - 5.2.a IP Spaces
  - 5.2.b VLANs
  - 5.2.c VSANS
  - 5.2.d SVMs

- 10% 6.0 Tools**
- 6.1 Describe resources for determining supported FlexPod components
  - 6.1.a TRs
  - 6.1.b IMT
  - 6.1.c HCL
- 6.2 Demonstrate knowledge of using tools for managing FlexPod
  - 6.2.a UCS/M and UCS/D
  - 6.2.b CSA
- 6.3 Demonstrate knowledge of troubleshooting methodologies for FlexPod solutions
  - 6.3.a Compute
  - 6.3.b Networking
  - 6.3.c Storage

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