



OKLAHOMA
CareerTech

Badge Details

Name	1123 - Internetworking
Description	This assessment measures an individual's ability to apply knowledge and skills necessary for internetworking.
Criteria	<p><i>Candidates receiving this certification will take an exam with the following criteria:</i></p> <p>This exam is composed of 50 questions</p> <ul style="list-style-type: none">• Explain Common Networking Concepts and Terminology 2%• Install and Troubleshoot Basic Hardware and Software required to communicate in a simple network and test for Connectivity 4%• Compare and Contrast Various Types of Media Used for Networking 2%• Explain the fundamental Concepts associated with Media Access Techniques (Ethernet Operations, MAC, LLC, CSMA/CD) 4%• Optimize Network Design in Regard to Segmentation, Collision Domains and Broadcast Domains 4%• Implement and Correct Problems Associated with Basic IP Addressing and Sub Netting Schemes 4%

- Describe Fundamental Concepts of Switching and Routing 4%
- Define the Layers of the OSI Model 2%
- Describe the Importance of a Router in a WAN Configuration 2%
- Configure a Router to Multiple Networks by Using the IOS Software 2%
- Log in to a Router, Record the IOS and Running Configuration and use Troubleshooting Commands 2%
- Configure a Router by Utilizing the CLI 4%
- Discover other Devices on the Network using the Router 4%
- Manage the IOS Software 4%
- Configure Routing Protocols 4%
- Identify and Utilize Distance Vector Routing Protocols 4%
- Use TCP/IP Suite Error and Control Messages to Troubleshoot a Router 4%
- Use Basic Show Commands to Troubleshoot the Router 4%
- Identify the Intermediate TCP/IP Operations and Porting 4%
- Identify and Utilize Access Control Lists (ACLs) to Add Security to the Network 4%
- Define and use Variable Length Subnet Masking (VLSM) 2%
- Describe how RIP Version 2 is Incorporated in a Routed Network 2%
- Understand how to Design and Implement Single-Area OSPF 4%
- Describe and Implement EIGRP Routing Protocol 4%
- Understand How Switching Operates Switching Concepts 4%
- Understand the use of the Access, Distribution and Core Layers in Switching and Routing 2%

- Understand how to do a Complete Switch Configuration 4%
- Understand how Spanning Tree Protocol has an Effect on Network Design and Setup 4%
- Describe how Virtual LANs Help to Control Broadcast Domains and How this Benefits the LAN Network 2%
- Configure a VLAN-Using Network Design Concept 4%
- Utilize Virtual Trunking Protocol to Set up Multiple Ports on a Router and Switch 4%
- Demonstrate how to use NAT and PAT to Scale IP Addresses Over a Multi-Network Configuration 4%
- Recognize the use of WAN Technologies in the Configuration of a Router and the Delivery of Data 2%
- Understand and Configure a Secure PPP Serial Connection 2 %
- Illustrate ISDN and DDR Concepts 2%
- Configure a Point-to-point and Multi-point Frame Relay Circuit 2%
- Demonstrate Best Practices of Network Administration 2%
- Provide Customer Support 2%