

K2W Network Specialist CSC Template (LF298.NetworkSpecialist.Template.K2W)

- Program Information
- Support Team
- Network Concepts
- Microcomputer OS
- PCs & Troubleshooting
- Linux OS
- Network Administration
- Network Security Basics
- Competency Progress
- Library Help
- K2W Website
- LFCC Help & Support

Course Management

- Control Panel
- My Files
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- Users and Groups
- Customization
- Packages and Utilities
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Quick Unenroll

PCs & Troubleshooting

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Introduction and Procedure

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This topic area will demonstrate competency in basic knowledge of hardware, software configurations, installation of various peripheral devices and basic system hardware components. These competencies map to the A+ Hardware Certificate.

A student must achieve a minimum of 80% of the total points allowed for this competency. How scoring is calculated can be found as descriptions under the various topics. Do not assume that each task is successfully accomplished if 80% is achieved for that particular task. Take notice of the variances. Successful completion of 80% is 1040 points out of 1300 max.

Completion of the following tasks are required:

- PC Hardware and Troubleshooting Competency LabConnection Assignment:** (Complete all virtual labs at 80%. These labs can be accessed via the PC Hardware & Troubleshooting Competency Lab link given below. Since the student will need to purchase an access code for these labs, a link is also provided below to do that.)
- PC Hardware and Troubleshooting Competency Assessment #1** (An assessment using multiple choice, and short answer and essay type questions; student gets two attempts to achieve the required score.)
- PC Hardware and Troubleshooting Competency Assessment #2** (An assessment similar in format to assessment #1 cover other materials; Student gets two attempts to achieve the required score)

Furthermore, in order to assist the student, Digital resources are provided as learning tools to enhance the student's knowledge as preparation for accomplishing any of these tasks.

Required Competencies to Achieve

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- Carry out trouble-shooting strategies for resolving an identified end-user IT problem.
- Identify basic components of an end-user IT system.
- Describe the attitudes, knowledge and abilities associated with quality customer service.
- Use documentation or a knowledge base to resolve a technical challenge in an identified computing scenario.
- Summarize the tenets of ethics and professional behavior promoted by international computing societies.

Digital Learning Resources

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These learning resources will help you learn areas of personal computer hardware, software configurations, installation of peripheral devices, and basic system hardware components.

This folder contains digital learning resources that cover the competency areas.

- It is recommended that the learner review this information prior to taking the two assessments.
- If a score of at least 80% is not earned on both assessments and the addressing assignment, the learner should review this material before attempting the assessment again

Lab Connection Purchasing

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- The student must purchase the access code to complete LabConnection (Online Labs) Assignment
- All labs must be completed
- A score of at least 80% must be earned on each lab before points are awarded. See details under the LabConnection assignment.

(A+ Hardware)

Lab access codes (A+ Guide to Software) can be purchased at: <http://www.cengagebrain.com/shop/search/9781305211261>.

PC Hardware and Troubleshooting LabConnection Virtual Labs Assignment

Enabled: Adaptive Release

Contains hands-on labs to demonstrate competency levels in this topic.

PC Hardware and Troubleshooting Competency Assessment #1

Enabled: Adaptive Release

An assessment using multiple choice, and short answer and essay type questions; student gets two attempts to achieve the required score. 80% is 400 points out of 500 points max.

PC Hardware and Troubleshooting Competency Assessment #2

Enabled: Adaptive Release

Select best answer; Must achieve 80% success for successful completion of this part. Success is 80% 400 points out of 500 points.

PCs & Troubleshooting

Enabled: Adaptive Release

To earn this competency the learner must:

- Complete all virtual labs with a score of 80%
- Pass PC & Troubleshooting Assessment 1 with 80% or higher
- Pass PC & Troubleshooting Assessment 2 with at least 80%

or

- Show evidence of an active A+ Hardware Certificate

Digital Learning Resources

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Discover Content



Traditional Textbook Information

6th Edition, Managing, Maintaining, and Troubleshooting, By Andrews, Published by Cengage Course Technology, ISBN 978-1-133-13512-8. This is the text of which many of the assessments are based. However, purchase is optional. Student may use any digital resources as prep for these assessments.



A+ Hardware Practice Quiz

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Virtual Desktop

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**** Requires Flash ****

- Learn Mode walks you through the assembly of the desktop computer.
- Test Mode allows you to virtually build a desktop computer without any assistance.



Troubleshooting Data Access Connections.

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The article offers guidelines that can help track down and solve data access connection errors in application software. The first place to begin solving a client connection problem is at the TCP/IP level because all data access connections start at the network layer. Down the patch of client connection troubleshooting is the Ping command which tells a user about three fundamental network connectivity issues. If unsuccessful ping occurs, it indicates that there is a network connectivity problem.



Network Troubleshooting Essentials

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This article presents topics related to network troubleshooting. The author states that any intuitive aspects of network problem solving require solid foundations of decidedly nonintuitive components as expert technologists know. The said components fall into three broad categories, namely, network instrumentation, diagnostic methods, and tactical tools. He suggests building visibility into the network from the start in which the Simple Network Management Protocol (SNMP) is the primary tool. INSET: The Golden Rules of Network Troubleshooting.



The Six-Step CompTIA A+ Troubleshooting Methodology

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This site provides six-step CompTIA A+ flashcards



Troubleshooting Training Video Playlist

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Below is a subset of A+ training videos from Professor Messer. The full list can be located online at <http://www.professormesser.com/free-a-plus-training/free-a-plus/>

Section 4: Troubleshooting

4.1 - Troubleshooting Theory

[Troubleshooting Theory \(8:58\)](#)



4.2 - Common Hardware Problems

[Troubleshooting Common Hardware Problems \(11:25\)](#)

[Hardware Troubleshooting Tools \(4:24\)](#)



4.3 - Hard Drive Troubleshooting

[Troubleshooting Hard Drives \(5:29\)](#)

[Hard Drive Troubleshooting Tools \(4:06\)](#)



4.4 - Troubleshooting Video

[Troubleshooting Video and Display Issues \(7:20\)](#)



4.5 - Troubleshooting Networks

[Troubleshooting Networks \(11:58\)](#) | [Network Troubleshooting Tools \(9:20\)](#)

[Network Troubleshooting at the Command Line \(14:33\)](#)



4.6 - Operating System Troubleshooting

[Troubleshooting Operating Systems \(10:57\)](#)

[Operating System Troubleshooting Tools \(12:49\)](#)



4.7 - Troubleshooting Security Issues

[Troubleshooting Common Security Issues \(8:18\)](#)

[Tools for Security Troubleshooting \(5:15\)](#)

[Best Practices for Malware Removal \(8:07\)](#)



4.8 - Laptop Troubleshooting

[Troubleshooting Laptop Issues \(7:19\)](#)

[Laptop Disassembly Best Practices \(5:26\)](#)



4.9 - Troubleshooting Printers

[Troubleshooting Printer Problems \(8:35\)](#)

[Printer Troubleshooting Tools \(4:07\)](#)



Introduction to Personal Computers

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Professor Messer provided instruction on Personal Computers that not only will help teach required competencies, it will help you prepare for the A+ professional certification exam. This link includes text for reading and videos.



Troubleshooting 101

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Mr. Ford talks about the the basics of troubleshooting and examines how we should talk to the customer as well as the 5 categories of computer problems in this 18 minute YouTube video.

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