

Access & Authentication

Build Content Assessments Tools Partner Content

Discover Content



Introduction and Procedures

Enabled: Statistics Tracking

This topic area will demonstrate an in-depth knowledge and ability in the area of communication protocols with a concentration on TCP/IP, Internet architecture, routing, addressing, topology, fragmentation, utilities to explore TCP/IP, and protocol analysis.

A student must achieve a minimum of 80% of the total points allowed for this competency. That equates to 760 points out of 950 points. How this score 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.

Completion of the following tasks are required after completing Network Concepts and Network Security Basics:

- Security Access Control and Authentication VLE labs Competency Assignment:** (Complete ALL 10 virtual labs These labs can be accessed via the Access Control VLE 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.)
- Communications, Access Control, and Authentication Assignment** (Click on the folder name and the assignments are given within that folder. Please read the background information prior to starting this.)
- Access Control and Authentication Competency Assessment #1** (An assessment using multiple choice, and short answer and essay type questions; student gets two attempts to achieve the required score.)
- Access Control and Authentication 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

Enabled: Statistics Tracking

- Explain the process of authentication and authorization between end user devices and computing network resources.
- Use a variety of practices for making end user systems secure.
- Differentiate between public and private data.
- Summarize the flow of data through a computer network scenario.
- Modify a system to improve data confidentiality or regulatory compliance.
- Use documentation or a knowledge base to resolve a technical challenge in an identified computing scenario.



Digital Learning Resources

Enabled: Statistics Tracking

These learning resources will help you learn areas of network communications, security, and authentication.

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 required scores are not earned, the learner should review this material before attempting the assessments again



Access Control Authentication & PKI Virtual Lab Access Code Purchasing

Enabled: Adaptive Release, Statistics Tracking

- The student must purchase the access code to complete Lab Activities
- All labs must be completed
- A score of at least 80% must be earned on each lab. See details under the VLE Lab assignment.

Purchase lab access at http://www.shopjblearning.com/shop_home.php

Access Control, Authentication & Public Key Infrastructure (Chapple/Ballad) - ISBN 978-1-284-07418-5

Plug the ISBN in the search bar and purchase from there. Please read site details before purchasing.



Access Control, Authentication and PKI Virtual Lab Hands-On Competency Assignment

Enabled: Adaptive Release, Statistics Tracking

Contains introductory descriptions and links to the various labs. There are ten labs. Please see the descriptions as to expectations and points awarded.

- K2W Cyber Security CSC Template (LF298.CyberSecurity.Template.K2W)
- K2W Cyber Security
- Support Team
- Cybersecurity Competition
- Web Links
- Network Concepts
- Network Security Basics
- Attacks & Crimes
- Access & Authentication
- Firewalls & E-Commerce
- Network Security Layers
- Legal Topics
- Weekly Interaction
- Competency Progress
- K2W Website
- Library Help
- LFCC Help & Support

- Course Management**
- Control Panel
 - My Files
 - Course Tools
 - Evaluation
 - Grade Center
 - Users and Groups
 - Customization
 - Packages and Utilities
 - Help
- Quick Unenroll



Access Control, Authentication and PKI Individual Competency Assignments

Enabled: Adaptive Release, Statistics Tracking

Contains six individual tasks to accomplish in order to achieve the expected competency level for success. Read the instructions for each assignment carefully. Each task is worth 25 points for a total of 150 points for this competency assessment. Minimum acceptable score is 80% for all 6 assignments (120 points).



Access Control & Authentication Competency Assessment #1

Enabled: Adaptive Release

For multiple choice, select best answers. For essays, short answers, and scenarios, be specific and comprehensive, and clear in meaning. min score is 120 of 150.



Access Control & Authentication Competency Assessment #2

Enabled: Adaptive Release

Some content from the first assessment as a refresher plus SSL/TLS, IPsec (minimum acceptable is 160 of 200 points)



Security Communications, Security and Authentication

Enabled: Adaptive Release

To be awarded this competency level one must:

1. Successfully Completed Network Concepts
2. Successfully Completed Network Security Basics
3. Security Access Control and Authentication VLE labs Competency Assignment:
4. Communications, Access Control, and Authentication Assignment
5. Access Control and Authentication Competency Assessment #1
6. Access Control and Authentication Competency Assessment #2

Lord Fairfax Community College (LFCC)

173 Skirmisher Lane

Middletown, VA 22645-1745

LFCC.edu



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

This work was funded in part by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. This work was created by Lord Fairfax Community College (LFCC) and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.