11.0 File Management

Content Area: **CTE**
Course(s): **Computer Systems & Networking III**
Time Period: **March**
Length: **11 days**
Status: **Published**

Unit Overview:

This unit explores the topics: Windows file locations, manage files on Windows, NTFS permissions, shared folders, Linux file management

Essential Questions:

- What directory is identified by the %systemroot% variable?
- Which versions of Windows use the default location of C:\Program Files (x86) for the program files?
- Which Windows versions use the C:\Users directory for user profiles?
- How do you repeat a command by causing the most recent command to appear at the command prompt?
- Which NTFS permissions are required to allow a user to open, edit, and save changes to a document?
- How does file ownership affect access and permissions?
- How are the simple share permissions different from the advanced share permissions?
- What are the differences between share and NTFS permissions?

Enduring Understandings:

- Libraries group files and folders, stored both locally and on network locations, into a single logical folder.
- A complete filename is made up of a file path combined with the name of the file itself. Extensions can be included in a filename to indicate a file type.
- A file attribute is metadata that gives certain qualities to a file after the attribute has been assigned.
- With NTFS permissions, each file and folder has an access control list (ACL). The ACL identifies the users or groups and their level of access to the folder or file.
- A shared folder is a set of files that are made available over the network to other users. Users can access the files through a network connection instead of having to log on locally to the computer.
- The file system determines how a computer's files are organized on a hard drive. Linux supports many different file system types.

Standards/Indicators/Student Learning Objectives (SLOs):

ITEC.9-12.9.4.12.K.(2).1	Perform user support to maintain service.
ITEC.9-12.9.4.12.K.(2).2	Manage software systems to maintain and update service.
ITEC.9-12.9.4.12.K.(2).3	Use hardware design, operation, and maintenance knowledge and skills to provide user support.
ITEC.9-12.9.4.12.K.54	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
ITEC.9-12.9.4.12.K.56	Demonstrate skills related to seeking and applying for employment in a desired job.
ITEC.9-12.9.4.12.K.58	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
ITEC.9-12.9.4.12.K.59	Identify and exhibit traits for retaining employment.
ITEC.9-12.9.4.12.K.60	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
ITEC.9-12.9.4.12.K.61	Examine requirements for career advancement to plan for continuing education and training.
ITEC.9-12.9.4.12.K.62	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
ITEC.9-12.9.4.12.K.63	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
ITEC.9-12.9.4.12.K.68	Demonstrate knowledge of the hardware components associated with information systems.
ITEC.9-12.9.4.12.K.70	Identify and compare new information systems trends and technologies to build an understanding of their potential influence on industry practices.
ITEC.9-12.9.4.12.K.72	Demonstrate technical knowledge of the Internet to develop and maintain information technology systems.
ITEC.9-12.9.4.12.K.73	Access and use Internet services to service and update information technology systems and to complete other information technology tasks.
ITEC.9-12.9.4.12.K.74	Install and configure software programs to maintain and update information technology systems.
TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.A.CS1	Understand and use technology systems.
TECH.8.1.12.D.5	Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs.
TECH.8.2.12.A.CS3	The relationships among technologies and the connections between technology and other fields of study.
TECH.8.2.12.B.CS3	The role of society in the development and use of technology.
TECH.8.2.12.B.CS4	The influence of technology on history.
TECH.8.2.12.D.4	Assess the impacts of emerging technologies on developing countries.
TECH.8.2.12.E.1	Demonstrate an understanding of the problem-solving capacity of computers in our world.
TECH.8.2.12.E.4	Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).

Lesson Titles:

- 11.0 FILE MANAGEMENT
- 11.1 Windows File Locations

- 11.1.1 System File Locations (8:36)
- 11.1.2 File Location Facts
- 11.1.3 Use Libraries (6:23)
- 11.1.4 Library Facts
- 11.1.5 Practice Questions
- 11.2 Manage Files on Windows
- 11.2.1 Windows File and Folder Properties (6:23)
- 11.2.2 File Extension Facts
- 11.2.3 Attribute Facts
- 11.2.4 Manage Files on Windows (13:03)
- 11.2.5 Manage Files
- 11.2.6 Manage Directories from the Command Prompt (14:00)
- 11.2.7 Manage Files from the Command Prompt (12:01)
- 11.2.8 File Management Commands
- 11.2.9 Manage Files and Folders
- 11.2.10 Practice Questions
- 11.3 NTFS Permissions
- 11.3.1 NTFS Permissions (6:04)
- 11.3.2 Configure NTFS Permissions (10:56)
- 11.3.3 NTFS Permission Facts
- 11.3.4 Configure NTFS Permissions
- 11.3.5 Practice Questions
- 11.4 Shared Folders
- 11.4.1 Shared Folders (3:18)
- 11.4.2 Configure Basic Folder Sharing on Windows (7:01)
- 11.4.3 Configure Advanced Folder Sharing on Windows (11:31)
- 11.4.4 Configure Share and NTFS Permissions (4:50)
- 11.4.5 Shared Folder Facts
- 11.4.6 Share and Secure Folders
- 11.4.7 Practice Questions
- 11.5 Linux File Management
- 11.5.1 Manage the Linux File System (11:05)
- 11.5.2 View File Contents (7:49)
- 11.5.3 Edit File Contents (10:52)
- 11.5.4 Manage Ownership and Permissions (8:30)
- 11.5.5 Linux File Management Facts
- 11.5.6 Manage the Linux File System
- 11.5.7 Manage Linux File Ownership
- 11.5.8 Practice Questions

Career Readiness, Life Literacies, & Key Skills:

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when

	it is appropriate to apply the use of an academic skill in a workplace situation.

Inter-Disciplinary Connections:

MA.A-SSE.A.1a	Interpret parts of an expression, such as terms, factors, and coefficients.
LA.RST.11-12.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
LA.RST.11-12.5	Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
LA.RST.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
LA.RST.11-12.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
MA.A-CED.A	Create equations that describe numbers or relationships
LA.K-12.NJSLSA.SL2	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
LA.WHST.11-12.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
LA.WHST.11-12.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Equity Considerations:

Asian American Pacific Islander Mandate

Holocaust Mandate

LGBTQ and Disabilities Mandate

Climate Change

CS.9-12.8.1.12.DA.1	Create interactive data visualizations using software tools to help others better understand real world phenomena, including climate change.
TECH.9.4.12.DC.8	Explain how increased network connectivity and computing capabilities of everyday objects allow for innovative technological approaches to climate protection.

Summative Assessment:

- Alternate Assessment
- Chapter Quizzes
- Homework
- Marking Period Assessment
- Networking notebook
- Unit Test on File Management

Resources & Materials:

- networking equipment
- networking posters
- networking tools
- PowerPoint presentations

Instructional Strategies, Learning Activities, and Levels of Blooms/DOK:

- Demo - System File Locations
- Demo - Use Libraries
- Demo - Manage Files on Windows
- Lab - Manage Files
- Demo - Manage Directories from the Command Prompt
- Demo - Manage Files from the Command Prompt
- Lab - Manage Files and Folders
- Demo - Configure NTFS Permissions
- Lab - Configure NTFS Permissions
- Demo - Configure Basic Folder Sharing on Windows
- Demo - Configure Advanced Folder Sharing on Windows
- Demo - Configure Share and NTFS Permissions
- Lab - Share and Secure Folders
- Demo - Manage the Linux File System
- Demo - View File Contents
- Demo - Edit File Contents
- Demo - Manage Ownership and Permissions
- Lab - Manage the Linux File System
- Lab - Manage Linux File Ownership

Instructional Strategies:

- Summarizing & Note Taking
- Direct Instruction
- Provide opportunities for student practice
- KWL Chart
- Chapter study guide
- Large group discussion

Blooms/DOK:

- Level 1: recall/remember vocabulary
- Level 2: categorize the unit's technology
- Level 3: compare and contrast various technologies
- Level 4: students analyze and create a project utilizing the learned technology

Formative Assessment:

- Anticipatory Set
- Classwork worksheets
- Closure
- Exit tickets
- Gimkit (Live Quiz Learning Game)
- One-minute paper
- Unit review game (Jeopardy / GimKit)
- Warm-Up

Modifications

ELL Modifications:

- Digital translators
- Provide ELL students with multiple literacy strategies
- Front load information
- Focus on domain specific vocabulary and keywords
- Group students
- Use manipulatives where possible
- Use visuals
- Use graphic organizer
- Use real objects when possible
- Create planned opportunities for interaction between individuals in the classroom: skits, cooperative

and collaborative learning, student generated stories based on personal experience
- Tap prior knowledge
- Establish a framework allowing ELL students to understand and assimilate new ideas and information
- Provide support as ELL students move through all levels of language acquisition: scaffold learning, processing time, as well as other modifications mentioned above
- Utilize explicit learning strategies that are well planned in advance (intentional planning)
- Assess ELL students continuously using formative assessment methods
- 1:1 testing
- Repeat, reword, clarify
- Intentional scheduling/grouping with student/teacher who speaks the same language if possible
- Offer alternate/or modify assessments
- Be flexible with time frames and deadlines
- Offer resources for specific topics in primary language (YouTube web resources)

IEP & 504 Modifications:

- Testing modifications:
    - higher level reasoning questions would have less weight than other questions or provided as extra credit questions to provide exposure to these questions but not something that will be a detriment to the student's ability to share knowledge of content
    - rewording questions so that there are not higher level vocabulary within the question (you are testing for understanding of the content not the ability to understand the question)
    - less questions per page (so not visually overwhelming)
    - less none of the above, all of the above, which of the following apply, or which do not apply type questions (again it is testing for understanding of the question not the content)
    - if not directly testing directly for reading comprehension offering paraphrasing of quotes, etc... if the student is expected to be testing on understanding that paragraph or quote to answer future questions
    - word banks, multiple choice, matching questions help when possible
    - less questions overall if the student takes so much extra time that they are going into future days (then missing instruction) to take the test
    - allowing student to correct mistakes or answer wrong questions correctly for additional credit if failed the first test (another way to re-teach material)
    - math tests could have formula's available on the test and/or sample problems
    - students could use calculator and/or other math tools (x grids, chips, ect)
- Instructional modifications/accommodations:
    - teaching the main ideas/concepts (limiting not needed details)to be taught and repeating them in several different ways over several different days (goal is 7 different ways same concept for students with learning disabilities)
    - providing students with content vocabulary prior to teaching a lesson including that vocabulary (pre-teaching)
    - providing study guides that don't lead the student to study too much extraneous information (less unnecessary details)/scaffolded study guides
    - scaffolded notes
    - allowing student to take notes in class for reinforcement but also providing a copy of completed/correct notes to study from
    - modeling and showing lots of examples
    - allowing co-teaching with general education and special education teachers in the same

classroom so that the special education teacher can re-teach students with special needs in a different way in a smaller group (pulled to the side)
  - if not in a co-teaching setting allowing time in the schedule for a special education teacher to consult with general education teachers on what specifically can be modified or how to paraphrase things in a different way specific to that lesson
  - direct teaching and/or assistance for organization, social skills/peer interactions
  - providing paraphrased or modified reading materials at the student's reading level for science and social studies and elective classes
  - speaking to students privately when redirecting behaviors
  - reducing homework length to just those most important for review
  - allow student to edit with teacher comments the first attempt at a graded written assignment
  - breaking larger assignments/projects into shorter tasks with clear deadlines for each section
  - monitoring student moods/behavior fluctuation patterns to report to casemanager

G&T Modifications:

- Encourage students to explore concepts in depth and encourage independent studies or investigations.
- Invite students to explore different points of view on a topic of study and compare the two.
- Determine where students' interests lie and capitalize on their inquisitiveness.
- Refrain from having them complete more work in the same manner.
- Employ differentiated curriculum to keep interest high.
- Avoid drill and practice activities.
- Ask students' higher level questions that require students to look into causes, experiences, and facts to draw a conclusion or make connections to other areas of learning.
- Encourage students to make transformations- use a common task or item in a different way.
- Different test items.
- Annotating
- Journal article analysis

At Risk Modifications

- review, restate, reword directions
- guided notes
- outlines & graphic organizers
- study guides
- modeling
- visuals
- hands-on Instruction
- slower pacing of materials
- center-based instruction
- more resources/supports
- additional help during tutoring/Delsea One/Academic Enrichment
- retesting
- providing students with content vocabulary prior to teaching a lesson including that vocabulary (pre-

teaching)
- scaffolded notes
- allowing student to take notes in class for reinforcement but also providing a copy of completed/correct notes to study from
- modeling and showing lots of examples
- non-verbal redirection of behaviors
- speaking to students privately when redirecting behaviors
- reducing homework length to just those tasks most important for review
- allow student to edit with teacher comments the first attempt at a graded written assignment
- breaking larger assignments/projects into shorter tasks with clear deadlines for each section
- preliminary or "draft" due dates for written assignments, allowing for teacher input prior to the actual assignment due date
- testing modifications

Technology:

- interactive whiteboard
- LabSim (simulation labs)
- student computers
- TestOut (IT Certification Training Courseware)

TECH.8.1.2.A.5	Enter information into a spreadsheet and sort the information.
TECH.8.1.2.A.6	Identify the structure and components of a database.
TECH.8.1.2.A.7	Enter information into a database or spreadsheet and filter the information.
TECH.8.1.12.A.4	Construct a spreadsheet workbook with multiple worksheets, rename tabs to reflect the data on the worksheet, and use mathematical or logical functions, charts and data from all worksheets to convey the results.
TECH.8.1.12.A.5	Create a report from a relational database consisting of at least two tables and describe the process, and explain the report results.
TECH.8.1.12.D.2	Evaluate consequences of unauthorized electronic access (e.g., hacking) and disclosure, and on dissemination of personal information.
TECH.8.1.12.D.4	Research and understand the positive and negative impact of one's digital footprint.
TECH.8.1.12.E.2	Research and evaluate the impact on society of the unethical use of digital tools and present your research to peers.
TECH.8.1.12.F.1	Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.
TECH.8.2.12.B.3	Analyze ethical and unethical practices around intellectual property rights as influenced by human wants and/or needs.
TECH.8.2.12.B.4	Investigate a technology used in a given period of history, e.g., stone age, industrial revolution or information age, and identify their impact and how they may have changed to meet human needs and wants.
TECH.8.2.12.B.CS3	The role of society in the development and use of technology.
TECH.8.2.12.B.CS4	The influence of technology on history.

TECH.8.2.12.C.2	Analyze a product and how it has changed or might change over time to meet human needs and wants.
TECH.8.2.12.D.4	Assess the impacts of emerging technologies on developing countries.
TECH.8.2.12.E.1	Demonstrate an understanding of the problem-solving capacity of computers in our world.
TECH.8.2.12.E.2	Analyze the relationships between internal and external computer components.
TECH.8.2.12.E.4	Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).

Computer Science and Design Thinking Standards:

CS.K-12.2.a	Cultivate working relationships with individuals possessing diverse perspectives, skills, and personalities.
CS.K-12.2.d	Evaluate and select technological tools that can be used to collaborate on a project.
CS.K-12.6.b	Identify and fix errors using a systematic process.