

Course wrap-up

You made it to the end of this course!
Congratulations—you did it!
I hope you are proud of all you learned.
The focus of this course was computing basics.
Understanding the basics of
computing is a valuable skill as
you transition into your career as a security analyst.

Let's recap what you learned in this course.
We first focused on operating systems
and how they relate to applications and hardware.
Understanding how the system you're protecting
works is essential for doing your job effectively.
That brings us to the Linux operating system.
When working in the security profession,
familiarity with Linux is important.
We first discussed this architecture
and various distributions.
Then, we used a Linux command line to carry
out tasks you might encounter as a security analyst.
Finally, we looked at
another useful tool and used SQL to query databases.

After this course, I
hope you have a better understanding of
how these foundations of computing support
a security analyst in their daily work.
I also hope you continue your path with this program.
There are a lot of other useful
and exciting topics ahead.
Once again, congratulations.
You've finished another course.
Building skills is something you should be proud of.
Keep it up as you progress through this program.

Terms and definitions from Course 4

A

Absolute file path: The full file path, which starts from the root

Application: A program that performs a specific task

Argument (Linux): Specific information needed by a command

Authentication: The process of verifying who someone is

Authorization: The concept of granting access to specific resources in a system

B

Bash: The default shell in most Linux distributions

Basic Input/Output System (BIOS): A microchip that contains loading instructions for the computer and is prevalent in older systems

Bootloader: A software program that boots the operating system

C

CentOS: An open-source distribution that is closely related to Red Hat

Central Processing Unit (CPU): A computer's main processor, which is used to perform general computing tasks on a computer

Command: An instruction telling the computer to do something

Command-line interface (CLI): A text-based user interface that uses commands to interact with the computer

D

Database: An organized collection of information or data

Date and time data: Data representing a date and/or time

Digital forensics: The practice of collecting and analyzing data to determine what has happened after an attack

Directory: A file that organizes where other files are stored

Distributions: The different versions of Linux

E

Exclusive operator: An operator that does not include the value of comparison

F

File path: The location of a file or directory

Filesystem Hierarchy Standard (FHS): The component of the Linux OS that organizes data

Filtering: Selecting data that match a certain condition

Foreign key: A column in a table that is a primary key in another table

G

Graphical user interface (GUI): A user interface that uses icons on the screen to manage different tasks on the computer

H

Hard drive: A hardware component used for long-term memory

Hardware: The physical components of a computer

I

Inclusive operator: An operator that includes the value of comparison

Internal hardware: The components required to run the computer

K

Kali Linux™: An open-source distribution of Linux that is widely used in the security industry

Kernel: The component of the Linux OS that manages processes and memory

L

Legacy operating system: An operating system that is outdated but still being used

Linux: An open-source operating system

Log: A record of events that occur within an organization's systems

N

nano: A command-line file editor that is available by default in many Linux distributions

Numeric data: Data consisting of numbers

O

Operating system (OS): The interface between computer hardware and the user

Operator: A symbol or keyword that represents an operation

Options: Input that modifies the behavior of a command

P

Package: A piece of software that can be combined with other packages to form an application

Package manager: A tool that helps users install, manage, and remove packages or applications

Parrot: An open-source distribution that is commonly used for security

Penetration test (pen test): A simulated attack that helps identify vulnerabilities in systems, networks, websites, applications, and processes

Peripheral devices: Hardware components that are attached and controlled by the computer system

Permissions: The type of access granted for a file or directory

Primary key: A column where every row has a unique entry

Principle of least privilege: The concept of granting only the minimal access and authorization required to complete a task or function

Q

Query: A request for data from a database table or a combination of tables

R

Random Access Memory (RAM): A hardware component used for short-term memory

Red Hat® Enterprise Linux® (also referred to simply as Red Hat in this course): A subscription-based distribution of Linux built for enterprise use

Relational database: A structured database containing tables that are related to each other

Relative file path: A file path that starts from the user's current directory

Root directory: The highest-level directory in Linux

Root user (or superuser): A user with elevated privileges to modify the system

S

Shell: The command-line interpreter

SQL (Structured Query Language): A programming language used to create, interact with, and request information from a database

Standard error: An error message returned by the OS through the shell

Standard input: Information received by the OS via the command line

Standard output: Information returned by the OS through the shell

String data: Data consisting of an ordered sequence of characters

Syntax: The rules that determine what is correctly structured in a computing language

U

Ubuntu: An open-source, user-friendly distribution that is widely used in security and other industries

Unified Extensible Firmware Interface (UEFI): A microchip that contains loading instructions for the computer and replaces BIOS on more modern systems

User: The person interacting with a computer

User interface: A program that allows the user to control the functions of the operating system

V

Virtual machine (VM): A virtual version of a physical computer

W

Wildcard: A special character that can be substituted with any other character

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