ThriveDX

Linux Security Course

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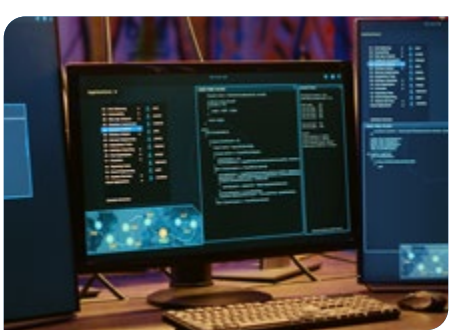

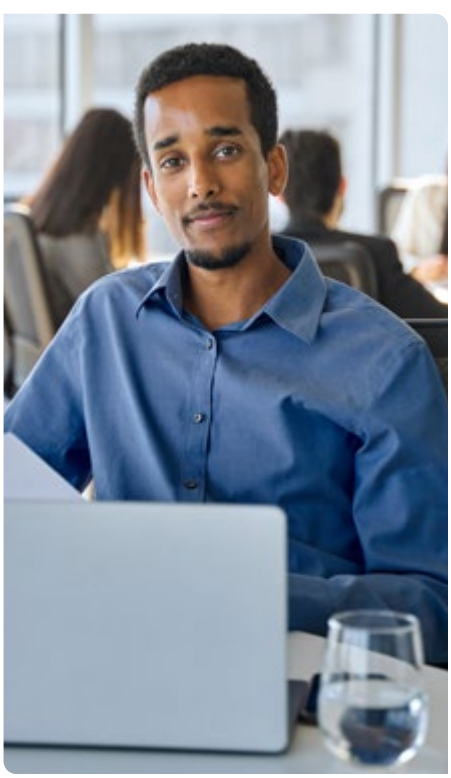

Linux Security Course

Learning Method
Live (Online), Instructor-Led

Difficulty
Essentials

Duration
40 Hours

Pricing
$4,950

Linux has become a critical component of modern computing, powering everything from servers to IoT devices. With this reliance comes the need for robust security measures. This course will equip you with the knowledge and skills to secure Linux environments effectively. You will learn about the Linux operating system and best practices for securing Linux systems through hands-on exercises and real-world examples. Whether you're a system administrator, cybersecurity professional, or simply interested in Linux security, this course will provide you with the tools and techniques to protect your systems from cyber threats.

The curriculum incorporates hands-on exercises and real-world scenarios, ensuring that learners grasp theoretical concepts and gain the practical skills needed to secure Linux effectively.

Who Should Attend:

- IT professionals
- System personnel
- Security practitioners

Prerequisites:

- Familiarity with IT and security concepts, including working knowledge of networking
- Good understanding of communication protocols
- Basic understanding of operating systems

Relevant for the Following Work Paths:

- Linux System Administrator
- SOC Analyst
- Cybersecurity Analyst
- Cybersecurity Engineer

Upon Completion, Participants Will Emerge With:

1. **Enhanced Linux Proficiency:** Comprehensive knowledge of Linux fundamentals and distributions, coupled with proficiency in using the Linux command line interface (CLI) for efficient file management and system navigation.

2. **User and System Security**: In-depth understanding of user management, permissions, and security best practices to safeguard systems effectively.

3. **Network and System Management Skills**: Practical abilities in networking, package management, and system administration.

4. **Automation and Scripting Expertise**: Skills to write and execute Bash scripts for automation and task management.

5. **Host and Network Security Proficiency**: Understanding of host and network security concepts, including firewalls and intrusion prevention systems

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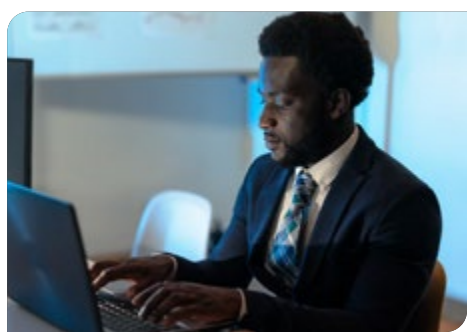


Program Structure

Module 1

Foundations of Linux Security

- Linux History
- Linux Distributions
- Open-Source Philosophy
- Linux Installation
- CLI vs GUI

Module 2

Secure System Navigation and Operations

- CLI & Terminal Emulators
- Filesystem Structure
- Command Structure
- Navigating in the File System
- Linux Advanced Operators and Output Filtering
- Input, Output, and Redirection
- System Monitoring Commands

Module 3

Users and Permissions

- User and Group Management
- File Permissions, Access Controls, and Environment Variables

Module 4

Networking and System Management

- Networking Files and Configuration
- Updating Network Configuration

Module 5

Implementing AI in Cybersecurity Operations

- Package Installation
- Package Management
- Git Concepts
- Validating Packages Authenticity

Module 6

Services and Hardening

- Common Services and Protocols
- SSH and SCP
- FTP Setup & Configuration
- Samba Setup & Configuration
- Hardening Services

Module 7

Bash Scripting

- Bash Scripting Introduction
- Script Input and Output
- Conditions & Arithmetic Operators
- Working with Archives

Module 8

Host Security

- Crontab
- Linux External Mounting
- Boot Protection
- PAM
- SELinux & AppArmor
- Crontab Security
- Common Types of Linux Vulnerabilities
- Privilege Escalation

Module 9

Network Security

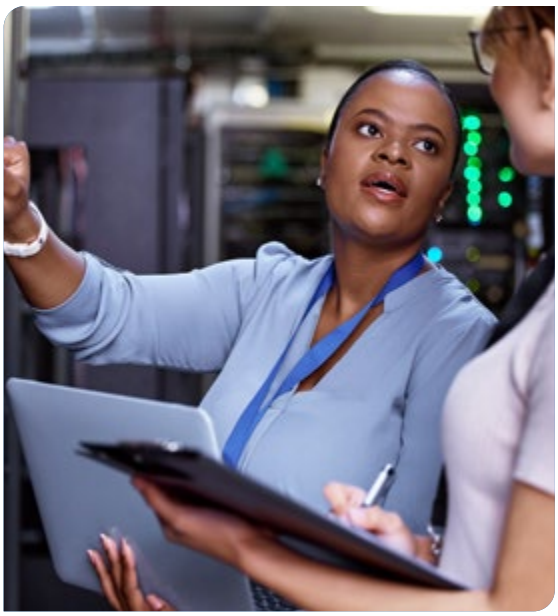
- iptables
- Firewall & ModSecurity
- Fail2ban
- Log Monitoring
- Web Server Secure Configuration
- SSH Secure Configuration

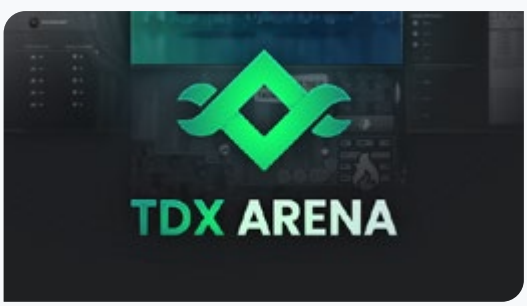
Certification Readiness

Participants who complete the course will receive a **ThriveDX Linux Security Completion Certification** to acknowledge their accomplishment. Participants who pass the final exam will also receive a **ThriveDX Cyber Practitioner Certification**.

The **ThriveDX Linux Security Completion Certification** provides a solid foundation for pursuing further certifications. The comprehensive curriculum in this course covers the foundational knowledge essential for the **LPI Linux Essentials Certification**.*

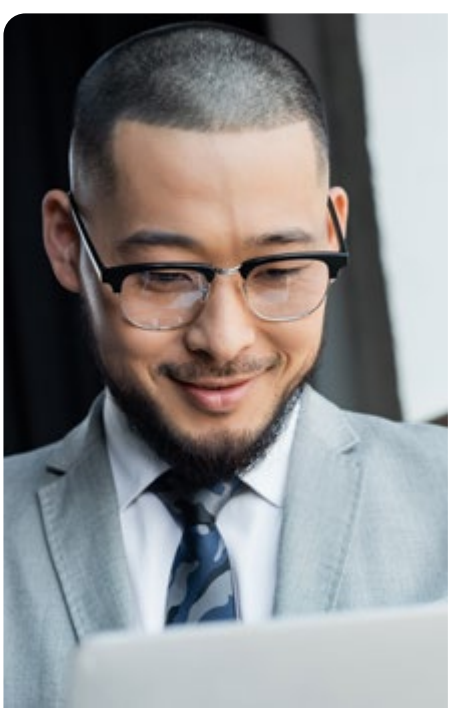
*This course is not intended to serve as a certification preparation course. The certification subjects may change based on the provider, and additional study and other prerequisites may be necessary to meet certification requirements.





Embedded Labs and Challenges

The course includes our state-of-the-art proprietary cloud-based digital education platform, **TDX Arena**, in which real-life scenarios and advanced tech teaching meet in a gamified environment.



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