



**TECKYGUYS
ACADEMY**

LINUX & SYSTEMS ADMINISTRATION

PATHWAY GUIDE

PREPARED BY: CHROME TECH LLC

2026 EDITION

A practical pathway for beginners, career changers, working professionals and experienced technicians.



www.teckyguy.com



info@teckyguy.com

ABOUT THIS GUIDE

Welcome to the Linux & Systems Administration Pathway

This standalone guide explains the curriculum, laboratories, simulations, assessments, awards and career preparation across the TeckyGuys Linux & Systems Administration Pathway.

What this guide covers

- Optional orientation — Linux Unhatched
- Level 1 — Linux Foundations
- Level 2 — Linux Systems Administration
- Level 3 — Advanced Linux & Enterprise Systems Administration (planned)
- Cisco Networking Academy learning, TeckyGuys laboratories and capstone assessments
- Tools, professional standards, certification direction and career opportunities

What this guide does not replace

- The TeckyGuys Academy Catalog and Student Handbook
- The student's written enrollment agreement and program offer
- Current Cisco, LPI, Red Hat, cloud-provider or other external certification requirements
- Employer-specific experience, access, screening or work-authorization requirements

IMPORTANT : Course access, schedules, included services, examination vouchers and advanced-level availability must be confirmed in writing for the applicable enrollment period.

NAVIGATION

Contents

Welcome to the Linux & Systems Administration Pathway.....	2
What this guide covers.....	2
What this guide does not replace.....	2
SECTION 1.....	5
Pathway Overview.....	5
SECTION 2.....	7
Who This Pathway Is For and How It Progresses.....	7
SECTION 3.....	8
Entry Requirements and Readiness.....	8
3.1. Level 1 Entry.....	8
3.2. Level 2 Entry.....	8
3.3. Level 3 Entry.....	8
LEVEL 1.....	9
3.4. Linux Foundations.....	9
3.4.1. Level 1 Courses — Part 1.....	9
3.4.2. Level 1 Courses — Part 2.....	10
3.4.3. Level 1 Courses — Part 3.....	11
3.4.4. Linux Foundations Practical Training — Part 1.....	11
3.4.5. Linux Foundations Practical Training — Part 2.....	12
3.4.6. Linux Foundations Practical Assessment.....	13
3.4.7. Level 1 Completion and Award.....	14
Level 2.....	14

3.5. Linux Systems Administration	14
3.5.1. Level 2 Courses — Part 1	15
3.5.2. Level 2 Courses — Part 2.....	17
3.5.3. Systems Administration Practice — Part 1	18
3.5.4. Systems Administration Practice — Part 2	19
3.5.5. Linux Server Administration Simulation.....	20
3.5.6. Systems Administration Capstone — Part 1.....	21
3.5.7. Systems Administration Capstone — Part 2.....	21
3.5.8. Level 2 Completion and Award	22
Level 3.....	23
3.4. Advanced Linux, Automation & Platform Operations	23
3.4.1. Advanced Linux Curriculum — Part 1	24
3.4.2. Advanced Linux Curriculum — Part 2	25
3.4.3. Advanced Linux Curriculum — Part 3	27
3.4.4. Advanced Enterprise Practical Training	28
3.4.5. Access, Change and Authorization Requirements.....	29
3.4.6. Advanced Linux Capstone and Completion.....	30
3.4.7. Linux Tools, Laboratory Resources and Professional Standards	31
3.4.8. External Platforms, Certifications and Program Formats	33
3.4.9. Level 3 Advanced Program.....	34
3.4.10. Student Journey, Awards and Career Opportunities	34
3.4.11. Related Pathways, Important Notice and Contact	36

SECTION 1

Pathway Overview

The Linux & Systems Administration Pathway prepares students to install, configure, secure, maintain and troubleshoot Linux systems and the services that operate on them.

The pathway combines:

- Linux courses available through Cisco Networking Academy
- TeckyGuys instructor-led practical training
- Command-line and operating-system laboratories
- User, storage, process, service and network administration
- Server-support simulations
- Practical assessments and capstone projects
- Technical documentation and professional development
- Career and certification preparation

The pathway has three clearly defined levels:

- Level 1 — Linux Foundations
- Level 2 — Linux Systems Administration
- Level 3 — Advanced Linux, Automation & Platform Operations

Each level identifies:

- The courses students complete
- The practical training delivered by TeckyGuys
- The tools and laboratory activities used
- The assessment students must pass
- The award students receive
- The certification or career preparation provided

Linux courses available through Cisco Networking Academy provide the principal course curriculum for Levels 1 and 2.

Some Linux courses delivered through Cisco Networking Academy are developed with or provided by an approved external curriculum partner. TeckyGuys will identify the applicable course provider in the student's enrollment information.

TeckyGuys Academy adds instructor guidance, practical laboratories, server simulations, troubleshooting exercises, documentation, assessments and career-development activities.

Level 3 is a TeckyGuys advanced practical program. It may use approved vendor resources, but TeckyGuys will not represent those resources as official Cisco courses unless they are specifically offered through Cisco Networking Academy.

AUTHORIZED PRACTICE Students may administer only systems, accounts and services expressly assigned for training.

SECTION 2

Who This Pathway Is For and How It Progresses

The Linux & Systems Administration Pathway is designed for:

- Beginners interested in Linux
- IT support technicians
- Network technicians
- Data center technicians
- Junior server administrators
- Cloud-support candidates
- Cybersecurity students
- DevOps candidates
- Application-support technicians
- Infrastructure-support personnel
- Professionals supporting Linux-based environments
- Students preparing for Linux Essentials or entry-level Linux certification examinations
- Individuals progressing into cloud, cybersecurity, networking or platform operations.

Previous Linux experience is not required for Level 1.

Basic computer literacy is recommended.

The Linux courses provide structured operating-system knowledge.

TeckyGuys Academy provides the practical experience required to apply that knowledge in realistic technical-support, server, data center, cloud and systems-administration environments.

SECTION 3

Entry Requirements and Readiness

3.1. Level 1 Entry

Level 1 is open to beginners.

Previous Linux or systems-administration experience is not required.

Basic computer literacy and familiarity with files, folders and applications are recommended.

3.2. Level 2 Entry

Students can enter Level 2 after:

- Successfully completing Level 1;
- Completing equivalent Linux-foundation training;
- Holding Linux Essentials or another approved foundational credential; or
- Demonstrating equivalent knowledge through education, certification, employment experience or a TeckyGuys readiness assessment.

3.3. Level 3 Entry

Students can enter Level 3 after:

- Successfully completing Level 2;
- Holding an approved Linux administration certification;
- Demonstrating practical Linux server-administration experience; or
- Passing a TeckyGuys advanced-program readiness assessment.

Students entering Level 3 should be able to:

- Work confidently at the Linux command line
- Manage files and permissions
- Administer users and groups

- Install and update software
- Manage processes and services
- Configure basic networking
- Review system logs
- Perform structured troubleshooting

TeckyGuys Academy reviews and approves all direct-entry requests.

- Level 1 — Linux Foundations

DIRECT ENTRY : TeckyGuys determines placement after reviewing prior learning, experience and demonstrated technical readiness.

LEVEL 1

3.4. Linux Foundations

Level 1 introduces Linux, open-source technology and the command-line skills required to work with a Linux operating system.

Students learn how to navigate the Linux file system, manage files, use commands, understand permissions, work with users and processes and perform basic system-support tasks.

Level 1 is appropriate for students who have never used Linux and for IT professionals who need a structured introduction before progressing into systems administration.

3.4.1. Level 1 Courses — Part 1

Every Level 1 student completes the following courses available through Cisco Networking Academy:

Linux Unhatched

Students develop introductory knowledge in:

- Linux and open-source technology

- Common Linux distributions
- Linux use in servers, cloud systems and embedded devices
- The Linux command-line interface
- Command syntax
- Files and directories
- Absolute and relative paths
- Basic file-management commands
- Viewing text files
- Command help and documentation

3.4.2. Level 1 Courses — Part 2

- Standard input and output
- Pipes and redirection
- Basic system information
- Introductory user and permission concepts
- Safe command-line practices

Linux Unhatched provides an introductory experience and prepares students for the more comprehensive Linux Essentials course.

Linux Essentials

Students develop foundational knowledge and practical ability in:

- Linux operating-system concepts
- Open-source software and licensing
- Linux distributions
- Command-line navigation
- File creation, copying, moving and deletion

3.4.3. Level 1 Courses — Part 3

- Text viewing and manipulation
- Shell expansion and command history
- Archiving and compression
- Basic shell scripting
- Hardware and system information
- Processes and process control
- Users and groups
- File ownership and permissions
- Special directories
- Basic networking concepts
- Security and administrative awareness
- Working responsibly in a Linux environment.

These three courses form the required academic curriculum for Level 1.

If Cisco Networking Academy or the applicable curriculum provider updates a course title or restructures the Linux portfolio, TeckyGuys may use the current approved equivalent while preserving the published Level 1 learning outcomes.

3.4.4. Linux Foundations Practical Training — Part 1

TeckyGuys reinforces the courses through guided Linux laboratories.

Students complete activities covering:

- Accessing a Linux physical or virtual machine
- Identifying the Linux distribution and version
- Logging in and ending a session safely
- Opening and using a terminal
- Identifying the current user and host
- Navigating the Linux file system
- Distinguishing absolute and relative paths
- Creating directories and files
- Copying, moving, renaming and deleting files

- Viewing and searching file contents
- Using command help and manual pages
- Using command history and completion
- Redirecting command output
- Connecting commands with pipes
- Searching for files and directories

3.4.5. Linux Foundations Practical Training — Part 2

- Using wildcards and basic regular-expression concepts
- Creating and extracting archives
- Compressing and decompressing files
- Reviewing disk usage
- Reviewing memory and processor information
- Viewing running processes
- Starting and stopping approved processes
- Reviewing local users and groups
- Creating users and groups in an approved laboratory
- Reviewing file ownership
- Applying basic permissions
- Editing text files
- Creating a basic shell script
- Reviewing network-interface information
- Testing basic connectivity
- Reviewing approved Linux logs
- Recording commands, observations and results

All administrative activities must be completed in a TeckyGuys-approved laboratory or another authorized training environment.

3.4.6. Linux Foundations Practical Assessment

Every Level 1 student completes a foundational Linux assessment.

The student must:

- Access an assigned Linux environment
- Identify the operating system, hostname and current user
- Navigate to the assigned location
- Create the required directory and file structure
- Copy, move, rename and remove approved files
- Search for specified information
- Create or extract an archive
- Review a running process
- Review assigned user, group and permission information
- apply an approved basic permission change
- Run basic system and network-information commands
- Create a simple shell script or command sequence
- Record the commands used and results obtained
- Explain the completed work

The assessment evaluates:

- Command-line navigation
- File management
- Command accuracy
- User and permission awareness
- Process awareness
- Basic networking
- Basic scripting
- Documentation
- Safety
- Professional conduct

EVIDENCE : Commands, screenshots, configuration records and troubleshooting notes must accurately represent the student's own work.

3.4.7. Level 1 Completion and Award

To complete Level 1, the student must:

- Complete both required courses
- Complete the TeckyGuys practical laboratories
- Pass the Level 1 practical assessment
- Meet attendance and participation requirements
- Follow safety, conduct and academic-integrity standards
- Follow all access and acceptable-use requirements
- Resolve applicable academic and administrative requirements

Eligible students receive:

- Applicable Cisco Networking Academy or curriculum-provider course certificates
- Applicable digital badges
- The TeckyGuys Academy Linux Foundations Award

Level 1 supports preparation for the separate Linux Professional Institute Linux Essentials examination.

Completion does not automatically grant the LPI Linux Essentials certificate or another professional certification.

Level 2

3.5. Linux Systems Administration

Level 2 moves students from Linux command-line foundations into practical systems administration.

Students learn to install and maintain Linux systems, manage users and storage, configure network settings, operate system services, review logs, apply security controls and troubleshoot common server problems.

Level 2 is designed for:

- Students who have completed Level 1
- Linux Essentials holders
- IT and networking technicians moving into Linux administration
- Data center technicians supporting Linux servers
- Cybersecurity students requiring deeper Linux skills
- Cloud and DevOps candidates
- Junior systems-administration candidates
- Professionals preparing for entry-level Linux administration certifications

3.5.1. Level 2 Courses — Part 1

Every Level 2 student completes the following courses available through Cisco Networking Academy:

3.5.1.1. Linux 1

Students develop administration knowledge and practical ability in:

- Linux installation concepts
- Command-line operation
- File-system navigation
- Text processing
- Shell environments
- Environment variables
- File and directory management
- Archiving and compression
- Users and groups
- Ownership and permissions
- Process management
- Package-management fundamentals

- Hardware and device awareness
- Storage and file-system concepts
- Basic network configuration
- Linux security fundamentals
- System documentation
- Administrative troubleshooting

3.5.1.2. Linux 2

Students develop more advanced administration knowledge and practical ability in:

- Advanced command-line operation
- Shell scripting
- System startup and boot processes
- Service management
- Storage devices and partitions
- File-system creation and maintenance
- Mounting file systems
- Logical storage concepts
- Package and repository management
- User and authentication administration
- Network configuration and troubleshooting
- Name-resolution concepts
- System logging
- Scheduled tasks
- Time synchronization
- Remote administration
- Secure Shell
- Host-security configuration
- Backup and restoration
- Server-service concepts
- Performance review
- Structured system troubleshooting

3.5.2. Level 2 Courses — Part 2

- Shell scripting
- System startup and boot processes
- Service management
- Storage devices and partitions
- File-system creation and maintenance
- Mounting file systems
- Logical storage concepts
- Package and repository management
- User and authentication administration
- Network configuration and troubleshooting
- Name-resolution concepts
- System logging
- Scheduled tasks
- Time synchronization
- Remote administration
- Secure Shell
- Host-security configuration
- Backup and restoration
- Server-service concepts
- Performance review
- Structured system troubleshooting.

These courses form the required academic curriculum for Level 2.

Where the courses are developed by an approved curriculum partner, students will be informed of the course provider.

If Cisco Networking Academy or the applicable provider updates a title or restructures the Linux course sequence, TeckyGuys may use the current approved equivalent while preserving the published Level 2 learning outcomes.

3.5.3. Systems Administration Practice — Part 1

TeckyGuys reinforces the course curriculum through Linux systems-administration laboratories.

Students complete activities covering:

- Preparing a Linux virtual machine
- Reviewing installation and partitioning options
- Performing an approved Linux installation
- Configuring system identity and time settings
- Applying software updates
- Working with package repositories
- Installing, updating and removing approved packages
- Creating and managing users and groups
- Applying password and account settings
- Managing file ownership and permissions
- Applying special permissions in approved scenarios
- Reviewing disks, partitions and file systems
- Creating and mounting approved file systems
- Reviewing disk capacity and inode usage
- Configuring persistent mounts
- Managing swap space
- Reviewing processes and system load
- Managing background jobs

3.5.4. Systems Administration Practice — Part 2

- Starting, stopping and enabling services
- Reviewing service status
- Configuring scheduled tasks
- Reviewing boot and system-service problems
- Configuring Linux network interfaces
- Reviewing IP addresses, routes and DNS settings
- Testing local and remote connectivity
- Troubleshooting name resolution
- Configuring and using Secure Shell
- Managing approved SSH keys
- Transferring files securely
- Reviewing system, authentication and service logs
- Applying basic firewall rules
- Reviewing listening ports and services
- Performing approved system-hardening tasks
- Creating basic administrative shell scripts
- Backing up and restoring approved files
- Preparing maintenance records
- Writing incident and escalation reports
- Conducting technical handovers.

Students must perform administrative actions only on assigned systems and within the authority provided for each laboratory.

3.5.5. Linux Server Administration Simulation

Students participate in a simulated Linux server-support environment.

Working individually or in an assigned team, students must:

- Receive assigned server-support requests
- Confirm the affected system and service
- Review the requested change or reported incident
- Establish the priority and potential impact
- Collect relevant system information
- Review processes, services, storage, networking and logs
- Identify the likely cause of the problem
- Apply an approved corrective action
- Verify system and service operation
- Protect system access and data
- Escalate conditions outside the assigned authority
- Update the technical record
- Prepare a shift-handover summary
- Close or transfer the request according to procedure

The simulation emphasizes:

- Technical accuracy
- Service availability
- Security
- Change discipline
- Troubleshooting
- Documentation
- Teamwork
- Escalation
- Professional communication

CHANGE CONTROL : Students must document the requested change, authorization, implementation, validation and rollback or escalation decision.

3.5.6. Systems Administration Capstone — Part 1

Every Level 2 student completes a Linux Systems Administration capstone.

The student must:

- Review a simulated organizational Linux environment
- Identify the assigned servers, users, services and dependencies
- Complete an approved Linux deployment or configuration task
- Create and manage required users and groups
- Configure the required storage and permissions
- Install and configure approved software
- Configure basic network and remote-access settings
- Investigate a simulated system or service failure
- Review relevant processes and logs
- Apply an approved corrective action
- Implement applicable security and backup controls
- Verify system and service operation
- Prepare complete technical and change records
- Prepare a system-administration report

3.5.7. Systems Administration Capstone — Part 2

Present and defend the completed work

The capstone evaluates:

- Linux installation and configuration
- Command-line administration
- User and group management
- Storage administration

- Package management
- Process and service management
- Network configuration
- Remote administration
- Security awareness
- Backup and recovery
- Troubleshooting
- Documentation
- Communication
- Professional conduct

3.5.8. Level 2 Completion and Award

To complete Level 2, the student must:

- Complete both required courses
- Complete the TeckyGuys systems-administration laboratories
- Complete the server-administration simulation
- Pass the Level 2 capstone assessment
- Meet attendance and participation requirements
- Follow access, privacy, security and acceptable-use requirements
- Follow conduct and academic-integrity standards
- Resolve applicable academic and administrative requirements

Eligible students receive:

- Applicable Cisco Networking Academy or curriculum-provider course certificates
- Applicable digital badges
- The TeckyGuys Academy Linux Systems Administration Award

Level 2 supports preparation for junior Linux and systems-administration responsibilities.

It may also support preparation for applicable Linux certification examinations, including Linux Professional Institute or other approved entry-level examinations.

Certification scope and examination objectives may differ from the TeckyGuys curriculum. Students should review the current provider requirements before registering for an examination.

Completion of Level 2 does not automatically grant LPIC-1, Linux+, RHCSA or another professional certification.

Level 3

3.4. Advanced Linux, Automation & Platform Operations

Level 3 is the planned advanced stage of the Linux & Systems Administration Pathway.

It will be delivered as a TeckyGuys advanced practical program using approved Linux distributions, automation tools, virtualization platforms, container technologies, monitoring systems and vendor learning resources.

Enrollment will open after TeckyGuys confirms:

- Qualified instructor availability
- Laboratory and server readiness
- Required software and licensing
- Access to approved virtualization and container environments
- Safe automation and deployment environments
- Assessment and supervision procedures

TeckyGuys will publish the exact required vendor courses, if any, before Level 3 enrollment opens.

Until these requirements are confirmed, TeckyGuys will not advertise Level 3 as open for enrollment.

Level 3 prepares qualified students to administer Linux services across more complex server, virtualized, cloud and platform environments.

Students progress beyond individual server administration into:

- Advanced Linux service management

- Administrative automation
- Virtualization
- Containers
- Infrastructure monitoring
- Performance analysis
- Security hardening
- Backup and recovery
- High-availability awareness
- Configuration management
- Platform operations
- Incident, change and problem management

Level 3 is designed for students progressing toward:

- Linux Systems Administrator
- Infrastructure Support Engineer
- Platform Operations Technician
- Cloud Operations Technician
- DevOps Support Technician
- Site Reliability Operations Technician
- Data Center Systems Technician
- Junior Systems Engineer responsibilities

PLANNED DELIVERY: Level 3 opens only after qualified instructors, laboratories, software, licensing and supervision controls are confirmed.

3.4.1. Advanced Linux Curriculum — Part 1

Level 3 does not claim additional Cisco courses unless Cisco courses are specifically identified before enrollment.

The TeckyGuys advanced curriculum covers the following integrated learning areas:

3.4.1.1. Advanced Linux Administration

Students develop practical ability in:

- Advanced shell operation
- System startup and boot troubleshooting
- Service dependencies
- Advanced storage administration
- Logical volume concepts
- File-system maintenance
- Resource and performance review
- Kernel and module awareness
- Package and repository control
- Scheduled administration
- Centralized time and logging concepts
- Advanced account and permission administration
- Secure remote administration
- System recovery procedures

3.4.1.2. Linux Network and Service Administration

- Linux network configuration
- Routing and name-resolution review
- Host firewalls
- Secure Shell services
- Web-service administration
- File-transfer and shared-storage concepts
- Database-service awareness

3.4.2. Advanced Linux Curriculum — Part 2

- Proxy and load-balancing concepts
- Service certificates and encryption awareness
- Service logging
- Network-service troubleshooting

- Secure service exposure

3.4.2.1. Automation and Configuration Management

- Advanced Bash scripting
- Variables, conditions and loops
- Functions and reusable scripts
- Error handling
- Input validation
- Administrative task automation
- Python automation awareness
- Configuration-management concepts
- Inventories and managed nodes
- Idempotent configuration concepts
- Automated software deployment
- Automated user and service administration
- Version-control fundamentals
- Script and configuration documentation

3.4.2.2 Virtualization and Containers

- Virtual-machine concepts
- Hypervisor awareness
- Virtual CPU, memory, storage and networking
- Virtual-machine creation and administration
- Templates and snapshots

3.4.3. Advanced Linux Curriculum — Part 3

- Container images
- Container creation and operation
- Volumes and persistent data
- Container networking
- Registries and image management
- Multi-container application concepts
- Container logging and troubleshooting
- Container-security awareness
- Orchestration fundamentals

3.4.3.1. Monitoring, Reliability and Platform Operations

- Infrastructure monitoring
- Resource and performance baselines
- Availability and health checks
- Log aggregation concepts
- Alert review
- Capacity awareness
- Backup validation
- Recovery testing
- Incident management
- Change control
- Root-cause analysis
- Problem management
- Runbook preparation
- Operational handover
- Service reporting
- Reliability and continuous-improvement concepts

These areas form one integrated advanced program. They are not five separate professional certifications.

3.4.4. Advanced Enterprise Practical Training

Students complete advanced activities covering:

- Building a standardized Linux server
- Applying approved security-hardening settings
- Managing advanced storage configurations
- Troubleshooting startup and service problems
- Configuring approved network services
- Managing host-firewall settings
- Configuring secure remote administration
- Managing service certificates in an approved laboratory
- Writing reusable administrative shell scripts
- Automating user, file, package and service tasks
- Using version control for scripts and configuration files
- Applying approved configuration-management procedures
- Creating and managing virtual machines
- Creating and operating containers
- Managing container storage and networking
- Reviewing container images and logs
- Deploying an approved multi-service laboratory application
- Configuring monitoring and health checks
- Reviewing system performance
- Investigating resource-consumption problems
- Reviewing centralized logs
- Responding to simulated infrastructure alerts
- Performing backup and recovery exercises
- Preparing change and rollback plans
- Writing administrative runbooks
- Conducting incident and root-cause reviews
- Preparing technical and management reports
- Presenting recommendations to technical and nontechnical stakeholders

The exact tools and distributions used may vary according to licensing, instructor access and laboratory availability.

LEVEL 3 • GOVERNANCE

3.4.5. Access, Change and Authorization Requirements

Before participating in Level 3 laboratories, each student must:

- Use only assigned accounts, systems and environments
- Follow the stated administrative permissions
- Protect passwords, keys, tokens and authentication information
- Use privileged access only when authorized
- Avoid changing production systems
- Review the approved scope before running automation
- Validate scripts and configurations in a safe environment
- Follow the approved change and rollback process
- Record material administrative actions
- Protect system data and configuration files
- Avoid exposing services without authorization
- Stop an automated process when unexpected behavior occurs
- Report unexpected access, data exposure or service disruption
- Follow applicable laws, policies and professional standards

Unauthorized access, scanning, credential use, service exposure, system modification, data collection or deployment is prohibited.

Students must not run scripts, automation, containers or configuration changes against external or production systems without documented authorization.

SCOPE CONTROL Administrative access is limited to assigned training systems. Production access is never implied by course completion.

3.4.6. Advanced Linux Capstone and Completion

Every Level 3 student completes an Advanced Linux, Automation and Platform Operations capstone.

The student must:

- Review a simulated organizational infrastructure environment
- Identify the assigned systems, services, users and dependencies
- Prepare an approved deployment and change plan
- Build or configure the required Linux servers
- Apply appropriate user, storage, network and security settings
- Deploy an approved service or application
- Automate selected administrative tasks
- Deploy or manage an approved virtual machine or container workload
- Configure applicable monitoring and logging
- Investigate a simulated service or performance incident
- Apply an approved resolution or recovery action
- Verify service availability, security and data protection
- Prepare a rollback or recovery procedure
- Create the required scripts, records and runbooks
- Prepare technical and management reports
- Present and defend the completed solution
- Demonstrate compliance with access and change requirements

The capstone evaluates:

- Advanced Linux administration
- Service administration
- Network and security configuration
- Automation
- Virtualization
- Container operation
- Monitoring and logging

- Performance analysis
- Incident response
- Backup and recovery
- Change and rollback planning
- Documentation
- Presentation
- Professional judgment
- Ethical conduct

After Level 3 is activated, students must:

- Complete the published Level 3 curriculum
- Complete all required advanced laboratories
- Pass the Level 3 capstone assessment
- Meet attendance and participation requirements
- Follow access, change, privacy, security and acceptable-use requirements
- Follow conduct and academic-integrity standards
- Resolve applicable academic and administrative requirements

Eligible students receive:

- Applicable approved vendor course certificates or badges, where available
- The TeckyGuys Academy Advanced Linux, Automation & Platform Operations Award

The TeckyGuys award is an academy pathway award.

It is not a Cisco, Linux Professional Institute, CompTIA, Red Hat, cloud-provider or other third-party professional certification.

RESOURCES

3.4.7. Linux Tools, Laboratory Resources and Professional Standards

Depending on the pathway level and laboratory availability, students may work with approved versions of:

- Ubuntu Linux; Debian; Rocky Linux, AlmaLinux or another approved enterprise-compatible distribution; Red Hat Enterprise Linux resources, where properly licensed
- Linux physical or virtual machines; Bash and standard Linux shells; Linux text editors; GNU command-line utilities; Package-management tools; System and service-management tools
- Storage and file-system utilities; User and permission-management tools; Linux networking utilities; Secure Shell; Secure file-transfer tools; Linux firewalls
- System journals and log files; Backup and archiving tools; Git or another approved version-control platform; Python for approved administrative automation
- Ansible or another approved configuration-management tool; Virtualization platforms; Docker, Podman or another approved container platform; Monitoring and alerting tools
- Web and database service demonstrations; Cisco Networking Academy resources; Approved curriculum-provider laboratory environments
- Tools and distributions may change as technology, licensing and workplace practices evolve.
- Use of a third-party tool does not mean that students must purchase that provider's course, subscription or certification.
- Students are expected to demonstrate professional systems-administration discipline throughout the pathway.; This includes: Confirming the assigned system before making changes
- Understanding the purpose and impact of each command; Using privileged access only when necessary; Protecting passwords, keys and sensitive configuration
- Creating backups before significant changes; Following change-approval procedures; Preparing a rollback plan; Testing changes in an approved environment
- Recording commands and configuration changes; Reviewing logs and system responses; Verifying service operation after changes; Protecting system availability and data integrity
- Escalating conditions outside assigned authority; Avoiding unsupported shortcuts; Maintaining accurate technical records; Communicating risks and service impact clearly
- Conducting professional shift handovers; Following organizational security and safety requirements

- Command-line ability alone is not sufficient for successful systems-administration work.
- Students must also demonstrate judgment, security awareness, documentation, reliability and respect for organizational procedures.

PROGRAM PLANNING

3.4.8. External Platforms, Certifications and Program Formats

The core pathway is built around Linux courses available through Cisco Networking Academy and TeckyGuys practical training.

Third-party resources may be introduced for demonstrations, laboratory activities, optional enrichment or certification preparation.

- Examples may include resources relating to; Linux Professional Institute Linux Essentials; LPIC-1; CompTIA Linux+; Red Hat Certified System Administrator
- Linux Foundation certifications; Ubuntu administration; Enterprise Linux administration; Cloud-provider Linux services; Bash and Python automation; Ansible; Git; Virtualization
- Containers; Infrastructure monitoring; Unless expressly stated in the student's enrollment agreement; Third-party courses are not required for the TeckyGuys pathway award
- Third-party certification examinations are not included; Commercial software subscriptions are not included; Students are not required to purchase every tool demonstrated
- Optional external certificates do not replace TeckyGuys course and assessment requirements; Examination vouchers are not included
- Vendor laboratory access is not guaranteed beyond the stated enrollment period
- TeckyGuys will identify any required external course, platform, examination, subscription or fee before enrollment.; Self-Paced Learning

Students complete assigned courses and applicable TeckyGuys learning activities within the stated access period.

Self-paced enrollment includes only the services identified in the enrollment agreement.

It does not automatically include the complete instructor-led laboratory, server simulation, practical assessment or career-support experience.

- 12-Week Cohort Program; Students complete one pathway level through a structured schedule that includes: Assigned Linux courses or the published Level 3 curriculum
- Instructor-led sessions; Guided laboratories; Practical assignments; Technical reviews; Professional-development activities; A final practical assessment or capstone

The amount of work required outside scheduled instructor sessions depends on the course level, the student's previous experience and the assigned laboratory activities.

- 24-Week Career Transition Program; The 24-Week Linux & Systems Administration Career Transition Program combines; Level 1 — Linux Foundations; Level 2 — Linux Systems Administration

The program provides a structured transition from basic Linux operation into junior server and systems-administration responsibilities.

3.4.9. Level 3 Advanced Program

Level 3 will be delivered separately after instructor, laboratory, software, platform and licensing requirements have been confirmed.

Students must complete Level 2 or demonstrate equivalent Linux systems-administration knowledge and practical ability before entering Level 3.

CERTIFICATION NOTICE : Certification preparation is not the certification itself. Exams, vouchers and provider decisions remain separate unless expressly included.

PROGRESSION

3.4.10. Student Journey, Awards and Career Opportunities

Beginner Route

- Complete Linux Unhatched and Linux Essentials; Complete TeckyGuys foundational Linux laboratories; Pass the Level 1 practical assessment

- Receive applicable course recognition and the TeckyGuys Level 1 award; Prepare for the separate LPI Linux Essentials examination; Progress to Level 2; Linux Administrator Route
- Complete Linux 1 and Linux 2; Complete TeckyGuys systems-administration laboratories; Participate in the server-administration simulation; Pass the Level 2 capstone
- Receive applicable course recognition and the TeckyGuys Level 2 award; Pursue junior Linux or systems-support opportunities
- Prepare for an applicable professional certification examination; Advanced Platform Route; After Level 3 is activated; Complete the published advanced curriculum
- Complete advanced Linux and platform laboratories; Complete automation, virtualization, container and monitoring activities; Pass the Level 3 capstone
- Receive the TeckyGuys Level 3 award and applicable vendor recognition; Pursue developing systems, cloud, DevOps or platform-operations opportunities
- Continue preparing for appropriate professional certifications; Students do not have to complete every level to receive recognition for a successfully completed individual level.
- Depending on the level completed, eligible students receive; Applicable Cisco Networking Academy course-completion certificates
- Applicable curriculum-provider certificates or digital badges; Applicable approved vendor course recognition; The corresponding TeckyGuys Academy pathway-level award

Professional certifications—including Linux Essentials, LPIC-1, Linux+, RHCSA and Linux Foundation certifications—require separate provider-controlled examinations and certification requirements.

Certification examination fees are separate unless expressly included in the student's enrollment agreement.

- A course-completion certificate or TeckyGuys pathway award must not be represented as a professional certification.; After Level 1
- Students can pursue introductory roles and development opportunities such as; Linux Support Trainee; IT Support Trainee; Technical Support Intern; Junior Computer Support Assistant

- Data Center Support Trainee; Open-Source Technology Intern; Systems Support Apprentice; Linux Laboratory Assistant; After Level 2
- Students can pursue entry-level or developing roles such as; Junior Linux Administrator; Junior Systems Administrator; Linux Support Technician; Systems Support Technician
- Server Support Technician; Data Center Technician; Infrastructure Support Technician; Technical Operations Technician; Network Operations Support Technician; Hosting Support Technician
- Application Support Technician; Cloud Support Technician; Junior DevOps Support Technician; Linux Technical Support Analyst; IT Operations Technician; After Level 3

After the advanced program is activated and successfully completed, students can pursue developing or advanced-support roles such as

- Linux Systems Administrator; Systems Administrator; Infrastructure Operations Technician; Platform Operations Technician; Cloud Operations Technician; DevOps Support Engineer
- Junior Site Reliability Engineer; Systems Engineer; Server Operations Specialist; Container Platform Support Technician; Automation Support Technician; Data Center Systems Engineer
- Infrastructure Support Engineer; Technical Operations Specialist; Job titles and qualification requirements differ by employer.; Some positions require; Professional certifications
- Previous employment experience; Cloud-platform knowledge; Networking or cybersecurity knowledge; Shift or on-call availability; Background screening; Security clearance
- Work authorization; Vendor-specific experience

Completion of a pathway level does not by itself establish that a graduate is qualified for a senior systems administrator, DevOps engineer, cloud engineer or site reliability engineer position.

3.4.11. Related Pathways, Important Notice and Contact

The Linux & Systems Administration Pathway provides a strong technical foundation for continued study.

- After Level 1 or Level 2, students may progress into; Cloud & DevOps; Cybersecurity; Data Center Engineering; Networking & Infrastructure; AI & Data; IT Support

Linux knowledge is particularly valuable in cloud computing, cybersecurity, data center operations, automation, artificial intelligence and DevOps environments.

- Progression is subject to the entry requirements of the selected pathway.; TeckyGuys may require a readiness assessment when a student seeks direct entry into a higher pathway level.
- TeckyGuys Academy provides Linux education, practical training, assessment and career-development support.; Completion of a pathway level does not guarantee
- Passing a professional certification examination; Receiving a Cisco or third-party professional certification; Internship or employment placement; A particular position or job title
- A particular salary or contract rate; Administrative access to an employer's systems; Selection by an employer; Admission into a higher level without meeting its entry requirements

Cisco, Linux Professional Institute, CompTIA, Red Hat, the Linux Foundation and other providers control their respective examinations, fees, policies, validity periods and certification decisions.

Employment outcomes depend on the student's knowledge, practical performance, communication, professional conduct, certification status, experience, location, work authorization and employer requirements.

Students must never access, modify, monitor, scan, automate, deploy to or interfere with a computer, server, service, account, network, cloud environment or container platform without proper authorization.

- All Linux and systems-administration activities must be conducted; Within assigned access; On approved systems; Under applicable supervision; According to organizational procedures
- In accordance with applicable laws; In accordance with professional and ethical standards

Contact TeckyGuys Academy

- Website: www.teckyguy.com
- Email: info@teckyguy.com
- Telephone: (737) 397-1127

FINAL MESSAGE Explore your pathway. Develop practical skills. Prepare for opportunity.