Linux System Administration & Troubleshooting Lab Manual

LAB SECTIONS | Linux & RHEL

Hands-on lab tasks built around real server deployments, service configuration, shell automation, and break-and-fix boot recovery exercises.

KEY MODULES & STUDY CHECKLIST

01. Lab 01: Multi-user RHEL server provisioning, sudoers policies & SSH hardening
02. Lab 02: Online LVM storage expansion, cron automation & bash health-check scripts
03. Lab 03: Break-and-fix server boot recovery (rd.break / fstab repair / service faults)

PRACTICAL LAB COMMANDS & QUICK REFERENCE

```
# Lab 01: Validate SSH daemon config before reload
sshd -t && systemctl reload sshd
# Lab 02: Verify failed units & inspect recent service errors
systemctl --failed && journalctl -xe -u nginx --no-pager
# Lab 03: Diagnose port conflicts & disk utilization
ss -tulpn && df -hT && du -sh /var/log/*
```

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