**Module 5: Linux Server - Deploy, Configure, and Maintain Systems**

**38. Schedule Tasks Using cron or at**

* **cron**: For recurring scheduled tasks.
  + Edit crontab for user:
  + crontab -e
  + Example (run script every day at 3 AM):
  + 0 3 \* \* \* /path/to/script.sh
* **at**: For one-time tasks.
* echo "/path/to/script.sh" | at 10:30

**39. Use apt or yum to Install, Update, and Remove Software Packages**

* On Debian/Ubuntu systems (apt):
* sudo apt update # Update package lists
* sudo apt install package\_name # Install package
* sudo apt upgrade # Upgrade installed packages
* sudo apt remove package\_name # Remove package
* On RedHat/CentOS systems (yum or dnf):
* sudo yum install package\_name
* sudo yum update
* sudo yum remove package\_name

**40. Install all httpd package**

* On CentOS/RedHat:
* sudo yum install httpd
* On Ubuntu/Debian:
* sudo apt install apache2

**41. Open Kickstart Configuration Graphically**

* Use **system-config-kickstart** tool (on RHEL/CentOS):
* sudo system-config-kickstart
* It provides a GUI to create/edit kickstart files.

**42. Configure New Kickstart File**

* Use the graphical tool or manually create a .ks file.
* Define installation parameters like partitioning, network, packages.
* Save the file for automated installs.

**43. Show Full Configuration of New Kickstart File**

* View the contents:
* cat /path/to/kickstart.ks

**44. Validate New Kickstart File**

* Use:
* sudo ksvalidator /path/to/kickstart.ks
* Validates syntax before use.

**45. Allow All HTTP Traffic on Firewall**

* On firewalld-based systems:
* sudo firewall-cmd --permanent --add-service=http
* sudo firewall-cmd --permanent --add-service=https
* sudo firewall-cmd --reload

**46. Reload Firewall**

* Reload after changes:
* sudo firewall-cmd --reload

**47. Start and Restart HTTP Service**

* Start:
* sudo systemctl start httpd
* Restart:
* sudo systemctl restart httpd

**48. Install New Foundation Using New Kickstart File**

* Use the kickstart file to automate OS installation:
  + Boot system with kernel parameter:
  + linux ks=/path/to/kickstart.ks
  + Kickstart performs unattended installation based on the config.