launch code

John Woolbright, Technical Curriculum Developer
June, 15, 2022

Cron



Purpose

Tool used to execute scheduled commands at a specific minute, hour, day, month, and day of the week



Parameters

Cron requires five time parameters to be considered a valid command

* * * * * command to be run

minute | hour | day of month | month of year | day of week



Crontab

Crontab is the file that will hold instructions for the cron daemon

You can have as many cronjobs within the crontab as you would like



Global Crontab vs User Crontab

You can find the global crontab at the following location:

/etc/crontab - This crontab file is system wide

When you open crontab using the crontab -e command it is user specific



Cronjobs

Every job within the Crontab is considered a cronjob



Use Cases

Cronjob that updates your package repositories at the end of every week

Cronjob that clears unwanted files from specific directories at end of a month

Cronjob that reminds you of important dates

The list goes on



Web Servers



Purpose

Programs that allow you to server web pages to the end user



Development Environments

Typically two types of environments:

- Production environments
- Development environments



Production Environments

- Asynchronous in nature
- Configured to have many workers
- If they have multiple requirements at the same time, configured to work immediately with a load balancer,
- For the end user
- Highly Distributed



Development Environment

- Most likely faster to set up
- Loose security
- Live reload for the developers
- Not meant for massive consumption by end users or to handle concurrent requests



Differences to Consider

- Who are the users
- What are the users needs



Protocols

HTTP: Hypertext Transfer Protocol

HTTPS: Hypertext Transfer Protocol Secure



Web Servers Covered

Caddy: Serve files and reverse proxy, default HTTPS, manually configured to HTTP

Nginx: Serve files and reverse proxy, default HTTP, manually configured to HTTPS

Both of the above web servers can accomplish the same tasks



Use Cases

This course utilizes Caddy and NGINX to serve static files as web applications for the following:

React Project, Spring Boot Project, Angular Project, C# Project, Python Project

Caddy - User friendly, less configuration, newer technology (released in 2015)

NGINX - Many organizations still use Nginx (released in 2004)

This Linux Course curriculum is currently being served with a Caddyfile



Caddy

Requires a Caddyfile to be configured in order to serve web applications

default Caddyfile located at /etc/caddy/Caddyfile

Best practice is to store your Caddyfile in the default location



Nginx

Requires a .conf (config) file to be configured in order to server web applications

default .conf file located at /etc/nginx/conf.d/default.conf

Best practice to store any custom .conf files at /etc/nginx/conf.d/



launch © code

launchcode.org







