Architecture Diagram

Firewall

DNS

Caddy Server

Server 1 (Static Server) → nginx
- Public Website
- CDN File Server (?)

Server 2 (Apps/Dynamic) → nginx
- Web Admin
- Portal

Server 3 (Server API & DB) → nginx
- API / Node Server App
- DB Utility App

Postgres DB

Server Logic

API Endpoints

- Auth
- Email
- Sync
- DB Backup
- Files
- Tasks (Cron)
- Active Directory
- Triggers
- Scripts
- Scrape

Notes

- CDN may need different approach?
  - NSF was AI suggested approach
  - Mount virtual storage and share over network

Service Overviews

- Auth
  - Handles authentication logic for API requests and also for front end applications.
  - Uses Active Directory with credentials → Calls AD Service
  - Logs/Audits login attempts
  - Constructs session user object
  - Passes back (expiring) JWT with a refresh token
- Email
  - Accepts simple parameters to compose NEOnet branded emails
  - Composable templates with Handlebars library
  - Logs/Audits
- Sync
  - Multiple resource sync logic
    - Employees
    - Users
    - Jobs
- DB Backup
  - Small module to handle backup logic
  - Likely calls scripts service
- Files
  - Handles file uploads
  - Verifies file formats and can do compression
  - Handles saving to file system
  - Converts to PDF
  - Extracts Text from existing PDFS
- Tasks
  - Cron job service
  - Schedule recurring tasks in a simple module
- Active Directory
  - Handle login by querying AD
  - Logic to findMany from AD
  - Logic to findOne from AD
  - Utility functions to parse:
    - Date
    - Timestamp
    - GUID
- Triggers
  - Webhook implementations
  - Exposes some type of process to being triggered
  - Used currently for rebuilds and git pulls
- Scripts
  - Executes any arbitrary script that the server can execute (Bash, Node, Python)
  - Any language script could be triggered, runtime just needs installed on server (Go, PHP, etc)
  - Returns the output of the script execution so application can handle return values
- Scrape
  - Web scraping service, used right now to retrieve jobs data from SchoolSpring