



## Server Architecture

- Recent generation server CPU
- High IOPS storage (either SSD RAID or NVME)
- Nginx for web requests (instead of Apache)
- Single server architecture for Nginx and MariaDB
- PHP-FPM with careful pool configuration
- Ongoing support for latest PHP versions
- Strategic avoidance of over-containerization of hosting services (e.g. PHP, Nginx, etc)



## Media

- Optional image optimization including:
  - » Lossless optimization
  - » Lossy optimization with configurable quality values
  - » Opaque PNG to JPG conversion
  - » WebP supplementation
- Optional automatic database cleaning
- Optional PDF optimization



## Support

- Ongoing innovation of speed and scale tech
- Optional installation of Speed by WordKeeper to optimize PageSpeed and Core Web Vitals
- Optional hands-on assistance or coding to mitigate speed/scale issues (paid separately)
- General assistance with site speed/scale questions and issues



## Scale Technology

### Caching

- Page caching
- Configurable page cache lifetimes
- Browser caching headers for static assets by default
- Automatic cache purges for obvious changes to site data
- Optional Admin AJAX caching
- PHP OPcaching
- Optional Redis for WP object caching
- Cacheable PHP redirects

### Capacity Prioritization

- Prevention of unnecessary WP and PHP involvement (e.g handling of missing static assets)
- Query string sanitation for client-side query string variables to prevent uncacheable traffic floods
- Fast terminating slash redirection
- Strategic use / request rate limiting to control traffic floods
- Security blocks for known bad bots, junk traffic, and malicious traffic
- Robots.txt bot control for common "nuisance" bots
- Robots.txt blocks for common "crawl junk"
- Automatic removal of PHP session cookies from cacheable requests
- Automatic recovery from common types of traffic floods (e.g. out of memory issues)



## Miscellaneous

- Configurable default WP image editor (Imagick vs GD)
- MariaDB with InnoDB, proper indexes, and optimized settings
- Smart WP redirect loop protection
- WP heartbeat control

