

Managed Hosting: **Compromises in security, flexibility, performance, and availability**

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**WordCamp Frankfurt 02.09. – 04.09.2016
(@WordCampFRA #WCFRA)**

About me

- Ingenieurassistent für Elektrotechnik
- Diplom-Pädagoge (Medienpädagogik)
- Hosting customer since about 20 years
- Server maintainer since about 10 Jahren
- Web development and administration
- „CTO“ at Nodegard GmbH

Managed Hosting basics

- Special hardware and data centers
- "Housing" or rental of hardware
- Virtualization and Cloud-Technologie
- Managed Server, no „root“ server
- Mail-Services
- Domain Name Server (DNS)
- Reseller: directly or indirectly?
- Shared hosting
- „Oneclick Install“ only good for testing

High flexibility „horizontal“

- Many customers through compatibility
- Many types of web applications
- Many advantages also bring disadvantages
- Suitable for beginners
- Do not confuse customers or urge customers to learn

Compromise: „vertical“ flexibility

- Lower prizes through limitation of possibilities
- Each function can be faulty and customers have the right to get support
- Reasonable restrictions are good for security on „shared hosting“
- Special functions not available for a few applications

Compromise: customer interface

- Customization possibilities
- Usability
- Client management
- Centre of all services
 - > Two Factor Authentication important

Compromise: file permissions

- „Customers are shielded from each other“
- Can single websites be shielded?
- Use two system users to avoid that a web application can change itself

Features and promises in common

- Comparability is sometimes difficult
- Marketing terms
- Vague statements
- Read carefully Service Level Agreements

Needed Services

- Webserver (Apache or Nginx)
- Database (MySQL/MariaDB)
- PHP (with FPM as service process)

Compromise: availability

- Different concepts
- Electrical power supply
- Multiple network adaptors
- Raid and/or external storage
- Multiple server hardware „Failover“
- On a single services e.g. database cluster
- Geo redundancy

Compromise: performance

- Interaction of hardware and software
- Faster components (e.g. SSDs)
- Optimized web server e.g. NGINX
- Caching technologies (e.g. Redis)
- Reverse proxy
- Load balancer
- Database replication (distribute reading)
- NoSQL for search (z.B. ApacheSolr)

„Less is more“-Features

- Data transfer flatrate
- Size of webspace
- Quantity of databases
- Less customers on server

„More is better“- features

- Backups more often than daily
- Maximum PHP memory limit
- Maximum PHP execution time
- Additional FTP Users

Important additional features

- Security through SSL encryption
- Cronjobs (web based or system cron)
- .htaccess features
- SSH access (PHP-CLI and MySQL)

Managed WordPress

- If there is no knowledge highly advisable
- Helpful for lack of time
- Security updates (Core and Plugins)
- As hosting add on possibly too inflexible
- Very flexible with a service provider
- Monitoring of web application
- Who reacts at which time on problems?
- Web Application Firewall

Questions?

Many thanks.

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