

# Bruno Marsal

**Software development, datacenter automation and  
IT consulting**

✉ [bruno@marsal.biz](mailto:bruno@marsal.biz)

☎ +49 176 67393223

🏠 Schlehenweg 1, 75387 Neubulach,  
Germany

## Services I provide

---

- Software Development for web, client and server software
- Tool and application development/forking to improve productivity using common programming and scripting languages (C/C++, C#, Perl, Ruby, PHP, JavaScript, Bash, Batch, PowerShell, ...)
- SQL database cluster setup and administration (MS SQL, MySQL)
- Webserver load balancing and caching technologies for distributed and high performance systems (**Apache, nginx, haproxy**)
- Datacenter Virtualization consultation and implementation (VMware **vSphere**, Microsoft **Hyper-V**, Linux **KVM**)
- Server/hardware installation and troubleshooting (**HPE, Dell, IBM, Sun**)
- Storage Systems configuration and administration (**HPE, NetApp, EMC, BlueArc**)
- Monitoring for systems and backup infrastructure implementation
- Network infrastructure planning and implementation
- Storage infrastructure administration (Fiber Channel, iSCSI)

## Professional experience

---

2010 – Today

Self-employed on software development, datacenter automation and system administration.

2016 – Today (Customer: Micro Focus)

Design file version controlling system allowing teams to use standardized tools with the added benefit of managed backup and disaster recovery.

Implement/Introduce tools supporting teams migrating infrastructure services for new business cases.

Design global endpoint protection solution ensuring high availability of update and threat event logging infrastructure.

2011 – Today (Customer: c-tac GmbH)

Implement high-performance data crawlers for e-commerce business allowing working with vendors not providing standardized product catalog APIs.

2014 – 2016 (Customer: Mackevision Medien Design GmbH)

Scale networking infrastructure for a growing company in need of faster and reliable core network for continued business. This included implementing a spine-leaf networking architecture and applying best practices to all networking equipment.

Design backup infrastructure for mixed environment allowing standardized and central backup / restores / disaster recovery of all base infrastructure reducing effort required managing individual solutions for network, storage, clients and servers.

Evaluate and implement remote desktop solutions allowing reducing initial investment required for growing sites which included working with internet providers and remote desktop experts running high-latency testing and tuning clients for best graphics performance giving graphic designer best available user experience.

Implement global monitoring solution allowing fast response times and improved SLAs by introducing advanced forecasting reducing system failure rates. Dashboards, statistics for users and administrator notification helped working on fixing issues before users notice any.

2010 – 2014 (Customer: Hewlett Packard GmbH)

Develop self-service portal for automated computing/storage/network provisioning for global software development/testing teams allowing quick deployment times, reduced work load and error-free deployments.

Expand virtualization environment to global scale allowing world-wide teams access computing/storage units at a standardized fashion. Working with developers and architects designing a solution sharing extreme large files with global teams.

2007 – 2010

Apprenticeship for the officially accredited **profession of computer science** (Subject Area: System Integration) at [Hewlett Packard GmbH](#) in Böblingen, Germany.

2007 – 2009

- Developed a system exporting exchange market data from Windows applications to a Linux server for [intraDAT GmbH & Co. KG](#)
- Developed a picture management and uploading tool for [NewsBoard EventMedia e.U.](#)
- Developed a web crawling system for getting current spot price for “Noble Metal Exchange UG”

## Completed and current work

---

### Datacenter automation

- Automated OS provisioning on VMware and physical servers
- Automated OS configuration for Windows/Linux/Solaris
- Automated file system creation on storage systems and ESX servers
- Automated physical server booting from SAN, reverting to clean state
- Scripted activating (licensing) Windows servers
- Scripted Antivirus software migration on Windows servers
- Scripted user account rollout on Windows/Linux/Unix/AIX/VMware servers

### System administration

- Setup High-Available Fileserver using Microsoft Hyper-V technology
- Setup and maintain High-Available MS SQL cluster
- Setup private cloud environments using VMware products, Microsoft Hyper-V and KVM
- Setup, configure, troubleshoot HP EVA/D2D/VLS, EMC and BlueArc filer
- Setup and maintain mixed-vendor device compatibility testing environments
- Setup and document test environments including MS SharePoint and Exchange cluster
- Plan and implement highly available LAN, SAN and Wi-Fi infrastructure
- Setup printing and photo editing room
- Install and troubleshoot Windows and Linux server and client OS
- Setup and maintain system monitoring and server backup environment
- Rack planning, assembling and cable management

### Software development

- Picture management and uploading tool (HTTP, FTP)
- Windows system clock synchronization tool (C++, SNTP)
- Project management platform (Perl, Catalyst)
- Tool synchronizing data from Windows applications to Linux systems (COM, FTP)
- Reporting tool for sold HP Care Packs (Mozilla XULRunner)
- Storage system benchmarking tool (C, Bash)
- Tool for managing datacenter network wiring (Mozilla XULRunner)
- Web crawling system for getting current spot price (Ruby, PHP)
- Product catalog data import and manipulation (C#, .NET)
- Hardware reservation platform for automated OS deployment (CakePHP, PowerShell)
- Custom e-Commerce marketplace (PHP, CakePHP)

## Education

---

1997 - 2011

- Primary school at “Grund- und Hauptschule Neubulach”
- Secondary school at “Bildungszentrum Wildberg”
- Professional school at “Gottlieb-Daimler-Schule 2” in Sindelfingen during 3 years apprenticeship

Internships during school

- At [HOLZMA Plattenaufteiltechnik GmbH](#) in field of computer science
- At [OMIKRON Data Quality GmbH](#) in field of computer science

Trainings and certifications

- ITIL v3 certification
- Perl Catalyst (Web-Framework), Mozilla Add-Ons Workshop
- Cambridge Business English Certificate (BEC) Preliminary Level certificate
- Active Directory basics
- Operating systems (Windows und Linux), Hardware and software basics
- Programming with HTML and C

Languages

- German (native)
- English (fluent)
- Russian (beginner)