



Marcel Misch

IT-Solutions-Architect (Software, Data, Cloud)
Certified Trainer (IT, Communication, Change)
(Senior Java Developer/Lead Developer)

Fliessstr. 19
12439 Berlin

mobile: +49 – 178 – 135 14 80
email: business@marcelmisch.de

Interesting Facts

- 15 yrs. of prof. experience in the IT (Architecture, Software, Middleware, Cloud, Linux, Java, Spring)
- 5 yrs. of prof. experience as a trainer for applied communication and change management
- Offer services as an independent entrepreneur (no temporary employment)
- Experience in IT architecture, IT-project management, application development and giving trainings
- Industry knowledge in aviation, banking sector, engineering, logistics, telecommunications
- Expertise in microservices using Spring Boot and operating them on Docker and Kubernetes
- Integrating a middleware for message exchange to microservices such as Apache Kafka
- International experience as a software architect abroad (Australia, France, India)
- Several years of practical experience in technical management of a team (5-20 employees)
- **Soft skills:** Personal, social and methodological skills

CURRICULUM VITAE

Born 08.05.1989 in Bernau bei Berlin
Nationality German

PROFESSIONAL CAREER

03/2021 – Entrepreneur in the **digital media landscape** with a focus on **audio and video production**
TODAY

12/2017 – **Freelance expert** for enterprise architecture and software development using Java and cloud computing in the areas of Berlin/Brandenburg Rhein-Main and supplying remote projects.
TODAY

06/2017 – Consultant for software development at **Trivadis GmbH** in Frankfurt am Main
11/2017

10/2011 – Technology Consultant for **Communication Media Solutions** at **Hewlett-Packard GmbH** in Bad Homburg
05/2017

STUDIES / PROFESSIONAL TRAINING

01/2021 – Apprenticeship as a **trainer** for **applied communication techniques** and **change models**
03/2022 (change management).

04/2015 – Guest student at FernUniverität Hagen studying applied computer science with focus on
09/2016 **software architecture**.

10/2008 – **Dual study program** in **applied computer science** at Baden-Wuerttemberg Cooperative
09/2011 State University in Mannheim in cooperation with IBM in Mainz.

- **graduation:** Bachelor of Science
- **final grade:** 1.9 (1.0 is best, 5.0 is worst)

SCHOOL EDUCATION

09/2001 – **A level** at Barnim-Gymnasium in Bernau (b. Berlin)
06/2008

- **graduation:** higher education entrance qualification
- **final grade:** 2.6 (1.0 is best, 6.0 is worst)
- **special subjects:** math, computer science

PRIVATE INTERESTS

- aviation (certified EASA remote pilot)
- entrepreneurship, investment
- traveling to other countries (especially Asia)
- volleyball
- photography
- videography

QUALIFICATIONS

- Spoken languages**
- German (native language)
 - English (proficient)
 - French (basic)

IT-Architecture

Frameworks

- The Open Group Architecture Framework (TOGAF)
- Information Technology Infrastructure Library (ITILv4)
- ISO/IEC 27000-family (ISO27k)
- Software Architecture with arc42

Modelling Software (Selection)

- SparxSystems Enterprise Architect (EA)
- SAP PowerDesigner (PD)
- Softeam Modelio (UML, BPMN, SysML)
- JGraph diagrams.net (draw.io, Confluence Integration)

IT-Projektmanagement

- Agile project management according to the Scaled Agile Framework (SAFe)
- Identification of the current business and technical environment
- Implementation of requirements / environment / market analyzes
- Definition of the project scope (scope, domain, time horizon)
- Documentation of restrictions (budget, schedule, resources)
- Identify the stakeholders, concerns, business needs
- Provision of a roadmap (schedule, statement of work, governance)
- Definition of work packages (definition of epics, user stories, tasks)
- Definition of operational / service level agreements (OLAs / SLAs)

Business Architecture

- Creation of architecture models (activity/use case/class diagram)
- Modeling of business processes (UPN, flow/Gantt diagram)
- Documentation of the business services to be established
- Specification of a necessary rights/roles concept
- Definition of standards, rules, guidelines, working practices

Data Architecture

- Creation of entity relationship diagrams (entities, attributes, relationships)
- Provision of a physical and logical data model (views)
- Definition of data sources, streams, ingestion, staging zones, consumers
- Documentation of architecture blocks (data stores, database, middleware)
- Linking the data entities with CRUD (Create, Reference, Update, Delete)
- Definition of data schemes (artifacts, swagger, OpenAPI)

Application Architecture

- Evaluation of the implementation approach (greenfield, brownfield/evolution)
- Description of the application on a functional and technical level
- Documentation of architecture blocks (domains, applications / microservices)
- Creation of structure (package/component/class/deployment diagram)
- Specification of application behavior (activity/use case/sequence/state diagram)
- Selection of suitable architecture patterns (e.g. client-server, peer-to-peer, SOA, pipes)
- Selection of suitable design patterns (e.g. fabric, builder, adapter, facade, proxy)
- Definition of non-functional requirements (e.g. security, availability, performance)

Technology Architecture

- Definition of the architectural elements for the construction of the IT infrastructure
- Selection of suitable technologies (e.g. microservices, event-driven architecture)

Software

Operating Systems

- Windows New Technology (NT): 8, 10, 11
- Windows Server 2012/2016/2019
- Linux (Red Hat - RHEL, CentOS, Debian, Ubuntu, Alpine)

Applications/Tools

- Microsoft Office (Word, Excel, PowerPoint, Outlook, OneNote)
- Microsoft Visio, Microsoft Project
- Sparx Systems Enterprise Architect 15 (bundled with arc42)
- IntelliJ IDEA (preferred), Eclipse IDE/Spring Tool Suite (STS)
- **Microservices:** Spring Boot, Micronaut, Docker, Kubernetes
- **Webservices:** REST, SOAP, Microservices, Swagger or OpenAPI 3.0
- **Cloud:** Microsoft Azure, Amazon AWS, OpenShift, Kubernetes, Terraform, IaC
- **Blockchain:** Ethereum, Web3j, Ganache, Truffle Suite, Smart Contracts
- **Messaging/Streaming:** Apache Kafka, RabbitMQ, WebsphereMQ, Event-Driven
- **Web UI:** Thymeleaf, Primefaces, Bootstrap, AngularJS, VueJS
- **Atlassian Suite:** Jira, Confluence, Bitbucket, Sourcetree
- **CI/CD:** GitLab, Bitbucket, Jenkins, TeamCity, Nexus, Artifactory, SonarQube
- **Testing:** JUnit, Mockito, Cucumber, Serenity, Postman, SoapUI, TDD, BDD
- **Spring Framework** (Boot, Batch, Cloud, Data, HATEOAS, MVC, Test, Web Flow)
- Version control using SVN or git
- Build tools/package manager: Maven, Gradle, Yarn, npm
- ORM Mapping with Hibernate und EclipseLink (based on TopLink)
- Bean mapping using MapStruct or Dozer (Apache Camel Framework)
- JBoss EAP/Wildfly Application Server, Oracle WebLogic Server

Programming/Scripting/Markup/Query Languages

- Java (JSE 8, 11-17/JEE 8), Kotlin, Groovy
- HTML, XML, JSON, YAML, XSD, CSS
- JavaScript, ECMAScript 2019 (ES 10)
- SQL, Cypher

Databases

- Oracle Database
- Microsoft SQL Server
- PostgreSQL
- MySQL/MariaDB
- SQLite, H2
- MongoDB
- Redis, RocksDB, etcd
- Neo4j

Certifications

- IPM certified **Trainer** (Train the Trainer)
- kikidan certified **trainer** in **applied communications** und **changing models**
- kikidan certified master practitioner in applied communications und changing models
- Licensed Master Practitioner of Neuro Linguistic Programming® (ID: 269776)
- Oracle Certified Associate Java v.5.0 & v.6.0 (OCAJ)
- Oracle Certified Programmer Java v.6.0 (OCPJ)

Further qualifications

- **agile project management** using Scrum and Kanban, Lean Coffee
- continuous integration/delivery, testing automation
- embedded computing (Raspberry/Rock Pi, Cubieboard, Arduino)
- driver license for classes A, B, BE
- remote pilot license EASA A2

PROJECT SUMMARY

- 06/2021 – 10/2021 **DWS Investment**, Solution and data architecture of a system for portfolio positions and the calculation of performance and exposure (risk) with look-through functionality in the areas of investment management, fund accounting (disposition) and investment accounting.
- Requirements management for the software solution together with the business side.
 - Coordination with the IT architects to define common design patterns.
 - Drafting and provision of a design and data model for the required software solution consisting of several microservices in a cloud environment.
 - Accompanying the agile development team in clarifying architectural issues.
 - **Skills:** TOGAF, DataVault, SparxSystems Enterprise Architect, SAP PowerDesigner, BlackRock Aladdin, Broadridge Paladyne, Spring Boot, Java, Apache Kafka, Event-Driven-Architecture, Microservices, OpenShift, Hadoop, Bigdata, RESTful Services, OpenAPI, UML, arc42, draw.io, Confluence, Jira, Scrum, Bitbucket, BDD, IT architecture, technical project management, team leadership
- 07/2020 – 05/2021 **Lufthansa AirPlus**, Architecture and development of a highly scalable rights management system for the credit card industry.
- Architecture and implementation of a highly scalable hierarchical rights management system for the credit card industry as microservices (Spring Boot) for use in the cloud (Microsoft Azure) with Docker and Kubernetes.
 - Specification of RESTful web services for internal services with Swagger/ OpenAPI.
 - Processing of Kafka events to create hierarchies for credit cards.
 - Implementation of an export functionality for credit card data as CSV (SuperCSV) and Excel Workbook (Apache POI).
 - Administration of applications and rights management in the Microsoft Azure portal.
 - Securing the microservices interfaces with access tokens (OAuth2).
 - Elasticity, robustness, security / hardening of the new microservices developed.
 - **Skills:** TOGAF, Microsoft Azure Cloud, Docker, Kubernetes, Nginx, Apache Kafka, Event-Driven-Architecture, Spring Boot 2.4, Spring Kafka, Swagger / OpenAPI 3.0, Java (JSE11+ LTS), SuperCSV, Apache POI, git, Maven, Jenkins, Nexus, SonarQube, Jira, Confluence, Bitbucket, Sourcetree, IntelliJ, JUnit, Mockito, TDD, Microsoft SQL Server, H2, Hibernate, Linux, Alpine, Bigdata, Scrum, Kanban
- 08/2020 – 02/2021 **Montessori kindergarten**, Architecture and development of a daycare master data system
- Commercial and technical project management in a customer project.
 - Conception, architecture and implementation of an individual day care center master data system with reporting functionality and automated assessment calculation.
 - Implementation of web UIs with Thymeleaf and Bootstrap for system users.
 - Automation of business processes in electronic payment transactions.
 - Specification of RESTful web services for third-party applications with Swagger/ OpenAPI according to the API-First approach.
 - Documentation of the individual software (front / back end, processes, maintenance)
 - **Skills:** Spring Boot 2.4, Swagger / OpenAPI 3.0, Thymeleaf, Bootstrap, JavaScript, Java (JSE11 LTS), SuperCSV, Apache POI, iText, git, Maven, IntelliJ, JUnit, Mockito, TDD, PostgreSQL, H2, Hibernate, Liquibase, Windows Server 2019, Kanban
- 11/2019 – 06/2020 **Deutsche Post DHL**, Development of a customer system for a new letter product
- Implementation of a new customer system involving several microservices written in Java and Spring Boot 2.2 that handles processes for customer registration, administration and verification including address normalization and calculation of the distribution code.
 - Specification of externally accessible RESTful web services for participating clients of the letter product using Swagger/OpenAPI according to the API first approach.
 - Protection of all microservices interfaces with access tokens (similar to OAuth2).
 - Implementation of the request validation and returning a response of found deviations in a list of issues to the external client.
 - Extension/adaptation of the customer portal developed in AngularJS.

- Introduction of behavior driven development with the aid of Cucumber and Serenity.
- Definition of feature and scenarios tests in Cucumber and implementation of these.
- Delivery of unit, component, integration and scenario tests.
- Definition of various build chains for microservices in TeamCity written in Kotlin.
- Documentation of interfaces and dependencies of all the microservices with Pivoo.
- Monitoring and analysis of microservices with Splunk and Grafana.
- Moderation of the Technical Retrospective / Community of Practice (CoP).
- **Skills:** Spring Boot 2.2, AngularJS 1,7, Swagger/OpenAPI 3.0, Java (JSE 8/11 LTS), Kotlin, Docker, git, Maven, TeamCity, Nexus, SonarQube, Jira, Confluence, Bitbucket, Splunk, Prometheus, Grafana, Pivoo, IntelliJ, JUnit, Mockito, Cucumber, Serenity, TDD, BDD, Webflux, Guava, Oracle DB, H2, Hibernate, Linux, Scrum

06/2019 –
08/2019

Radeberger, Realization of an on-premise Kubernetes cluster

- Giving workshops about building a Kubernetes cluster and implement a continuous integration and continuous delivery (CI/CD) platform.
- Compare an on-premise Kubernetes cluster with Microsoft Azure and Amazon AWS.
- Realization of a highly available Kubermet cluster with several master and worker nodes using the kubeadm tool and a pod-based control plane, container virtualization was done with Docker CE.
- Realization of high availability through a redundant HAProxy setup with a virtual IP switch through keepalived and use of DNS names.
- Provision of a Maven and Docker repository with Nexus OSS and integration of this into Docker and Kubernetes.
- **Skills:** Microsoft Azure, Amazon AWS, VPC, CentOS, Alpine Linux, Docker, Kubernetes, Terraform, IaC, Nginx, etcd, HAProxy, keepalived, Nexus OSS, Java, Spring Boot, Continuous Integration, Continuous Delivery, consultancy

07/2018 –
09/2019

Lufthansa AirPlus, Development of the mediation layer for credit card processing

- Implementation of the authorization process according to ISO8583 and credit card clearing using Spring Boot 2.1 to develop microservices for a cloud infrastructure
- Messaging and streaming between microservices using Apache Kafka 2.
- Connecting the clearing component to SAP Convergent Charging (SAP S/4 HANA)
- Deploying and maintaining all container applications using Kubernetes. Container virtualization is done using Docker, and Alpine Linux is used as the container (guest) operating system.
- Specification of REST interfaces using Swagger or OpenAPI 3.0.
- Implementing several Web-UIs using Thymeleaf and Bootstrap which are used for monitoring and steering of implemented credit card processes.
- Establishing resilience, robustness, security and hardening of all developed microservices.
- Delivery of unit, component and integration tests for all developed microservices.
- Dependency management in the entire project for all Java libraries using Maven.
- **Skills:** Microsoft Azure Cloud, Docker, Kubernetes, OpenShift, Apache Tomcat, Nginx, Apache Kafka, Event-Driven-Architecture, Bigdata, Spring Boot, Spring Kafka, Spring Cloud Stream, Swagger/OpenAPI, Thymeleaf, Bootstrap, JavaScript, Java (JSE8/11), git, Maven, Jenkins, Nexus, SonarQube, Jira, Confluence, Bitbucket, Sourcetree, IntelliJ, JUnit, Mockito, Cucumber, Serenity, TDD, Guava, Microsoft SQL Server, MongoDB, H2, Hibernate, SOAP (JAX-WS), REST (Spring MVC), Linux, Scrum, Kanban

01/2018 –
06/2018

EDAG, Development of a manufacturing execution system (MES)

- Realization, testing and documentation of several modules of a production control.
- **Skills:** IntelliJ, PostgreSQL, JSE8, Groovy, Gradle, git, Jira, Confluence, Bitbucket, Sourcetree, SonarQube, Spring Boot, JUnit, Guava, Hibernate

06/2017 –
11/2017

Trivadis, Project at a German authority

- Concept and development of an information system for authorities as a web application using JEE and Spring Webflow for operation on Oracle WLS based on the greenfield approach as well as replacement of a legacy system.
- Integration of external services using SOAP which are mapped using Dozer.
- Definition and implementation of unit tests for the domain model, Dozer mappings,

interfaces and front-end tests using Selenium IDE.

- Processing and documentation of work assignment in Jira.
- Giving trainings to the development team and the business.
- Pre sales activities to acquire new opportunities.
- **Skills:** SparxSystems Enterprise Architect, solution architecture UML, TDD, JEE, Spring, Apache Dozer, Oracle WebLogic Server (WLS), Event-Driven-Architecture, Bigdata, Hudson, Nexus, SonarQube, Spring Tool Suite (STS), SOAP, REST, training, consulting

06/2015 –
05/2017

Hewlett-Packard, Project at a German telecommunication provider

- Introducing SLA management component to monitor internet connections of business customers (B2B) by developing tailor-made software and the software product HPE USLAM (Universal SLA-Manager).
- Development of the tailor-made software using Java EE and the agile approach of continuous integration/delivery and test automation on Jenkins.
- Determining the customers need followed by the design of a solution architecture.
- Writing an application concept and several interface agreements.
- Leading an international team consisting of six project members
- **Skills:** HPE USLAM, enterprise architect, Eclipse, solution architecture, UML, JEE, JBoss/Wildfly, Hibernate, Spring, git, Gerrit, Jenkins, Artifactory, OpenStack, MDD/TDD, leading team, technical project management, consulting, OSS

05/2015 –
06/2015

Hewlett-Packard, Project at a German telecommunication provider

- Creation of a solution architecture for the calculation of the charge prices for each internet connection by integrating the tailor-made software SLA Control and the product HPE USLAM.
- Pre-sales activities with focus on solution marketing.
- **Skills:** Pre-Sales, Marketing, HPE USLAM, SLA Control

01/2015 –
04/2015

Hewlett-Packard, Project at a Spanish telecommunication provider

- Design and implementation of an analysis toolkit with Java for the monitoring of the network in the context of customer experience management (CEM).
- Solution and system monitoring of the probe, meditation and GUI server.
- Monitoring of user activities in a German mobile network (2G, 3G, 4G networks)
- **Skills:** HPE CEA (Customer Experience Assurance), Linux, Java, RRD-Tool, IaaS

04/2014 –
07/2014

Hewlett-Packard, Project at an Australian telecommunication provider

- **Work experience abroad in Sydney and Melbourne.**
- Development of a tailor-made solution of a self-service desk using ITIL (OSS).
- Creation of a high-level solution design document involving a general overview, environments, use-cases, customization, system boundaries, user dialogs and the test and diagnostics platform.
- **Skills:** HPE Service Activator, Aptana/Eclipse, JEE, JavaScript, leading team

01/2013 –
12/2014

Hewlett-Packard, Project at a German telecommunication provider

- Creation of specification documents for HP Service Activator describing the system use cases of the overall BNG solution.
- Leading a team of 3-4 developers during the implementation phase of the project.
- **Skills:** HPE Service Activator, HPE uCMDB, JEE, JSF, PrimeFaces, build server (Hudson), ITIL, BSS, OSS, test automation, leading team.

11/2012 –
12/2012

Hewlett-Packard, Project at a German telecommunication provider

- Customization and extension of business automation workflows in HPE Operation Orchestrations and HP Service Manage
- **Skills:** HPE Operations Orchestration, HPE Service Manager, JEE, JavaScript, ITIL

05/2012 –
10/2012

Hewlett-Packard, Project at an internal leading telecommunication provider

- Development and customization of the Auto Configuration Server (ACS)
- Creation of complex documentation in LaTeX.
- **Skills:** JEE, JBoss, Hibernate, Infinispan, LDAP, MySQL, Red Hat Linux, LaTeX

- 03/2012 – **Hewlett-Packard**, Project at a German telecommunication provider
04/2012
- Security hardening and migration of Oracle 11g in reference to the service level agreement (SLA) database
 - **Skills:** Oracle 11g, Red Hat Linux
- 10/2011 – **Hewlett-Packard**, Project at a German telecommunication provider
02/2012
- Implementation of SOAP Connectors in HP Service Manager
 - Development of auto installation scripts for HP Operation Orchestrations on Linux
 - **Skills:** HPE Operation Orchestration, HPE Service Manager, Java, BSS, OSS
- 02/2011 – **IBM** Frankfurt am Main, Project at a German private broadcasting company
06/2011
- **Bachelor thesis** in the department of Broadcasting Services, IBM GBS
 - Development and implementation of a simulator concept in order to determine the estimated end time of jobs in a distributed system of the media solution IBM ADMIRA implemented on JEE.
 - **Skills:** JEE, Tomcat, RMI, XML-RPC, DB2, Red Hat Linux
- 07/2007 – **IT-Technik Misch**, web development
06/2008
- Development of a content management system (CMS) for driving schools using JavaScript, PHP and MySQL as well as visualization using HTML und CSS.
 - **Skills:** LAMP, HTML, CSS, JavaScript, PHP, MySQL, Java (JSE), Linux