

Access and VBA Developer Profile

Frank Hentzschel | Senior Access and VBA Developer

Development, takeover, support and modernisation of bespoke business applications with Microsoft Access and VBA. Extensive experience with SQL databases, Excel automation, interfaces and established software, from fault analysis to complete new development.

Core skills Access/VBA · Excel/VBA · SQL Server/T-SQL · Oracle/PL/SQL · Database migration · Performance tuning · Legacy modernisation

Additional technologies PostgreSQL · MySQL · DAO/ADO/ODBC · Access Reports · Power Query · Power BI · C#/.NET

Working arrangements Primarily remote; on-site meetings by agreement across Germany, Austria and Switzerland.

Contact Frank.Hentzschel@office-dev.de | Office +49 8641 59 11 626 | Mobile +49 170 48 26 169

Online www.office-dev.de | linkedin.com/in/frank-hentzschel

Selected Project Results

- Invoice generation: Reduced processing time from over six hours to under one hour by replacing Word automation with native Access reports.
- E.ON data reconciliation: Reduced processing from an original 12–16 hours to around ten minutes for the actual comparison after data preparation.
- E.ON Excel automation: Reduced approximately two days of recurring monthly manual work to around two minutes.
- LDBV Access migration: Moved data and queries to SQL Server, optimised critical functions and successfully launched the converted application.

Specialist Skills

Access and VBA New application development, support and enhancement; forms, reports, DAO/ADO/ODBC, database connectivity, Office integration and business process automation.

Modernisation Reverse engineering, refactoring, bug fixing, change requests, performance analysis and maintenance of long-established Access applications.

SQL and Databases SQL Server and Oracle backends, T-SQL and PL/SQL, stored procedures, query tuning, migrations and data validation.

Development Methods Technical design, software architecture, automated testing, TDD, Git and systematic quality assurance.

Selected Project References

Retail – Development and Support of Custom Access Applications

since 09/2023

Development, support and continuous enhancement of custom Access applications for a mobile-phone retailer with two branches and seven employees. Analysis of existing applications, implementation of new requirements, VBA programming, bug fixing and automation of operational processes. Integration of Outlook features and development of an SMS reminder function; support for ongoing production operations.

Result / Status: Ongoing enhancement to integrate electronic invoicing into an existing application.

Technologies: Microsoft Access, VBA, SQL, Outlook, Office automation, E-invoicing

Industry Association – Modernisation of an Access Invoicing Application

since 05/2023

Maintenance and enhancement of an existing Access/VBA application for the administration and invoicing of an industry association. Adaptation of invoicing processes and document generation, automation of recurring tasks, and integration of Word and PDF documents.

Result / Status: Ongoing development to add ZUGFeRD electronic invoicing without replacing the existing application in its entirety.

Technologies: Microsoft Access, VBA, Microsoft Word, PDF, ZUGFeRD

Zurich – Call Centre and CRM Applications

since 06/2021

Adaptation and occasional support of a Delphi application showing breaks and availability of call-centre staff. Development of two Access/VBA CRM applications with MySQL backends for importing customer lists, recording contact attempts, outcomes and insurance products, and generating management reports.

Result / Status: One CRM application and the Delphi solution continue to receive maintenance as required.

Technologies: Delphi, Access, VBA, MySQL, Excel

Vehicle Development – Support of a Long-Established Test Logging Application

11/2022–11/2024

Took over and independently maintained a long-established Access/VBA application for logging and analysing vehicle and component tests. Reverse engineering, bug fixing, change requests and support of production operations until replacement by a cloud solution. Also maintained C#/.NET reporting components.

Result / Status: Accelerated slow Oracle data access in Access forms and optimised Excel exports.

Technologies: Access, VBA, Oracle, ODBC, SQL Server, T-SQL, PL/SQL, C#/.NET

Bavarian Judiciary – Database Optimisation and Office Automation

01/2022–07/2023

Analysed and optimised SQL Server stored procedures; improved an Access application and supported Power BI reports and Excel/Power Query solutions. Developed Excel-based solutions for collaborative data maintenance via SharePoint.

Result / Status: Reduced the work involved in an error-prone consultant invoicing process from approximately one to two days to less than 30 minutes.

Technologies: SQL Server, T-SQL, Access, VBA, Excel, Power Query, Power BI, SharePoint

Bank in Bavaria – Cash and Valuables Logistics and Performance Tuning

06/2021–10/2022

Took over the support and enhancement of an existing Access/VBA database application for cash and valuables logistics following the departure of the previous developer. Analysis, bug fixing, change requests and optimisation of business processes. Replaced Microsoft Word-based invoice generation with native Access reports. Also certified and digitally signed Access and Excel/VBA macros for production use. Part-time remote engagement through a recruitment intermediary.

Result / Status: Reduced invoice generation time from approximately six hours or longer to under one hour (more than 83%).

Technologies: Microsoft Access, VBA, Microsoft Word, Microsoft Excel, SQL, SQL Server, Access Reports, Terminal Server

Allianz – Incident Recording and Central Reporting

09/2017–01/2018; follow-up engagement 12/2020

Developed and subsequently adapted an Excel/VBA solution for decentralised incident recording. Generated and transmitted records via Outlook, imported them centrally into an Access database and analysed them using pivot tables, charts and reports.

Technologies: Excel, VBA, Access, Outlook, SQL

LDBV – Migration of an Access Application to SQL Server

02/2016–07/2016

Migrated data and tables from an existing Access application to SQL Server largely independently and adapted VBA code and queries. Retained efficient Access queries while moving time-critical processing to SQL Server queries and stored procedures.

Result / Status: Migration completed and the converted application subsequently put into production.

Technologies: Access, VBA, SQL Server, T-SQL, Stored Procedures

Energy Trading in Leipzig and Frankfurt – Modernisation of an Asset Management Application

02/2013–04/2016

Developed custom Office and database applications. Largely independently replaced an Excel-based power-plant asset management tool, whose calculations had become increasingly slow, with an Access/SQL Server database solution. Also provided reporting and ongoing application support.

Result / Status: Centralised data storage, improved data quality, fewer errors and faster calculations.

Technologies: Access, Excel, VBA, SQL Server, Oracle, C#/.NET, SSRS, SSIS

PLAN.NET / Serviceplan – Online Advertising Campaign Planning

01/2012–05/2014

Led the technical work and played a principal development role in an Access/SQL Server application replacing an Excel/VBA planning tool. Database modelling, user interfaces, integration of other systems, CSV output for invoicing and management reporting; coaching and code reviews with another developer. Introduced SVN and development tools.

Result / Status: Implemented technically but not put into production following a subsequent organisational decision.

Technologies: Access, Excel, VBA, SQL Server, SVN, ODBC, CSV

IKEA – Financial Application for Supplier Loans

05/2010–09/2010

Enhanced an existing Access/Oracle financial application for loans and credit facilities for suppliers. Business-driven improvements focused on usability. Developed reporting functionality with dynamically defined user filters connected by AND/OR conditions.

Technologies: Access, VBA, Oracle, SQL, PL/SQL

E.ON Bayern – Balancing Group Analysis and Excel Automation

04/2007–03/2008

Developed Access/VBA solutions to convert, validate and analyse distribution network operator data from Excel, CSV and EDIFACT in SQL Server. Developed Excel automation for recurring manual data preparation.

Result / Status: A recurring monthly task taking around two days was reduced to approximately two minutes using a tool developed in two days.

Technologies: Access, Excel, VBA, SQL Server, T-SQL, EDIFACT

E.ON – Performance Tuning of Address Data Reconciliation

10/2001–03/2003

Took over a slow Access/VBA application for reconciling address and billing data from SAP IS-U and Oracle. Optimised it using indexes, temporary tables, improved matching logic and scheduled Oracle data imports; data was then matched locally in Access.

Result / Status: Processing time originally around 12–16 hours, initially reduced to 60–90 minutes and ultimately to around ten minutes for the actual matching after data preparation.

Technologies: Access, VBA, Oracle, SAP IS-U, ODBC, SQL

Diakonisches Werk Bayern – Business Applications

10/1996–12/1998

Developed several production applications, including central address and membership-fee administration, residential care management, service billing, statistics, financial accounting and banking interfaces, and OLAP reporting. Within a team of three to four developers, quickly assumed a technical lead role and responsibility for subprojects. Standardised code, improved maintainability, and introduced a consistent, user-friendly interface design.

Result / Status: Applications deployed to production, with substantial qualitative improvements in maintainability and usability.

Technologies: Visual C++, MFC, Visual Basic, Access, VBA, SQL Server, ODBC, COM/OLE, Crystal Reports, TM1

Additional Experience

Additional Databases and Development PostgreSQL, Informix, DB2; C#/.NET, Delphi, Visual Basic and C/C++ (partly from earlier projects).

Reporting and Integration Power BI, Power Query, occasional SSRS/SSIS, Crystal Reports (earlier project experience), ETL, CSV, XML, JSON and EDIFACT.

Education and Languages DV-Kaufmann vocational qualification (IHK). German: native; English: good working proficiency.

Professional Development Regular attendance at Access developer conferences and workshops on Office and database development.