

Dave Yilling

SOFTWARE DEVELOPER

Apex, NC - Email me on Indeed: [indeed.com/r/Dave-Yilling/02c32afe27f74ffa](https://www.indeed.com/r/Dave-Yilling/02c32afe27f74ffa)

Software developer with more than 15 years of enterprise application software development experience and a proven track record of identifying areas of improvement, designing effective solutions and implementing successful outcomes.

- Performance tuning
- Usability enhancement
- Reports development
- Accuracy improvement
- Analysis and design
- Implementation and testing

Authorized to work in the US for any employer

WORK EXPERIENCE

SOFTWARE DEVELOPER

VERTEX, INC - Sarasota, FL - 2000 to 2016

SOFTWARE DEVELOPER, VERTEX, INC., Sarasota, FL 2002 - 2016

Implemented changes in the form of repairs and minor enhancements to the following products: Vertex Provision and Vertex Income Tax Domestic. Created and modified the source code for the business logic, the controllers and the services layer. Repaired and enhanced the data layer by adding and maintaining SQL statements and stored procedures.

Worked in Microsoft C++, MSSQL, Visual Basic

Enhancements:

Provision calculation performance: Calculation performance was slow due to processing cumulative temporary differences (CTDs) during each run. Performance was improved by reworking the Provision calculation engine to perform the CTD calculation only with a triggering event by using the same strategy as was used for reports performance and interim rollover performance described below. Preliminary results showed an improvement in the provision calculation speed for subsequent reporting periods of 20 – 53%.

Provision reports performance: Consolidated and worldwide reports were taking an excessively long time to load. One of the reasons for the performance hit was loading report data one entity at a time. Performance was improved by tailoring the same approach as was used for the interim rollover performance to the loading of reports data for the entities. The other reason was an extraneous set of iterations which were necessary only for an old implementation not used by the later reports. This code was modified simply to avoid the extraneous iterations. The time required to load consolidated and worldwide provision reports was improved by 40 – 97%.

Interim rollover performance: While the user could select multiple entities for interim rollover, data from the source period was being rolled one entity at a time. The code was reworked so that the read/write was performed in batches of entity data. The core of this solution was utilizing as a template the team's standard approach to load 8000-byte fields into stored procedure parameters. Interim rollover performance was improved by 23 – 28%.

Prior-year adjustments usability: The prior-year adjustments feature was cumbersome from a user's point of view. The functionality was improved by broadening the types of data that can be selected, i.e. temporary, permanent, credit, etc.; providing popup messages; adding validations; adding caching to allow for users to reverse previous true ups; eliminating memory leaks which were preventing report data from loading; and adding flagging to the key change event (dataset item) allowing prior-year adjustment changes to flow to

cumulative temporary differences, beginning cumulative differences, tax attributes, tax logic factors and tax destination codes.

Override report: Customers expressed a need for an override report for cumulative temporary differences and tax attributes. The Override Report was implemented and displayed beginning balance and prior-year valuation allowance for CTDs and tax attributes and the national deferred beginning tax rate for CTDs.

Domestic M-3 improvement: The M-3 feature had needed improved accuracy for years. The code was reviewed and modified resulting in the improved accuracy of the single, legal and consolidated calculations and reports. A key improvement was the implementation of new methods to provide an algebraic sum of rolled-up tax differences at the consolidated-entity level.

Integration with the International Compliance application: Enabled obligation structure set up to process foreign entities. Updated the suite-level component to disallow certain activities appropriate only for the Domestic module. This work also included enhancing the suite-level UI components to accommodate the International application.

Flexible apportionment project: Implemented the reports code and the server-side code which supported the new user interfaces. This feature gave users the ability to customize the apportionment of the income to the various states in which they operate.

Export feature: Implemented the server-side code and the first iteration of the client-side code for the export feature which allowed users to export certain types of data from Vertex Domestic and Provision.

New and enhanced reports: All remaining enhancement work during this period consisted of implementing new reports and adding detail to existing reports. The approach to implementing these reports was to load a vector of data according to a format defined by an XML file provided by the Content development team. Sorting of the data was accomplished through the generic sort algorithm (algorithm.h). The reports were in the form of single-entity, summary or spread.

CONTENT DEVELOPER

ARTHUR ANDERSEN TAX TECHNOLOGY ENTERPRISES - Sarasota, FL - 1994 to 2000

Implemented tax logic by researching changes to tax forms and instructions and then creating/updating Lotus spread sheets through an internally-developed Lotus-extension application. Used an internally-developed tool to map fields to form images for display, context, tab order and drilling.

Functional design for Joyce and Finnegan: Expanded the design of the scheme for performing combined state income tax calculations to accommodate the Joyce and Finnegan rules.

EDUCATION

BACHELOR OF ARTS in ACCOUNTING

UNIVERSITY OF WEST FLORIDA - Pensacola, FL
1994

SKILLS

C++ (10+ years), SQL (10+ years), T-SQL (5 years), Visual Basic (10+ years), Java (Less than 1 year), XML (7 years), C# (Less than 1 year)

LINKS

<https://www.linkedin.com/in/dave-yilling>

ADDITIONAL INFORMATION

SKILLS & ABILITIES

Languages: C#, Framework Class Library, Java, C/C++, SQL, T-SQL, Visual Basic

Operating Systems: Windows 10, Windows Server 2008, Windows 7 Enterprise

Architecture: COM+ and ATL

IDEs: Visual Studio 2015, SQL Server Management Studio, IntelliJ IDEA

Database Engine: SQL Server

Version Control: MKS Integrity

Tracking Systems: Axosoft-OnTime, Lotus Notes