

Technical Skills

Likes: c# canjs jquery domain-driven-design service-bus shuttle messaging sql-server cqrs vue.js reactjs angular azure-devops
Dislikes: webforms wpf silverlight orm ruby scala java go c++ python ruby-on-rails

Experience

Specialist Developer – Johannesburg Stock Exchange / EQPlus
c#, sql-server, shuttle

Jan 2019 → Current

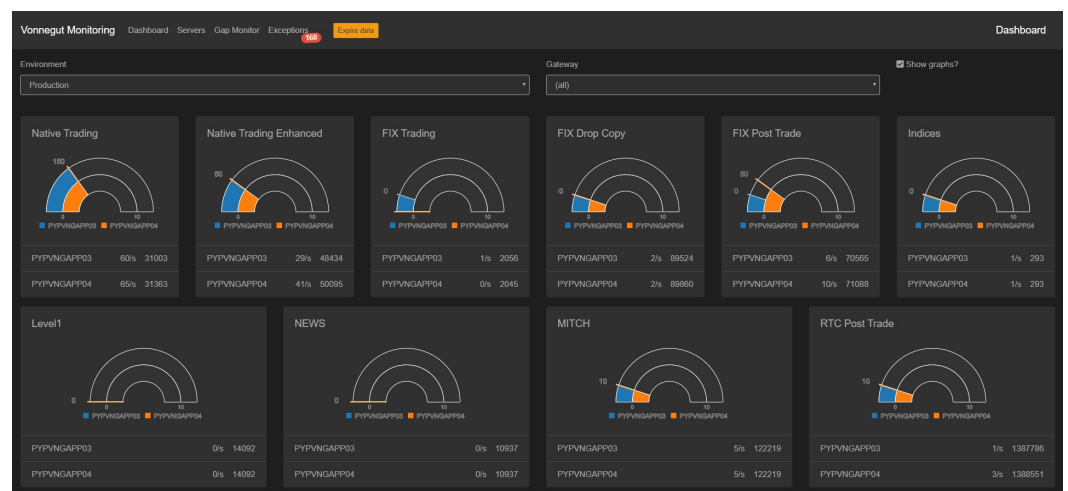
As a member of the monitoring team network packets (TCP/UDP) are captured and reported on.

Notable achievements:

Fixed TCP stream assembly that had been incorrectly implemented which subsequently required the reprocessing of messages since the system inception. This was roughly 3 years of data.

Removed redundant storage of empty buffer bytes on raw packets which resulted in a saving of about 50% disk space. The daily raw packet compressed files are gigabytes of data so that made a difference.

Implementation of monitoring / dashboard system (using a CanJS front-end, Sql Server data store, .Net Core web-api) for the relevant servers:



- message throughput rates (per second)
- network adapter availability through the WinPCap driver
- file creation to ensure correct system functioning

Refactoring of a gap monitor that subscribes to UDP packets and picks up gaps in the sequence. These gaps were integrated into the above-mentioned monitoring front-end.

In August 2019 I moved to the surveillance team where we have been using Azure DevOps since December 2019. I have assisted the team in moving our source over to Git.

Developer – Seбата

Mar 2016 → Jan 2019

webforms, entity-framework-6, sql-server, shuttle, domain-driven-design

I started out contracting through EQ Plus / Atos to Seбата. Contracting directly to Seбата from 1 August 2016.

Responsible for development on the billing module for an enterprise management system used by municipalities.

Notable achievements:

Implemented a domain model for the billing system and removed countless stored procedures. Introduced a messaging architecture on RabbitMQ using Shuttle.Esb and related components which enabled processing of any number of accounts where previously the system struggled to produce even a minimal set.

Demonstrated a single page application accessing a .Net Core web-api proof-of-concept running on Linux and had a minimal CanJS front-end to start a billing run. The back-end services were running as .Net Core console applications hosted on systemd as units. The data base was still a Windows-based Sql Server running on the host.

Reason for leaving: Seбата moved to Centurion

Solutions Engineer – MultiChoice Support Services (Pty) Ltd
shuttle-esb, c#, asp.net-web-api, ember.js, node.js, sql-server

Feb 2013 → Feb 2016

Responsible for the development of the front-end framework that interacts with a webMethods back-end and have also fulfilled the role of team lead and stand-in scrum master.

Notable achievements:

Used node.js to host the static ember.js site locally on the user's machine which would automatically update itself when a new version was released.

Introduced messaging using Shuttle.Esb open-source project:

- In the front-end framework we use it to co-ordinate cached data changes among the load-balanced application servers.
- The CRM team had tremendous issues with notifications to the webMethods back-end and their implementation would hang every-so-often. The offending code had been replaced by a Shuttle.Esb component that simplified the implementation and immediately resolved the issue.
- Shuttle.Esb was also implemented in the customer self-service side of things as well as in an Integration Framework for a third-party system.

Reason for leaving: in the process of emigrating.

Developer – Oz Technologies
php, mysql

Jul 2012 → Jan 2013

I was initially hired to assist in the redevelopment of existing PHP systems in C#. However, the business need changed and I ended up working with PHP and MySQL.

Reason for leaving: Since these technologies are not my focus I decided to seek employment elsewhere.

Senior Consultant – Ovations Technologies
c#, sql-server, domain-driven-design, shuttle-esb

Aug 2010 → Jun 2012

I was placed at Zurich insurance where I had to maintain an existing document indexing system that I eventually redeveloped.

Notable achievements:

Implemented a messaging system using Shuttle.Esb to replace the document indexing system which ended up providing much better visibility w.r.t. to the document indexing process. The system is also remarkably stable.

Reason for leaving: received interesting offer from Oz Technologies

Developer (contracting) – iSolve
c#, sql-server, html, jquery, nservicebus

Jul 2009 → May 2010

I started out at insurance company Glenrand MIB (now owned by Aon) where I rewrote a premium calculation system that has a composite UI and made use of NServiceBus. The new system outperformed the existing system by many orders of magnitude and it went live after only 6 months of development with no more than 3 resources on the project at any one time.

I also helped out at Avis RAC while they were in a transitional phase w.r.t. resources.

Reason for leaving Glenrand: end of contract / project

Reason for leaving Avis RAC: Avis appointed permanent affirmative action candidates.

Developer (contracting) – InSource
c#, sql-server

Dec 2008 → Jun 2009

I was placed at Barone, Budge and Dominick (now called BBD) where I assisted in the development of a finance system for Sasfin. This was quite a large team of around 20 folks and the project was already a year behind schedule. After my 6 month contract ended I was offered permanent employment but did not feel comfortable with the solution and decided not to accept.

Developer – Qualica Technologies
c#, sybase, jquery, asp.net-mvc

May 2008 → Oct 2008

Solution architecture and re-development of 1Time web application. The existing application was written in Perl with a Sybase database. This had to be re-developed in C#.

Reason for leaving: the environment was not for me.

Developer (contracting) – Lucid
c#

Feb 2008 → Apr 2008

Maintenance of existing solutions and ad-hoc additional functionality for First National Bank (Home Loans).

Reason for leaving: the environment was not for me.

Developer (contracting) – Rand Mutual Assurance
c#, asp.net-ajax, wcsf, wssf

Mar 2007 → Jan 2008

Re-write of claims system.

The actual development of the system never really got off the ground so I spent quite a bit of time on research and architecture of the proposed re-write.

Reason for leaving: the project never really got going (so mostly boredom).

Sabatical
vb6, vb.net, c#

Jan 2003 → Feb 2007

During this time I completed my MCSD for VB.NET and created a code generator that I intended to market as a product.

I also performed some ad-hoc contract work.

Developer (contracting) – Liberty Life
vb6, asp-classic

Jan 2002 → Dec 2002

After I returned from Saudi Arabia I was contacted by Liberty and asked to contract with them again. This time around I developed various smaller systems including an auto-update mechanism.

Reason for leaving: I needed some time off.

Developer (contracting) – Algosai Information Systems (Saudi Arabia)
vb6, ms-access-2000, excel-vba

Jun 2001 → Nov 2001

Redeveloped a budgeting system.

The existing system was a huge Excel spreadsheet. This spreadsheet was used to perform budgeting and determine royalties. There was a previous attempt to re-write it in PowerBuilder that took a year and eventually was abandoned. I managed to write a successful system within 4 months. After that I also kicked-off the writing of an export managed system.

Reason for leaving: end of contract / culture shock :)

Developer (contracting) – Liberty Life
vb6, rational-rose, sqlbase, sql-server, iis

Oct 1998 → May 2001

- Coding
- Development of Component-based Application Architecture
- Mentoring of Liberty staff

Reason for leaving: opportunity to work in Saudi Arabia

Developer (contracting) – Eikon Software
vb5, rational-rose, sql-server

Jul 1998 → Sep 1998

I was placed at Liberty Life and temporarily at Pretoria Portland Cement.

The Liberty project requirements were not yet in place when we arrived and the entire project team was asked to be placed elsewhere resulting in me maintaining a reporting system and a chemical analysis simulator.

Reason for leaving: I started directly contracting to Liberty Life

Developer (contracting) – QData Consulting
vb5, ms-access, vb4

Nov 1996 → Jul 1998

I was placed within QDC (QPlan Division) to continue my work on QPlan (maintenance management system). Just before I left I did a short stint at Nedcor / American Express.

Reason for leaving: was looking out for something new.

Developer (contracting) – TopData Consulting
vb4, msaccess, mapi

Jul 1996 → Nov 1996

I was placed at the South African Forestry Company Limited where I maintained an Access 2.0 application along with implementing a MAPI application.

Reason for leaving: somewhat of a bait and switch scenario and I ended up not working on what was agreed upon.

Developer (contracting) – QData Consulting
vb3, vb4, msaccess, regis, crystal-reports

Jul 1995 → Jul 1996

Initially I worked at Glen Agricultural Institute (in Bloemfontein) on a ground preservation system and then moved over to Johannesburg to work on QPlan for QData Consulting.

Reason for leaving: this was purely a rate disagreement.

General – Netwise*Mar 1994 → Jun 1995*

novell, lantastic, windows-3.1, windows-for-workgroups, msoffice, wordperfect, lotus

This was my first job and did not include actual professional software development.

I was involved with network installation, sales (software and hardware), and general IT support.

Reason for leaving: opportunity to actually get into software development.

Education**N.Dip: Computer Data Processing – Technikon OFS***1991 → 1993*

cobol, turbo-pascal, information-systems, database-design, project-management

The course was focused on structured programming using COBOL and together with information systems comprised the major subjects.

I managed to complete 6 out of the 12 subjects with distinction.

Certifications**Microsoft Certified Solution Developer .NET (MCP ID: 1090158)***2002 → 2003*

vb.net, sql-server, web-services

Microsoft Certified Solution Developer VB 6 (MCP ID: 1090158)*1999 → 2000*

vb6, sql-server

Microsoft Certified Solution Developer VB 5 (MCP ID: 1090158)*1998 → 1999*

vb5, sql-server

Projects & Interests**Stack Overflow** – <https://stackoverflow.com/users/324157/eben-roux>*Apr 2010 → Current*

Written 496 answers. Active in domain-driven-design, asp.net, c#, esb, windows-services and 9 other tags.

Shuttle Open Source Repositories – <https://github.com/Shuttle/Shuttle.Esb>*Oct 2014 → Current*

c#, servicebus, event-sourcing

I have a number of open source projects on GitHub:

- Shuttle.Esb service bus
 - Shuttle.Core infrastructure packages
 - Shuttle.Recall event sourcing
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Public Artifacts**Shuttle Service Bus - Presentation — InfoQ** – <http://www.infoq.com/presentations/Shuttle-Service-Bus>

Eben Roux introduces messaging using a service bus, explaining the differences between WCF, web services and a service bus, and demos how Shuttle handles messages.

My YouTube channel – <https://www.youtube.com/channel/UCtaK4nTyVCs7rc5uEul6zZw>*Aug 2018*

various

On this channel you will find videos that will assist you in your everyday full-stack software development when using C#, Sql Server, Html, Domain-Driven Design, and so much more.

Others**Released self-published book: Hard Edges** – Domain-Driven Design*Oct 2017*

domain-driven-design, object-oriented-analysis

Background – Background*Jan 1995*

- Strong problem-solving skills
 - Object-Oriented Modeling
 - Domain-Driven Design
 - Software Design Patterns
 - Patterns of Enterprise Application Architecture
 - Service-Oriented Architecture
 - Event-Driven Architecture
 - Enterprise Service Bus
 - Database Design & Querying
 - Command / Query Responsibility Segregation (CQRS)
 - Messaging
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Readings

Patterns of Enterprise Application Architecture – Martin Fowler – <http://www.amazon.com/Patterns-Enterprise-Application-Architecture-Martin/dp/0321127420%3FSubscriptionId%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverflow108-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D0321127420>

Applying Domain-Driven Design and Patterns: With Examples in C# and .NET – Jimmy Nilsson – <http://www.amazon.com/Applying-Domain-Driven-Design-Patterns-Examples/dp/0321268202%3FSubscriptionId%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D0321268202>

Implementing Domain-Driven Design – Vaughn Vernon – <http://www.amazon.com/Implementing-Domain-Driven-Design-Vaughn-Vernon/dp/0321834577%3FSubscriptionId%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D0321834577>

Domain-Driven Design: Tackling Complexity in the Heart of Software – Eric Evans – <http://www.amazon.com/Domain-Driven-Design-Tackling-Complexity-Software/dp/0321125215%3FSubscriptionId%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D0321125215>

Refactoring: Improving the Design of Existing Code – Martin Fowler, Kent Beck, John Brant, William Opdyke, Don Roberts – <http://www.amazon.com/Refactoring-Improving-Design-Existing-Code/dp/0201485672%3FSubscriptionId%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D0201485672>

Test Driven Development: By Example – Kent Beck – <http://www.amazon.com/Test-Driven-Development-By-Example/dp/0321146530%3FSubscriptionId%3DAKIAIIBINOD46VC3JCLQ%26tag%3Dstackoverfl08-20%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D0321146530>

Tools

First Computer: Commodore VIC-20
Favorite Editor: Visual Studio / VS Code