redgate







# redgate

#### THIS BOOK BELONGS TO





Here it is. The thing you've been waiting for, even if you didn't know it was coming.

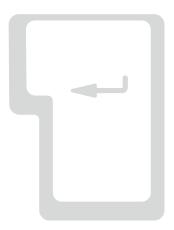
No, not *this*. This is just the preamble.

We're talking about the second volume. The difficult sophomore album. The SQL.

Some people said that the brand was a bit muddy the first time round, so this edition comes with added LUX.

Come on in – the water's lovely.





# What's the point of this book?

### Good question.

# What *is* the point of this book?



If it has any point at all (which is debatable), its purpose is to capture the mysterious essence of the Red Gate brand and present a flavour of it in book form. A soupçon of our company, if you will. Like many things at Red Gate, it has no real point; it exists mostly because a bunch of people met in Darth Vader and thought it might be a fun thing to do for a while. And, like everything we do at Red Gate, it's an alchemical product of collaboration, attention to detail, heated debate, lots of meetings, and joyful horse trading. To be honest, it's mostly just a rehash of the first book.

Weird things have happened since we launched the first Book of Red Gate with an initial print run of just a few hundred copies. It was primarily intended to give longserving employees a few in-jokes to laugh at, and to help new Red Gaters absorb some of our culture. We didn't think anyone outside of the office would get it, or like it. But now there are 7,000 copies out in the wild, the vast majority in the hands of people who don't work here. Our customers read it. People stumble across it and decide to apply for a job here, and keen applicants pore over it in the name of research. A lot of people flick through it and tut at our childish sense of humour. The genesis of the BoRG says a lot about Red Gate. A few years ago, during a meeting of the internal team that was redoing our website, it was suggested that, as a step toward a website, we should first attempt a book. And not just a brand bible\*, with font sizes and permissible Pantone numbers, but a book that would pull together as many aspects of Red Gate as possible. From the number of fag butts generated per division to the adventures of Spider, the company piggy-bank. The book would embody the spirit of who we are.

There was an embarrassed silence in the meeting, and a fair few puzzled faces. No one thought it was a good idea.

But the book went ahead anyway, and ended up serving quite well a number of purposes it was never intended to serve. Nearly three years later it looks rather out of date, like a bath in need of re-enamelling.

The first edition still serves as the Red Gate cultural Haynes manual, but – let's be honest – no one smokes cigarettes around here any more, do they? So it needed updating, and that's what we've aimed to put on the page: a snapshot of Red Gate in 2012. It's mostly just a rehash of the first book, to be honest. But what it still hasn't become is a website. The larval stage is very long in this one. Our People Team (formerly the HR department) now refer to certain incidents as "a page 44 problem", so we've kept page 44 in the same place. In fact, all of the company values from the original edition remain. People come and go, projects rise and fall, dashes dash in and out of fashion, but the company's values endure. Which is why we've reprinted them (with one small difference and one even smaller one\*\*). It's still mostly just a rehash of the first book, though, to be honest.

If this new edition of the Book of Red Gate manages to provide an entertaining surf over the Red Gate seas, then its primary job is done. If it gets repurposed as a monitor stand, perhaps, or a temporary ping pong bat, then it will have gone that extra mile and embodied our eleventh value (see p. 128).

Enjoy your soak, now!

If this book does not prove satisfactory to you in every way, please let us know and we will endeavour to provide you with a full refund. This does not affect your statuesque tights.

\* For up-to-date brand guidelines see p. 133

\*\* A bottle of Wray & Nephew White Overproof Rum to the first correct respondent. Please send answers to design@red-gate.com before Oct 32<sup>nd</sup>.









# You will be reasonable with us.

# We will be reasonable with you.

We're all trying to treat each other as we would like to be treated in the same circumstances. Sometimes the circumstances are difficult, but we will all still be reasonable.





"I was amazed before my first day about the response time to my e-mails: I sent a CV, I received an answer the following day with an exercise to do. I sent the assessment back, and again, I got an interview arranged on the following day. I came for the interview and I got told the outcome the same day. That was truly unbelievable." New starter

"You can count on a feeling almost weekly if not sometimes daily of 'Wow, this is amazing!" Red Gate employee

"Tech support & facilities people have been ace at sorting out my equipment, software, and lots of other hassles I came up with"

New starter

"Have a nice weekend and take joy in the fact that it was your outstanding customer support and personal call that got you my business. Have an extra pint for a well done job! ;)"

Niklas Winde for Steve Harris

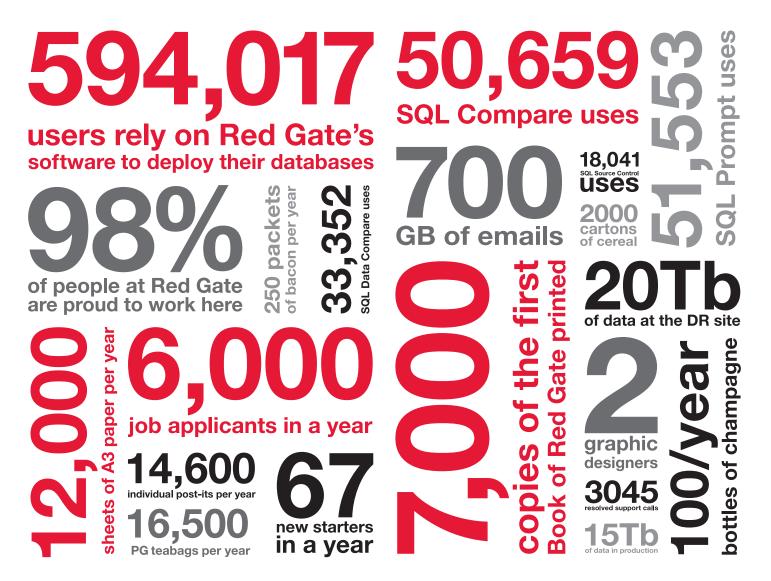
"You should feel good that you have helped a struggling developer get closer to his goal of world domination... Thank you for all of your help, if ever I am in Cambridge I will buy you a pint or 6!" P Gossip

"Your excellent service level is highly appreciated!"

Gary Smeulders for Michael Austridge

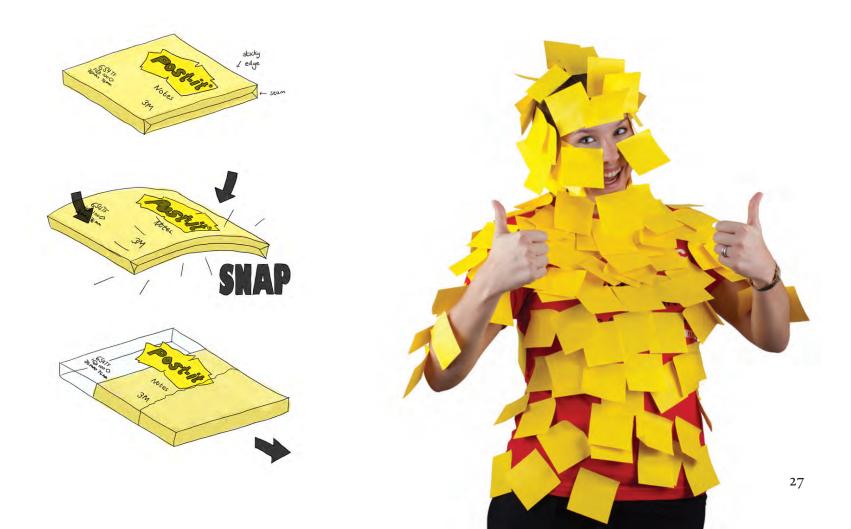
"Lovely offices, very welcoming and friendly people"

Interviewee



### How to Open Post-it Notes

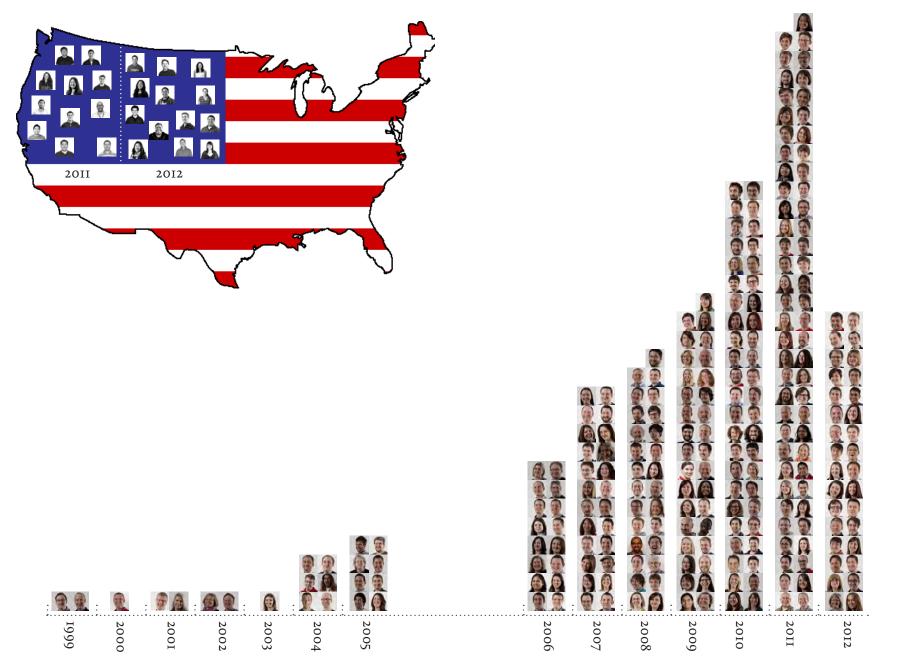
### **Emergency Post-it Note**



What we believe in	#2/13

# Attempt to do the best work of your life.

We'd like you to achieve your own greatness and to be all that you can be. We'll try hard to allow that to happen and we'd like you to try hard too.







Everybody gets involved

Moustaches

Black tie for the Christmas party

Company-wide meetings

Everyone can have a say

People change their minds about stuff

Fast-flying table tennis balls

The fact that we don't have a plan for everything

The hum of the canteen at lunchtime

Impromptu gun fights

# **About Red Gate**

**Some Things We Like** 

**Ενειγροά** gets involved



#### 

**Shout Bed Gate** 

Some Things We Hate

The hum of the canteen at lunchtime

The fact that we don't have a plan for everything

Fast-flying table tennis balls

People change their minds about stuff

Company - wide meetings

Ενειγοπε can have a say

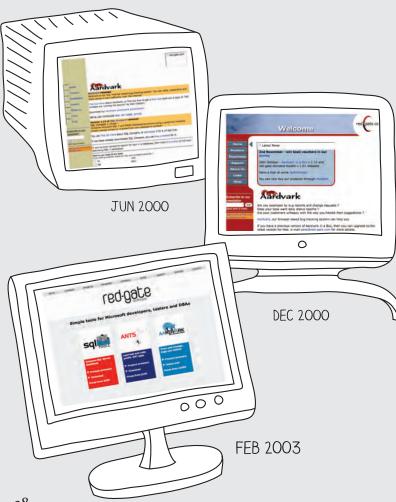
Black tie for the Christmas party

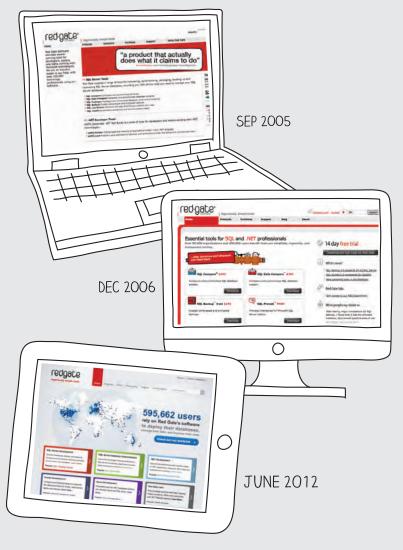
Noustaches

# Motivation isn't about carrots and sticks.

Constant oversight and the threat of punishment are incompatible with great, fulfilling work. We believe in creating appropriate constraints and then giving people the freedom to excel.

## **Website Evolution**





## Code of the Year 2012

This year, we're awarding a Golden Bracket each to SQL Test and to a successful implementation of the Fisher-Yates shuffle.

#### The Golden (left) Bracket

#### SQL Test - the whole darn story

**PASS, Seattle, November 2011** – Friend of Red Gate Sebastian Meine visits Red Gate booth: "Want to see our amazing tSQLt framework?" David A: "Ah yes, you asked me that last year." Rob Sullivan, another FoRG and Oklahoman about town, is also present at the demo. "Hey, why doesn't Red Gate front-end this thing?" "Hell yeah!"

*I week later* – David talks to Kevin B. Kevin recruits Justin C, Aaron L, Michelle T, Tom C and Andrew D for coding, testing, design, and marketing.

2 weeks later – David invites Sebastian and his business partner Dennis Lloyd to join the guys for Down Tools Week. Secretly, David and Tom also prep a lot of work in advance and survey 600 customers to find out what they want from a unit testing interface.

**Down Tools Week** – November 2011 – C.o.d.e.c.o.d.e.c.o.d.e.c.o.d.e.b.u.g .d.e.c.o.d.e.c.o.d.e.c.o.d.e.b.u.g. SQL Test 1.01 ships half-way through the week. Sebastian and Dennis are on hand to check and sign off each new build. **December 2011** – Kevin and Aaron slay some mighty bugs and then recruit David S for an afternoon, who provides SSMS 2012 and SQL Compare support.

**January 2012** – SQL Prompt teamsters Michael U, Robin H, James A, Joachim C and Paul S squish remaining bugs and add polish. Pete W from the Agency adds groovy logo. Andrew D writes web pages and ads.

*For the rest of 2012* – *Simple Talk and SQL Server Central publish series of articles promoting SQL Test, the free tSQLt engine, and the wisdom of unit testing.* 

**The result:** a 470% uplift in downloads of tSQLt and a productionquality tool that rounds out Red Gate's end-to-end agile development story. All in three-months-and-a-bit. Test that!

**The uplift:** six times more people now do unit testing on their SQL code than before, because Red Gate did what it does best: delivered an ingeniously simple answer to a complex problem.

The moral: to get the most out of Down Tools Week, prep first!



#### The Golden (right) Bracket

Using dice to speed up SQL Source Control

**Jeff Foster and Matt Turner write:** We added the following code (using the Fisher-Yates shuffle) to our code base, and SQL Source Control parsed files 50% faster. Why on earth does that happen?

// Shuffle the files.

Utils.InPlaceShuffle(files);

In SQL Source Control we maintain several records of the database format. We have the working base (a copy of what the user currently has on their system) and the transient (the most up-to-date version of the database available from source control). Each of these folders maintains a structure of SQL files that are parsed to work out the changes to the database.

From using ANTS Performance Profiler, we were aware that one of the most time-consuming parts of the process was parsing the SQL files from disk. We wrote a memoization layer which maintained a mapping of File to Parse Tree (keyed on the SHAI hash of the file). Our thoughts were that this should increase performance dramatically, because now when we parsed a file for a second time the cost should be greatly reduced, as we were just returning a value from a dictionary. However, this did not result in any significant speedup.

With a bit more thought, we realised that when SQL Source Control connected to a database for the first time, it concurrently parsed both the working base and the transient. The following block of code (greatly simplified) is executed concurrently by two threads:

```
void Parse(IEnumerable<String> files) {
    foreach(var file in files) {
        ProcessFile(file);
    }
}
AST ProcessFile(string file) {
    If (MemoizedResults.Contains(file)) {
        return MemoizedResults[file]
    } else {
        var ast = ParseFile(file);
        MemoizedResults[file] = ast;
        Return ast;
    }
}
```

The order of files is the same in both cases and "ProcessFile" tries to look up the file in the dictionary, otherwise it parses it anew and then stores the result in the dictionary. Each thread was doing the same set of files in the same order, meaning that neither of them got a chance to read from the cache.

As an example, consider parsing the following set of files concurrently on two threads.

- $\{A, B, C, D\}$
- {A,B,C,D}

Both threads run along together, going at roughly the same speed, reparsing each file and never having the chance to use the memoized results. We recorded each cache hit using the feature usage reporting of SmartAssembly and saw a disappointing hit rate (0-5%).

But with the shuffle,

#### {B,C,D,A}

{A,D,C,B}

The files in red have already been parsed by the other thread, and thus the performance increases. Again, using SmartAssembly, we were able to see that the cache hit rate had increased to nearly 50%.

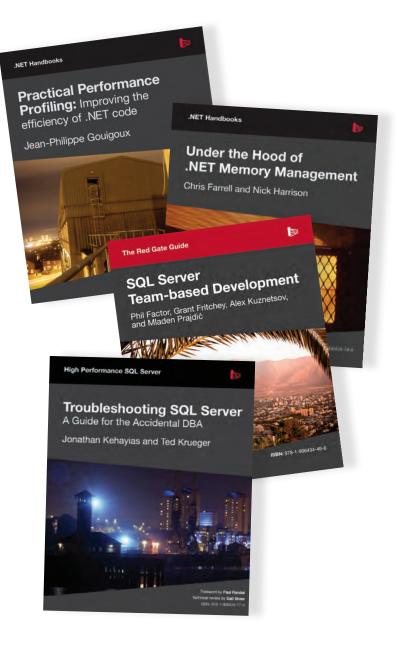
What we believe in	#4/13

### Don't be an asshole.

No matter how smart you are, or how good you are at narrowly-defined tasks, there is no room for you here if you're an asshole.

## **Red Gate Books**







### Ask the Vending Machine

Dear NECTA Rondo vending machine,

Everyone is always talking about "lean" projects and "experimentation" and "the funnel", but I work on a legacy product with a complex codebase and a large number of conservative customers, and I'm not sure how to apply the principles of small batches and incremental releases to validate learning experiences.

How can I convince the team to be more with-it?

DBA Code Monkey



Dear DBA Code Monkey,

Select product. Temperature: 16.8 degrees.

NECTA Rondo vending machine

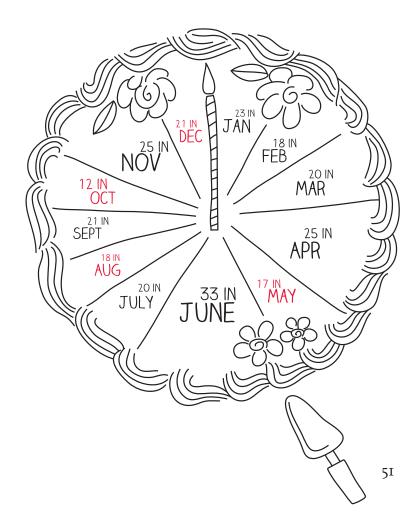
## Whose Shoes?



Answers on page 152

## **Our Birthdays**

We love birthdays at Red Gate. Birthday means cake! Here's when to expect the good stuff.



#### Across

I McGehee crossing city. (8)

**5** Small fruit dangerous when thrown up? (6)

10 Lively plaza is capital! (2,3)

II Morgan, perhaps, after release? (7)

12 Sanskrit goddess forged air. (3)

**13** Tanning device is pointless for one in the Sun? (3,2)

**15** They can guide those having a row? (5)

16 Average stay in SE10? (3)

17 Reinstallation of MSN failed - up in knots it sounds like! (9)

**2I** Cracked, go crazy where the goods are stored on board. (5,4)

**22** Goes finally to two hotels for quiet. (3)

**24** Endless hymn in theology class lass heard, third long song - for three examples of it here. (5) **26** What's said to get a measure of power? (5)

**28** Potter's friend's dodgy company lacking dash. (3)

**29** Supporter back in time to provide safe haven. (7)

**32** Backward, (developmentally disabled in part) but produces poem. (5)

33 Change gun after killing two kings.(6)

**34** Violent riot here - slash twice perhaps? (6-2)

#### Down

I Party's over and Heather has small requests for payment. (8)

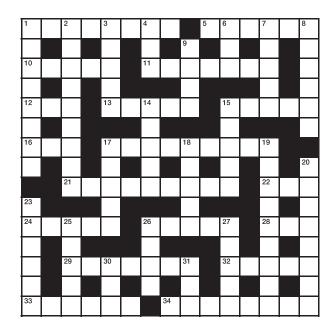
**2** Confused Caliph sat on type of road surface. (9)

**3** Zionist leader in disputed safe surroundings makes one unsettled. (5)

4 Umpire bereft after losing wager. (3)

6 Guide turns up for Ms Anderson shortly. (3)

8 Cordial sport? (6)



**9** Grass makes stag flip. (4)

**14** Prohibit jazz initially - then love stringed instrument. (5)

**15** Cops start to smell cove. (5)

17 Type of code inside telegram or semaphore. (5)

**18** Quick! Escape start of trouble. (5)

**19** Armed ship restored badly around Fourth of July. (9)

20 He wrote thrillers in Abersoch and Lerwick. (8)

23 Credit facility needs ironing out.(6)

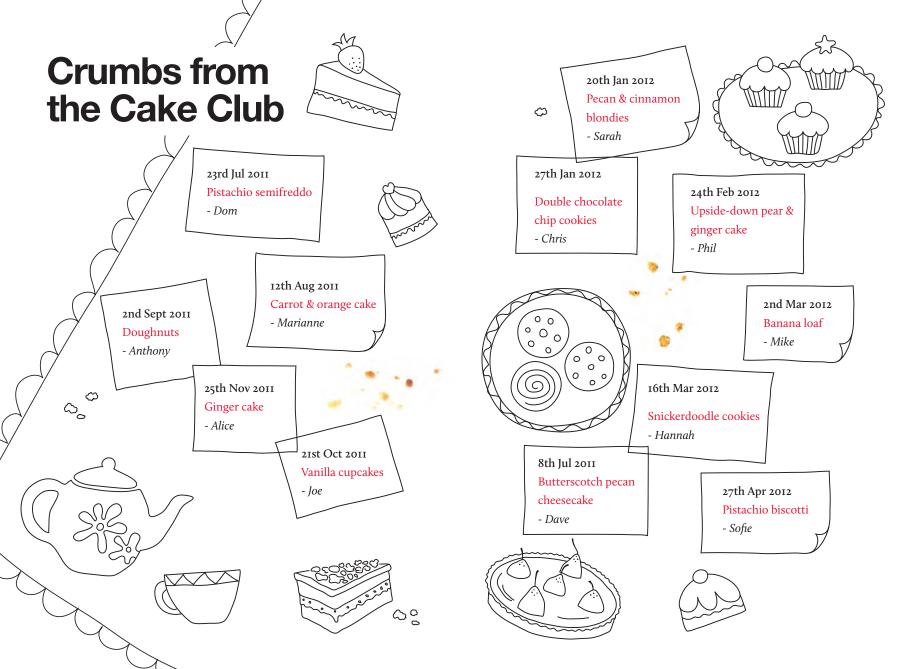
25 Primitive search engine? (5)

**26** After romance, Daniel initially pines, perhaps. (4)

27 Mormonism, it happened with his revelation. (5)

30 About five, man is collared. (3)

31 Sir! Sorry, my wrist hurts! (3)



## **Customer Map**

3-

## **Developer Interview**

#### Peter Cowan, Software Intern

#### How did you get interested in computing?

Back in the days when he was a consultant surgeon, my dad had a 486 PC. Instead of having a laptop, he would pack up his PC and bring it home, and I was just fascinated with this shiny box that he'd pull out. I'd sit with him and watch him work, doing this boring, mundane stuff. He'd be typing things up on Word, but I'd be fascinated with how it worked. I was with him when he'd upgrade the PC He'd take it apart, install Windows 95 on it, and he taught me as we went along. It wasn't too long before I started progressing beyond him, and I was the one teaching him. He's the one who taught me to build my first PC from scratch, and that was when I started saying, "This is my thing now, I'm going to go with it", and embracing it utterly.

#### How did you get started with programming?

I got started with programming with the web. The Internet was first made known to me from an early age, when I was about seven or so. My first introduction to what you could call programming was HTML, and then the natural progression was JavaScript, getting the pages to do something. Then I got interesting in Flash and dabbled around with a little bit of ActionScript. A little later, I got interested in PHP, which was also my first introduction to Linux, and I started messing around with open-source stuff. It was only really in university that I got proper programming training.

#### What was you first job writing code?

My first job writing code was last year in an internship in Oxford at a place called CoreFiling. I was working on their web applications, which are financial reporting software. I learnt about GWT, servlets, and loads of really cool Java features.

#### Are you working on any particular side projects?

I'm really interested in the Raspberry Pi – mine arrived recently. I had a list of possible projects from one of the guys who's running the Raspberry Pi project, so I'm hopefully going to investigate some of them.

### How would you summarise the essence of programming, beyond just the mechanics of programming?

To me, programming is limited by your own imagination. You can do more or less everything. If you have an idea, then there is enough support out there with libraries, projects, and people that you can go and hammer out code. It's the joy of being able to just build something. If you have an idea, unless it's something like solving the halting problem, then you can realise it in code, and you can actually produce something from it. The limit is more or less your imagination when it comes to code.

What we believe in	#5/13

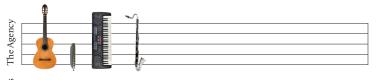
# Our best work is done in teams.

We work in groups and towards a common goal. The company is more important than the team, and the team is more important than the individual.

## **Red Gate Musicians**











Borscht for the Bewildered Self Help Through Soup

EAT UP YOUR SPAM

47 Hot Tips

for Flogging Viagra

Breaking Some Metaphorical

Marketing Omelettes

Everything

Everything

and

Else

ggs to Make Some Metaphorical

A Donut Is Just A Bun If It Doesn't Have a Hole: The Power of Emptys

#### I HATE YOUR SH\*TTY **WEBSITE**

THE REALLY LEAN STARTUP: **MAKE A FORTUNE** WITH NO PRODUCT AND NO TEAM FROM A PARK BENCH



I blog; you tweet;

he codes

Conjugating the Modern Workplace

**BI ANCHARD 4**:

Crowdsource the **Design for a Nuclear** Reactor: Stealing the **Wisdom of Millions** 

**Odd Socks?** You're Crazy!

Llamas Don't Sell Plugs:

78 Seth Speaks



Rewrite the rules of eCommerce



Aardvark Blancmange 213 Ways to **Combine Two Jarring Images** into an Arresting **Book Title** 

A Pile of Trite: Tweetin' Truisms The Godin Way

62



### Inside the Publishing Cell

	••••
Content delivery web development •	
Red Gate Developer bloggers •	
www.red-gate.com •	
www.sqlservercentral.com/forums	
www.simple-talk.com	
Guest bloggers •	
http://ask.sqlservercentral.com	
Red Gate Books	
www.sqlservercentral.com	
SSC / S-T / .NET Newsletters •	

📬 = Tom Randle - Conversation	_ = ×	¢
🥺 - 👰 🖵 🚚 - 🍇 Invite -		•
Tom Randle     Image: Compare the second secon		
Tom Randle • Morning Ben	7:47	•
Ben Challenor • Morning Tom	7:47	
Tom Randle → Good night?	7:48	
Ben Challenor → Yes. You?	7:49	
Tom Randle → It was OK. I stayed in.	7:50	
Ben Challenor • Your hair looks nice today.	7:50	=
Tom Randle <ul> <li>Thanks. Is that a new aftershave you're wearing</li> </ul>	7:50	
Ben Challenor → Yes. It's the new P.Diddy fragrance. I found it cheap at Portobello Road Market.	7:50	
Tom Randle ▶ Good call. Tea?	7:50	
Ben Challenor Lovely. Oh. We're out of the milk by the way.	7:51	
Tom Randle • What? It was your turn to get some.	7:51	
Ben Challenor → No it wasn't. I got the milk last time.	7:51	
Tom Randle You did not! I got the milk last time.	7:51	
Ben Challenor • Ooooh. You so did not. Fine, I'll just have black t	7:51 tea.	
Last Message received on 23/08/2012 at 8:17.		
	A	

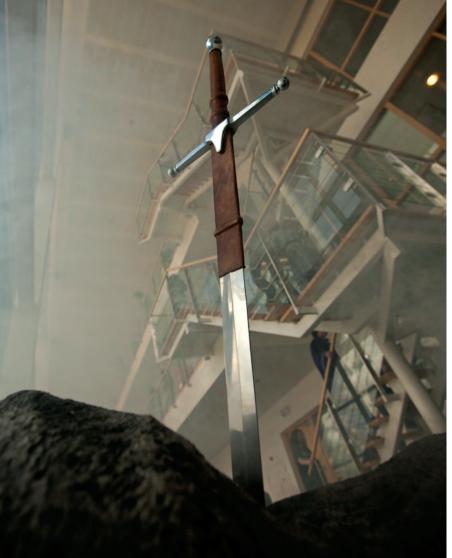


Ben Challenor - Conversation		x
😯 - 🔮 🖵 🥥 - 🍇 Invite -		-
Ben Challenor     Image: Constraint of the second sec		
Tom Randle Fine. Whatever. I'm going to have coffee. And a delicious chocolate bourbon with it.	7:51	
Ben Challenor → Errr	7:52	
Tom Randle • What?	7:52	
Ben Challenor • I ate the last one.	7:53	
Tom Randle • Grrrrrr. You are SO inconsiderate.	7:53	
<ul> <li>Ben Challenor</li> <li>Well, your typing is too loud and it's giving me a headache.</li> </ul>	7:53	
Tom Randle I can't believe you ate my biscuits. Why do you not respect my boundaries?	7:53	
Ben Challenor • I thought we were supposed to share everything.	7:54	ш
Tom Randle • What?! Communist!	7:54	
Ben Challenor • Fascist!	7:55	
Tom Randle → D'oh. I can't stay mad at you.	8:17	
<ul> <li>Ben Challenor</li> <li>LOL </li> <li>Me neither. Come on, let's pop out to Covent Garden and watch some of those amazing street acts.</li> </ul>	8:17	
Tom Randle Aces. I'll get me coat.	8:17	-
Last Message received on 23/08/2012 at 8:17.		

What we believe in	#6/13

# Get the right stuff done.

We admire people who get stuff done. While there's a place for planning, thinking, and process it is better to try - and try well - and fail than not to try at all.



The Red Gate Book of the Future: Coming Soon

# Ask the Coffee Machine

Dear Schaerer Coffee Machine,

I love my job, but sometimes the things I get asked to do seem a bit pointless, if not a complete waste of time. Last week, for instance, I had to make thirty-two minor updates to the website, blow up twenty-nine balloons for a practice keynote, design a t-shirt for a product team that doesn't exist, write positioning copy for a product we no longer make and make a 3-minute animated video for use in just one meeting. How can I make sure I'm doing what it says on p. 70 – "Get the right stuff done."

All Copied Out in Marketing



#### Dear All Copied Out in Marketing,

100% of our Italia Mocha Blend is sourced from Rainforest Alliance Certified Farms.

Schaerer Coffee Machine

## **Code Names**



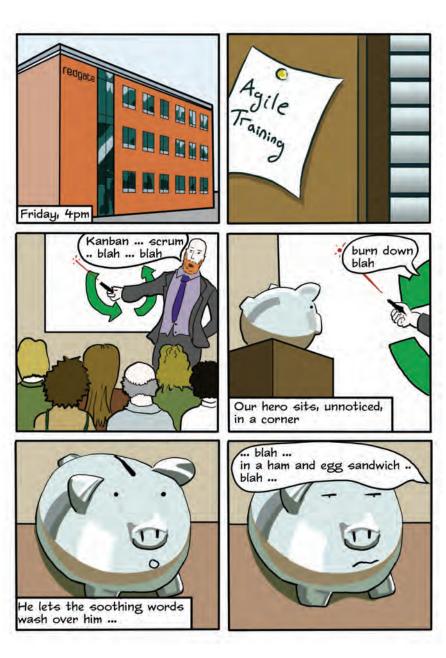


Bug tracking system **ANTS** Profiler Log Rescue ANTS Load DTS Compare Licensing Components SQL Compare SQL Packager The common components SQL Data Compare Website and intranet Update Client/Server Test Manager Virtual server application

## **Red Gate Clubs**



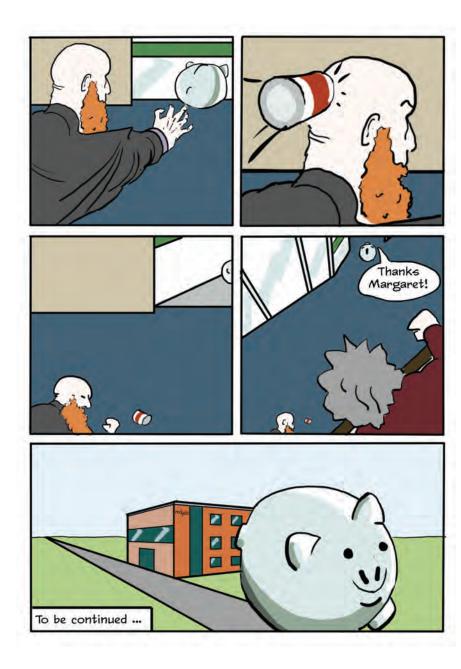








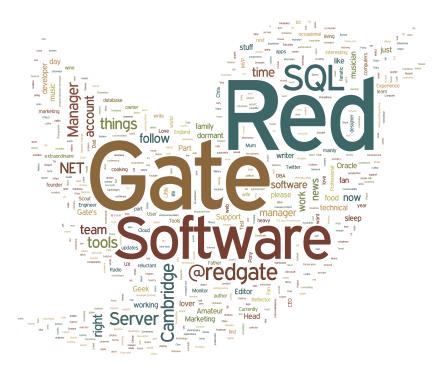




### Visible mistakes are a sing that we are a healthy organisation.

What we do is very difficult, the current situation is hard to understand and the future is uncertain. Mistakes are an inevitable consequence of attempting to get the right stuff done. Unless we can make mistakes visible both individually and collectively we will be

### **Biographies of Twits** who work at Red Gate



# **Free Lunch** This voucher entitles you to a free lunch at Red Gate. redgate Lunch is served betwen 12 and 2pm every weekday **Free Dessert Free Breakfast**

### **Friends of Red Gate**

	N.T. 1	1
Aaron	Ne.	Ison

Brent McCracken

Brian Kelley

**Buck Woody** 

Chris Leonard

Cory Smith

Cristian Lefte

Darren Lacy

Denny Cherry

Felipe Ferreira

Ike Ellis

James Johnson

Jeff Julian

Jim Bears

John Alexander

Jonathan Allen

Jonathan Gardner

Jorge Patricio Diaz Guzman
Ken Simmons
Louis Davidson
Mitchel Sellers
Pinal Dave
R.Raja Jegan
Rodney Landrum
Rodrigo Crespi
Satya SK Jayanty
Tim Radney

Tobiasz Koprowski

The FoRG+ are available for a chat and a chinwag about our tools pretty much anytime, but before you call them up, check with **friends@red-gate.com** to find out what time zone they're in.

### **Enemies of Red Gate**

The A14

David Hasselhoff

Melted choc-ices

The Combine

Inside-out umbrellas

The Great Old Ones

Rogues, footpads & vagabonds

Skynet

Daleks

Poorly-designed user interfaces

Head crabs

Recalcitrant printers

Treacle

Sock holes

Asbestos

Broken toasters

Moths and mothmen

Kitten-killers

Meanies

Baddies

Panics, moral and immoral

Slow swimmers in the fast lane

Trolls

Bicycle punctures

Hipster assassins

Some (but not all) ninjas

Monkeys dressed as pirates

Cold tea



# **Developer Interview**

#### Jeff Foster, Head of Software Engineering

#### How did you get started with programming?

When I was little, I was left-handed, which is the key to my entry to the programming world. I'm old, so I used a fountain pen, and dragged my hand across the page whilst writing completely illegibly, so I decided to get a computer. It was an Einstein or something like that, a very old computer with a 6502 processor. It had this thing called MOS, which was like a REPL for assembly code. My first taste of programming was probably a bit of BASIC on the Einstein, and maybe entering cheat codes by poking around in memory. Good fun times.

#### When did you start programming in earnest?

I had school projects when I was doing my A level in computing (not to be confused with computer science). I wrote some back-end system for an estate agent, which sounds really impressive, but my auntie happened to own an estate agency, so I could go in there and write some code, and it didn't really matter if it didn't work.

I think I managed to go all the way through university without writing a real program, as in something that's independently useful for someone else. You have to wind quite a lot further forward to see that. Even when I did my PhD, that was just solving a problem for myself.

#### How do you think your style of programming has changed over time?

When I left university, I could program perfectly! I was the only one ever running my own code, so everything was fine. I might need to rewrite it a hundred times, but generally when it worked it was pretty sure to work. Then I got a real job and realised that it had to work all the time, and other people had to have a bit of confidence in it when they were looking at it. So that was when I learnt that other people are reading your code, and that it needs to be good rather than just work.

### If you could tackle a single idea in programming or computer science, what would it be?

I think code should be live. At the moment, we interact with code quite statically, and that's not very interesting. We have compile-time relationships between two objects, and very rarely do we get that wrong. What we do tend to get wrong is the dynamic nature of objects, how they fit together. At the moment, the only way to explore that space is via a debugger or a test. What I want to see is that reified into a real, living organism. I want to have my code editable, not just at compile time but at runtime too.

What we believe in	#8/13

### No politics.

No gossiping, no intrigue, no pussy-footing around problems, and no telling people what you think they want to hear whilst privately disagreeing. We will be transparent in our dealings.









# Simplicity

When I was 16 or 17, I spent the summer holidays writing a screen-based application for a small software house. One of its screens had two scrolling lists, one on the left and one on the right. To move to the next screen, the user had to select an item from both lists and then hit 'next'.

To me, it seemed terribly inefficient to force the user to choose the two items one after the other. So I decided to streamline the interaction, allowing the user to choose the item from the left hand list using the shift and ctrl keys on the left hand side of the keyboard, and the item from the right hand list using the the shift and page up keys up on the right hand side. He could therefore use both hands simultaneously - efficiency! yay! - and choose both items and move on to the next screen, all without any unnecessary tabbing.

I showed it to my boss. He banged the up and arrow keys, and the tab keys - none of which worked - and the enter keys, but couldn't get it to work. "It's easy," I said, and explained what he was doing wrong.

He made me rewrite it.

That day, I learnt that it's easy to create hard user interfaces, but hard to create easy ones.

Here at Red Gate, we aspire to create products that click with our users. We love creating software that seems obviously, astonishingly simple. Software that, once you've seen it, cannot be unseen - you find it inconceivable that anybody would ever have designed it in any other way.

Some of that is about process. It's about putting yourself through the pain and difficulty of watching other people try, and fail, to use your software. And then fixing it. And then trying again. And again. And again.

Another part is more magical. It's a magic that I personally don't have. Luckily, I have the privilege of working with people, and teams of people, who do.

Most importantly, though, it's a belief that software doesn't have to suck; that it's a worthy goal to create software that simply works and that doesn't get in the way. Beyond that, it's a belief in creating software that can make you smile.

That's what we believe at Red Gate.

Neil

What we believe in	#9/13

# Do the right things for our customers.

We believe that if we do what is right for our customers then we will thrive.

# **Missing Brackets 2012**

This year, for the first time we're also introducing the **Missing Brackets (aka WTF) Award**.

Many worthy suggestions were put forward. Runner-up is Rob Chipperfield for this auto-submitted, auto-degrading, auto-not-updating stroke of genius:

26 public void Install()
{

throw new NotImplementedException();
 m\_ExtensionManager.Install
 (m\_InstallableExtension, false);
}

(Old code in **red**, new code in **green**)

**Rob**: "Specifically, This is the bit of VS Nomad's auto-updater that's responsible for installing the new version. I only realised that after having released said code through an auto-update to ~3000 users, something which would mean they'd be unable to update to new versions in the future. Thankfully, I realised relatively swiftly, and managed to fix it so that only 7 users have managed to get stuck on the dodgy version. **Moral of the story:** auto-updates are wonderful, as long as you **never, ever** break the auto-updater.

But the Missing Brackets Award 2012, by a technical knockout, goes to.....



In early August, some Red Gate website customers found that when they clicked on "Download ANTS Performance Profiler", they were sent the Spotify installer instead. Not the Red Gate product they were looking for but the **Spotify installer**. ;-(

This was probably the most embarrassing moment for Red Gate in 2012. A Stop The Line process has since been carried out, to investigate how it happened. Also, a review of any procedures related to downloads is underway, to make sure that it can't possibly happen again. Ever.

This was a very visible mistake (see Value #7: p. 82).

Which is good. Sort of.

+

### Clive's Code Completion Challenge

We wanted to include another code challenge in the Book of Red Gate, but it looked as though the actual code listing would be too big to fit into the book. Of course, someone here came up with the solution – make the coding examples available as a linked download from our website.

You can either view the questions in text form, or download an assembly in which the questions are added to the methods as XML comments.

If you're going to do the latter, you can download the assembly, BookOfRedGate.dll, from www.red-gate.com/ external/code-challenge, and view it in Reflector or another decompiler.

Clicking on the question classes should show you the questions in the documentation pane.



As a taster, Question 5 asks whether getting an exception from the following code is a bug in the compiler.

var x = (object) 20;

QuestionsResultAssert.AreEqual((long)x, 20);

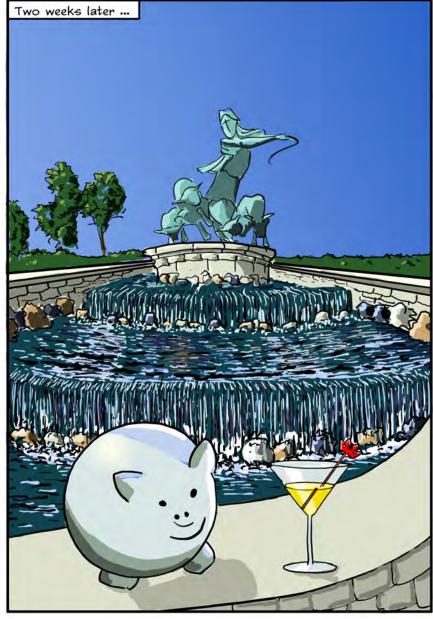


As before, put all your correct answers in an email and send to codechallenge@red-gate.com. Mystery prizes for 1st, 2nd and 3rd. Booby for 4th.

Adrian Parker Adam Walker Agaka Moska Maron Law Agata Raniszevska No Davies Alex Frence Alex lites Ne- Turner Alice Chapman Alice Easey Alice South Avoida Plade Romand: M. M. Gold Andy CompterSade Andrew Clake Andrew Danly Andrew Farries Madrew Paulica Juliación Nata Juszezak knyus Chudleys Asadod Bralford Hunne Entrona Osbora Anu Destipade BART Brad Ben Emett Ben Res Bin Kikoson Bon Challonor Ben Tozar Brad McGehee Brian Brian Huris Care Frede Carl Macdonik Card Turner Cassi Roper Catherine Carling Huris Care Frede Carl Macdonik Card Turner Cassi Roper Catherine Carling Carl Charles a Charles Card March Card Carles Roper Catherine Oralles Brown Charlotte du Percez Ours Dahaszo-Auchland Chris Spencer Chris Albrd Chas Alba Chris Bacher Chris George Chris Kelly Chris hanbion Chris Nassey Chois Morgan Chris Smith Chris Whitwork Chie Toway Son Coline Villactoro Coline Ontinene Coltery The Appendice Barnert Dan Chesewords Daniel Mooney Daniel Njawaya Daniel Richting Daniella Druis A David Bich David Blurton Druis Coslim Davie DDA Druis A David Bich David Blurton Druis Coslim Davie DDA Drue Convery Dave Mellors Druid Pond David Prodor Commell Drue Convery Dave Mellors Druid Pond David Prodor Cost David Sinner Demebolim Down Smith Don Read Mr Flibble Edile Onuis Eduta Wolszlegier Ellie Ryder Elizabets Ayer Emina Armstrong Enna Pattern Envir Pory Enna Suith Four Gazdey Gardh Marlow & Geoff Bones Graham Helliwell Graut Fritchoy Greg Tillman Gyorgy Pocsi Hannah Blunk Graham Helliwell Graut Fritchoy Heidi Smith Herdi Ulff Helen Joyce Mannah Geothan Hamah Jermy Heidi Smith Herdi Ulff Helen Joyce Telen Paterson Holly Baynes Wictoria Viseman Irma Tanovic Lowe Jaime Peart James Allison James Billings James Davies James Jame rear James Moore Save with Jamic Page Jason Crease Jason Neleod Jeff Foster Jema Wass Jenny Jeff Foster Jema Wass Jenny Juliaft Jess Suain Jess Upton Joachin Cassel Jokie Pinkowshi Del John Theron Jonathan Allin Jon Boardman Joy Hodson Jon Hitts Joe Cencha Joyce Tse Justin Caldicott Hudson Justin Heron Jushn Off Kat Codlin kathryn Lye kelly Britlett Kowin Boyle him Moss Krzysztof Wojtyra Laila Loffi Laura Mc Quillen LAWA Morry Lawi Resonen Lewence Novem Linda Holland Lionel Clarke LUCY BOYES LUCY Mansell Lylee Cooper

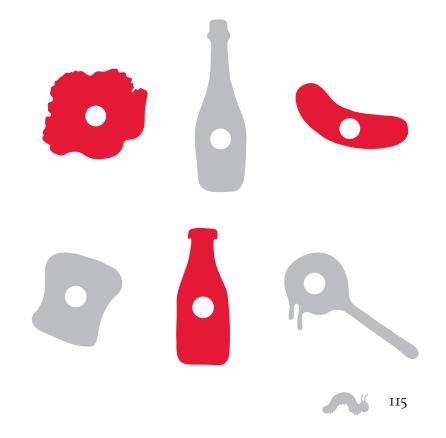
Luke Jefferson Mariane Crowder Morie McCann Marine Babarouse Mak Chaveton Made Jodon Made Roberts Hale Wightman Mak Dalgarno Mut Buton Matt Capon Matt Chandler Matt Dickens Matt Flatt Natt Los Matthew Matthew Wray Meghan Pures Nel Reist Michael Klame Townsond Med Harbour Michael Matthew Wray Meghan Pures Nel Reist Michael Klam Million Williamson Withed Christofiles Midnel Francis Michael Uphon Mille Williamson Michaela Murray Midelle 1/e-Smith Michelle Bain Middle Medd Midelle Taylor Nei Anlorson Nich Maidment Nich Suthorland Uch Hovel Nick Wood the first Nigel Morse Nrau Christian Nina Griffey Noemi Moreno Fabrico Panda Sual Nigel Morse Nrau Christian Nina Griffey Noemi Moreno Fabrico Panda Sual Paul Stephenson Pete Holdhin Pete Peart Peter Stevenson the Wise Paul Stephenson Phil Scrace Phil Scott Phil Wise Priger Sinha Pate Noodhouse Anne Roka Burnister Royatha Hallowert Public m Pite Woodhouse And Scrace Phil Scott Phil Wise I ver Sinne Pite Woodhouse Anos Reka Burneister Revathi Hathaniel Richard Mu Rain Cao Buchy Anos Reka Burneister Revathi Hathaniel Richard Mu Richard Muscat Richard un der Hoff Robbie Richard Kobert Chipperfield Robin Anderson Thing Richard Robert Chipperfield Robin Anderson Thing Richard Robert Chipperfield Robin Anderson Thing Richard Hellen Roger Had Roc Legge Rosie Parsona Public Thank you to everyone at Red Colle a set Thank you to everyone at Red Gate Ryan for making us the best small workplace h Sarah Carlille Sarah Chapman Jsarah Enwards Satah B) Sarah-Lourse Beckett Shobaan Sekar Simon Cooper Simon Cromerly Simon Hohess Simon Johnson Simon Lye Sofie Slephanic Herr Stephen Charbers Steve Harris Steve Jones The Theo Spears Ton Cosserva Ton Russell Jihan Brogher Tim Evens Toby for Austin Youn Harris Ton Randle Tony Occis Wibke Carstensen Zora Sheldrake Self Aven Paul Deleka Peter Yech Raj kadbet Broch Eskanderi Celine Pulido Daphne Liang David You Eddy chen Evan More Ford Anderson Sason Young EAP Wang John Swanson Katte Balar Kelly Top Gun McGranis Kyle Morilis May Pudenen Max Bausbor Som Nardella Tom Curtis Ed Ralph Stmon Brown Resso Stephen Allott Claine Ruckin Son phoks 10:1 China Ka Nich Desy Big Steve Margaret Saxboy Nich Desy and war New Paver Ch Dever Acker Way ~ Stanford Sonczal







In one year, a Very Hungry Redgaterpillar munched its way through I chocolate fountain, 100 bottles of champagne, 2,000 boxes of cereal, 5,000 baked potatoes, 6,000 yoghurts, 10,000 sausages, and 23,000 pints of milk. It felt a bit queasy. Then it ate 2,000 lettuces and felt much better.



Cover Ups The Choir String Quartet Chris W Acoustic Kool-Aid Acid Test Bart Read Pants on Piano Comic Sans

# **The Arsenal**

### Profits are only a way of keeping score, not the game itself.

Focusing purely on the numbers is a sure way to kill Red Gate's culture. We believe that if we focus on the game – building awesome products that people want to buy, and then persuading them to buy them – then success will follow.

### Simon Scores Sabbaticals

Cycled from Prague to Dubrovnik.

Sounds nice, but you could probably have done this on a normal holiday.



Peddled a bar around central Berlin, ate gelato in Venice, got run over in Zanzibar, rafted down the Zambezi, got arrested in Zimbabwe and saw a leopard in South Africa.

I'm jealous, but you could just about have done this on holiday. 6



Flew to Brazil to go to the Carnival and then travelled across Argentina, Bolivia, and Peru. Met the most amazing people and saw some very unusual things! Ended the trip with a four-day hike up Machu Picchu.

Hard to imagine how you could have done this on vacation.



Chillaxed in the garden with the wife and kids, completely redecorated the house in order to sell it, and then decided to stay.

This isn't sabbatical material.

1

Asked IS to change my email password and handed in my access key. Got in the car with The Present Mrs Wood, three Woodlets and a dog, and went on a tour of Cornwall, Devon, Somerset, Suffolk, and the Lake District. Bliss. Sounds like a lovely long holiday, but not quite a sabbatical.

Completed an intensive 6-week course in lion taming. Could I borrow some lion manure to keep foxes out of my garden?

Went to New Zealand and drove around North and South Island. Apart from that, I mainly sat around in my underwear watching TV.

I was going to score this higher, until you started talking about your underwear.

Started a baby photography business, looked after my toddler for an extra day a week, and had a pedicure, which was nice.

I'd love to see some of your baby pictures!



Got on a bus and drove for 22 hours to a fantasy winter wonderland, where I spent eight weeks and finally became a reasonably credible snowboarder.

This is exactly why we offer sabbaticals!



Started to write a book on the absurd antics of Mr. Flibble. Have a look - it's called *I Drink Lead Paint*. An almost-perfect sabbatical. If the book had been published (which it should have been), this would have scored a 10. 9 9

imon Galbraith, one of our co-founders and joint CEOs, is a fan of theatrical gestures to make a point. He is particularly fond of big visual metaphors at our company meetings, in order to illustrate the direction he wants to take Red Gate as a company. There was the time he smashed a flower pot (and nearly blinded Neil) to announce that the company was going to divisionalise, as we d outgrown our original pot and needed more space and new soil to grow. And the time that he dressed up as a wizard and stuck a sword in a stone, to announce that he wanted to send the whole company on a quest for the future. There was also the time that he dressed up as Darth Vader, but no one can remember why ...



### The Cost of Failing to Deploy An Alternative History of Red Gate

by James Moore



In 2005, Red Gate assembled a team of seven brilliant people to work on the next release of our successful SQL Backup tool. The product brief was wide-ranging and visionary: we were going to do for the backup industry what Google Maps did for cartography. We got our best developers and testers to work on the code, our best UX people on design, and assigned our best project manager to lead the whole adventure. The team worked diligently and relentlessly on SQL Backup for 18 months – the equivalent, in man-hours, of one person working on it solidly since Red Gate's founding in 1999 to the present day.

#### And we blew it.

Everything was going very nicely, until we released SQL Backup 5 in 2007. The upward curve on our sales graph swiftly flatlined. We had taken a product with steady growth and actively stopped it from continuing to increase revenue. And we thought we'd done everything right. We'd put our best people on a project with a compelling brief. We'd given them plenty of time to deliver against our hopes and expectations, and they had. But our customers didn't buy it\*. The SQL Backup 5 team had each wasted 18 months of their lives, and we cost ourselves a \$50m market in the process.

Skip forward to 2008. We'd learnt an enormous amount from the Backup 5 experience – it had been galling but not terminal, and we had the chance to put things right. When a team assembled to work on version 4 of ANTS Performance Profiler, we did many things very differently. We talked to customers as early and often as possible, getting tons of constructive feedback and immediately incorporating this into our plans for the product.

\* Now, SQL Backup 5 is a fine product, and still has thousands of users. But we went about creating it the wrong way, and it wasn't the great success we'd hoped it would be. The entire project took us seven months, compared to the 18 months we spent on SQL Backup 5, and ANTS Performance Profiler 4 was a huge success. The lessons from SQL Backup 5 were still painful to think about, but we'd begun to learn from them, and had made real changes to the way we developed software.

In August 2008, Red Gate acquired .NET Reflector. It was a tool that was already in the hands of many thousands of users, and it had an inbuilt auto-update mechanism. In short, it was the perfect opportunity to experiment with even more frequent releases.

#### And we bottled it.

We didn't know what regular releases would mean for our customers, or how they could negatively affect the product. We were afraid of pushing out builds with major bugs in them overnight, or just before the weekend, and not realising we'd caused significant problems for our customers until the next morning or the following week.

We were cowards: cowards because we didn't understand how or why to use the technology we'd inherited, and cowards because we were too afraid to experiment. As a result, we missed a trick.

Around the same time, copies of the Toyota Way were springing up all around the office, and the majority of our developers, testers, and project managers signed up for lean, agile, or scrum master training. Ideas from the Lean Startup movement around regular release cycles and validating assumptions also resonated deeply with the progress we'd made on our projects. When the SQL Tools division began work on SQL Connect in November 2011, the team were ready to bring together all of the lessons we'd learnt as a software company since screwing up Backup 5 six years earlier.

The Connect team worked on the product for ten days before releasing, and then shipped more than 40 further releases in the following six months. It had taken us six years and a hell of a lot of learning, but the wider message coming out of the rapid development and iteration of SQL Connect was clear: we'd revolutionized the way we create software, and we'd done so in a way that was geared towards continued change and improvement.

We still have a lot to learn, but we believe that if everyone developed software the way we develop it now, the world would undoubtedly be a better place. The NHS patient record system wouldn't have cost £12.7 billion if it had been run like a Red Gate project, nor would it ultimately have failed at great expense.

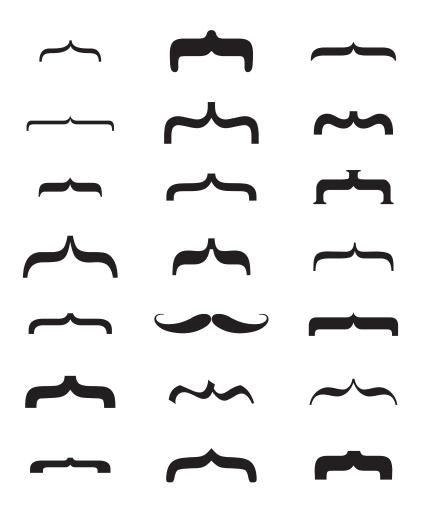
One of the most enduring images here at our Cambridge headquarters is that of the snorting horse – the person whose first thought upon waking every morning is how to pull off something which is important to us. We have plenty of snorting

horses, especially when it comes to software deployment. We are deeply passionate about the way we're making software, and how this is going to change in the future. Passionate enough to build a company around world-class development practice, and passionate enough to believe that the way we do things is worth sharing.

### We will succeed if we build wonderful, useful products.

Shipping something amazing is better than creating something average and to budget and on time. We cannot market, sell, manage, or account our way to success.





# **Brand Guidelines**



Please give the logo plenty of space.

Use two words when refering to Red Gate.

If you are not sure how to apply the logo please email marketing@red-gate.com.



Do not feed the logo after midnight.

Do not refer to Red Gate as Redgate, Red-Gate, redgate, red gate, rude gate, Nude Gate.

Do not liquidize the logo.

Any questions? Send an email to: marketing@red-gate.com

#### The Cambridge Blue - Gwydir Street, Cambridge

One of the best real ale pubs in the country, with an amazing selection of UK and imported draft and bottled beer. The sheer range of beers can be a bit intimidating, but the staff are happy to offer tasters and recommendations.

*Pros:* Amazing beer, great garden. *Cons:* A slightly relaxed attitude to service, even when busy.

#### The Maypole - Portugal Place, Cambridge

One of the few city centre pubs you might actually consider visiting. It boasts a fantastic and steadily-increasing beer selection, as well as reasonably-priced cocktails. Assessing the desirability of the large screens showing constant sports is left as an exercise for the reader.

*Pros:* Open late, plenty of ale. *Cons:* Limited indoor seating; needs a lick of paint.

#### The Geldart - Ainsworth Street, Cambridge

An odd one. Half passable ale pub, half restaurant/bar. You can drink in either, and the whisk(e)y selection is splendid. The restaurant has carved out a niche serving grilled lumps of novel animals. Crocodile fillet with your pint? No problem.

*Pros:* Good food, even when not exotic. Friendly atmosphere. *Cons:* Some may be deterred by occasional live Jazz & Folk.

#### Barney's Beanery - 99 East Colorado Boulevard, Pasadena

Barney's Beanery is a long-time Old Town bar & restaurant, best known for its casual, laid-back ambiance. The selection of food and alcohol is pretty broad, so if you're not sure what you're in the mood for, Barney's has something for everyone, from beer to BBQ and burgers to Bloody Marys. Plenty of TVs showing sports, as well as a pool table and some arcade games.

#### Lucky Baldwin's - 17 South Raymond Avenue, Pasadena

Lucky Baldwin's is another classic Old Town bar with a local/pub vibe. Primarily where you'd stop in for a pint of the local's finest, although anyone with a taste for a good pour would enjoy this wannabe English/ Irish pub, and their food menu reflects this theme.

#### Jake's Diner - 38 West Colorado Boulevard, Pasadena

From the outside, Jake's Diner appears to be a tiny burger shop where you can build your own bespoke burger combination from a wide array of ingredients. However, most visitors overlook the full bar downstairs, with

a karaoke machine and several billiard tables for afterhours enjoyment – it's definitely worth asking the locals for weeknight specials going on in the basement!



# Ballad of the US Office

I went back to the southern Californian sun early in 2010, after three-and-a-bit years in the Cambridge rain. I was doing some consulting work for James Moore initially, and then we met up at PASS in Seattle in November. We agreed that we should at least try out a US sales operation, and so we decided to set about doing it.

The thing that really made us sweat was the idea that we could end up getting burned by the higher rate of corporate taxes in the US, so Colin (our Head of Finance) and I spent loads of transatlantic phone time trying to structure things in a way that would avoid this. Fancy dinners at the British Consulate also helped, as did introductions to other ex-pats who'd successfully localised technology companies there. It all helped to settle our nerves, and everyone was pretty encouraging.

Two months after PASS I was back in the UK, and then it was straight back to Pasadena in February, where we signed the lease on a 'tester' office. Meanwhile, I'd been

conducting some first interviews out of our real estate broker's office. I must have looked pretty shady, this guy with no office. But I did have the Book of Red Gate, which helped convince candidates that I was for real. It's a great tool for interviews.





"So, have you read the book? What resonated with you?"

#### "Page 44! Don't be an asshole!! SIR !!"

Hiring was pretty easy after that.

We had a wild Quarter 2 last year, breaking loads of records straight out of the blocks. In the fall, we went on a day out to the Santa Anita race track. They had generously agreed to name a race after us, the Red Gate Yearling Hurdle, or something. There was a horse called Pop The Cork, a thirty-to-one outsider. Well, we just had to put something on it. I think everyone did. And it came home! We were rolling. Especially Jeff, who'd put twenty bucks on the nose. And now there's a meeting room here at the Pasadena office called Pop the Cork.

Prost!

Tom Curtis

### We base our decisions on the available evidence.

We don't base our decisions on people's opinions, the volume of their voices or who they are. When the evidence changes, we are prepared to change our minds. We will thank, and never shoot, the messenger. "I would just like to say that I love your products. They are easy to use and incredibly powerful. I can tell that "ingeniously simple tools" is not just a sales slogan - it's a mission statement for you guys. It is truly a pleasure to see a company with such diligent focus on the user experience."

Mike Bundy, Flex-Plan Services Inc.

"All the Red Gate products I used are a delight – SQL Developer Bundle and ANTS Profiler. Simple to use, powerful, fast – awesome."

Doron Grinstein, Technical Director, Walt Disney Studios

"Our ROI on the SQL Developer Bundle has been high... Because we are doing less maintenance, it enables us to have a larger team with more separate lines of development than might otherwise be possible."

Annette Allen, Database Developer, First Databank

"I'm a busy person. I get a lot done in a day. One of my secrets is using SQL Prompt. It reduces hours of coding to minutes; minutes to seconds. I would recommend it to anyone that writes SQL."

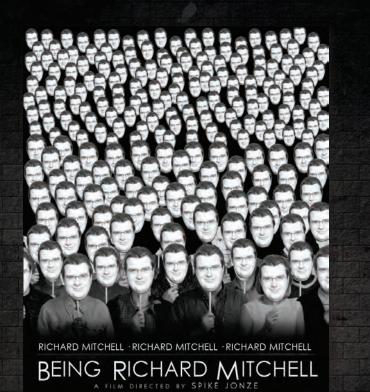
Jes Borland, Consultant, Brent Ozar PLF

"It is possible to work without Red Gate's SQL Developer Bundle; it simply takes twice as long and requires twice the effort. I would whole-heartedly recommend them to anyone whose role involves development or administration on MS SQL Server platforms."

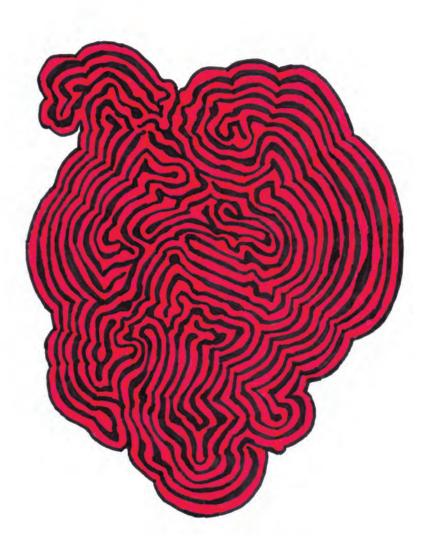
Jerry Pett, Director, Burnt Orange Designs

"I cannot thank you enough for SQL Backup Pro. Great tool, excellent interface, good and useful help pages, and above all, it \*works\*!"

Peter Warren, Children's Hospital Boston



ever wanted to be someone else?



### **User-Generated Content**

### **User-Generated Content**

### **User-Generated Content**

### **User-Generated Content**

### We count contribution.

#13/13

What you achieve is more important than how long it takes.

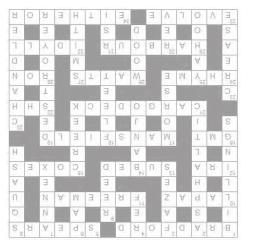
# **Public Holidays**

	2012	2013	2014	2015	2016
New Year's	<mark>2</mark>	<b>1</b>	1	1	<mark>1</mark>
Day	Jan	Jan	Jan	Jan	Jan
Good	<mark>6</mark>	<mark>29</mark>	18	3	<mark>25</mark>
Friday	Apr	Mar	Apr	Apr	Mar
Easter	9	1	<mark>21</mark>	<mark>6</mark>	<mark>28</mark>
Monday	Apr	Apr	Apr	Apr	Mar
Early May	7	<mark>6</mark>	<mark>5</mark>	4	<mark>2</mark>
Bank Holiday	May	May	May	May	May
Spring	<mark>4</mark>	<mark>27</mark>	<mark>26</mark>	<mark>25</mark>	<mark>30</mark>
Bank Holiday	Jun	May	May	May	May
Queen's Diamond Jubilee	<mark>5</mark> Jun	-	-	-	-
Summer	<mark>27</mark>	<mark>26</mark>	<mark>25</mark>	<mark>31</mark>	<mark>29</mark>
Bank Holiday	Aug	Aug	Aug	Aug	Aug
Christmas	25	25	25	<b>25</b>	25
Day	Dec	Dec	Dec	Dec	Dec
Boxing	<mark>26</mark>	26	26	<mark>28</mark>	<mark>26</mark>
Day	Dec	Dec	Dec	Dec	Dec

***	2012	2013	2014	2015	2016
New Year's	1	1	1	1	<mark>1</mark>
Day	Jan	Jan	Jan	Jan	Jan
Martin Luther	<mark>16</mark>	<mark>21</mark>	<mark>20</mark>	<mark>19</mark>	<b>18</b>
King Day	Jan	Jan	Jan	Jan	Jan
Presidents'	<mark>20</mark>	<mark>18</mark>	17	16	<mark>15</mark>
Day	Feb	Feb	Feb	Feb	Feb
Memorial	<mark>28</mark>	<mark>27</mark>	<mark>26</mark>	<mark>25</mark>	<mark>30</mark>
Day	May	May	May	May	May
Independence	<mark>4</mark>	<mark>4</mark>	<mark>4</mark>	<mark>4</mark>	<mark>4</mark>
Day	July	July	July	July	July
Labor	3	2	1	7	<mark>5</mark>
Day	Sept	Sept	Sept	Sept	Sept
Columbus	8	14	13	12	10
Day	Oct	Oct	Oct	Oct	Oct
Veterans	<b>12</b>	11	11	11	11
Day	Nov	Nov	Nov	Nov	Nov
Thanksgiving	<mark>22</mark>	<mark>28</mark>	<mark>27</mark>	<mark>26</mark>	<mark>24</mark>
Day	Nov	Nov	Nov	Nov	Nov
Christmas	<mark>25</mark>	<mark>25</mark>	<mark>25</mark>	<mark>25</mark>	<mark>26</mark>
Day	Dec	Dec	Dec	Dec	Dec

### Answers

152



Compare Hamster - Web site and intranet Owl - Test Manager Grasshopper - Update Client/Server

Newt - SQL Compare Reindeer - SQL Packager Sheep - the common components Weasel - SQL Data

Line SQL Tools Hummingbird - AVTS Load Lizard - DTS Compare Muffin - Licensing Components

Aardvark - Bug tracking system Ferret - ANTS Profiler Greyhound - Log Rescue Halibut - Command

6: Roger Hart 7: James Moore 8: James Moore 9: Richard Mitchell 10: David Proctor I: Jodie Pinkowski 2: James Moore 3: James Moore 4: Richard Collins 5: Chris Massey

Locust - Vittual server application

SOUDN ODD

¿saoys asoym

#### 153

**Credits** 

2012 Edition edited by: Alice Chapman, Richard (Fox) Collins, Brian Harris, Dom Reed, Pete Woodhouse, Rain Cao, Lucy Boyes and Roger Hart.

\*Additional photography by Mushin Schilling for "Where's Robbie" (originally, Obama in Berlin).

Obviously the contents of any future edition of the BoRG will be entirely up to whoever's editing that

edition. There is however one untransgressable rule: the pig stays in the picture. So Spider's going to

Design by Pete Woodhouse and Rain Cao

Photography by Dom Reed and Alice Chapman\*

How to Open Post-it Notes by Tom Randle

Spider Comic by Neil Davidson

A Note on Future Editions

need a new adventure to star in.

Developer interviews by Mike Williamson

End papers and page 143 by Michelle Taylor

Being Richard Mitchell by Chris Whitworth



