

architect the 'Quartz UI' (which later became UIQ). He is currently Symbian's Chief System Architect.

Outside work, Martin is a keen cyclist and has cycled extensively in Europe. In 2002, he spent 26 days cycling 2600 miles across America.

Andy Cloke

Andrew joined Symbian (then Psion) in 1995 from Philips Research Labs where he had been working on hardware and software for WCDMA prototype phones. He worked initially as an engineer and then as an engineering manager for the fledgling Communications group.

From the foundation of Symbian, he worked on the communications subsystems for the first Symbian OS phones, the Nokia 9210 and Ericsson R380. In 2002, he became the company's first Chief Technology Architect and now has ownership of the Technology Strategy.

Charles Davies

Charles became CTO of Symbian in March 2003, after a long career at Psion as a software technologist and as a director since 1982. Charles has been a technology pioneer in software for handheld computers and a lead contributor to many of the architectural concepts underpinning Symbian OS.

As CTO, he provides technology leadership at the executive level, contributes heavily to Symbian's business, product and technology strategies and is the executive sponsor of Symbian's Technology Committee.

Charles holds a first-class degree in Physics from Imperial College, London, and a PhD.

Morgan Henry

Before joining Symbian (then Psion) in 1995, Morgan dabbled in graphic design and wrote software for fun. He stayed in the software arm of the company through its transition from Psion into Symbian. He worked on the Psion Series 5 and was responsible for the kernel port for the Nokia 9210 ('the world's first open Symbian OS phone'). During his time at Symbian, he has also worked as a Technical Lead and System Architect working on many projects during the platform's evolution.

Morgan holds a BSc in Mathematics and Computer Science from Queen Mary and Westfield College, London, and maintains an active interest in drawing, painting and animation.

Ian Hutton

Ian joined Symbian (or Psion, as it then was) in 1995, straight from university. He initially wrote test code for the Text Handling (EText) component of what was still EPOC32. As one of Charles Davies's gang, he played a lead role in designing and implementing the Application Architecture and Printing Services. He later spent two years in Ronneby, Sweden, as Technical Lead seconded to UIQ working on UIQ releases based on Symbian OS v7.0, moving into the Technical Consulting organization on his return. He now works with Charles Davies in Product Marketing, as an OS Product Planner, helping to shape Symbian's technology roadmap and planning future releases of Symbian OS.

Peter Jackson

Peter joined Symbian (then Psion) in 1994, wishing to apply his mainframe expertise, gained working with the VAX/VMS operating system, to smaller devices including handhelds. He was an early fan of the Psion operating systems created for the Organiser family of devices, and later of the SIBO operating system, the 16-bit precursor of what became Symbian OS. He designed and implemented the first versions of the Symbian OS localization and internationalization components, led the team that created the FreeType implementation for Symbian OS, and later became responsible for Symbian's source configuration management framework. He now works with Ravenbrook as a consultant specializing in configuration management.

Keith de Mendonca

Keith was awarded a first-class honors degree in Computer Systems Engineering followed by a DPhil by Sussex University. He joined Psion in 1994 and wrote SDKs and applications for the Psion PDA range.

On joining Symbian, Keith originally worked in the messaging team, initially specializing in email protocols before becoming the Messaging Technology Architect. More recently, Keith was the Chief Technology Architect for Symbian's Application Technology Development group in the UK. He is currently the Chief Technology Architect for Symbian India and is based in Bangalore.

Will Palmer

Will studied electronic engineering at Oxford Polytechnic, before training as a C++ programmer. Prior to joining Symbian, he worked on various

leading-edge projects such as vehicle-tracking and automated precision measurement.

Will is a System Architect in Symbian. He joined the company in June 2000 and has worked as an engineer on synchronization technologies, PC- and device-side networking and device management. He is currently trusted with the development and integrity of Symbian's security architecture.

At the moment, Will is traveling an inspiring road with his young family but can quite often be found on a football pitch.

Howard Price

Howard grew up in South Africa. After conscription into the army as a cook for 10 months, he studied for two years towards a six-year degree in architecture before finding that it wasn't what he wanted to do with his life. After six years traveling and working around Europe, he decided to settle down, did a degree in physics and mathematics (including some courses on programming) and, aged 28, joined Symbian (then Psion) as a programmer.

At Psion, Howard developed software for all Psion's PDAs from the Organiser I to the Series 5, including developing the low-level arithmetic operators and the mathematical functions, developing the Series 3/3a OPL runtime, leading the OVAL (Visual Basic for SIBO) run-time and debugger team, leading the Series5 OPL team and designing the OPX framework, and leading the initial Java team. He was working as Engineering Manager of the Applications team at the time Psion Software became Symbian.

At Symbian, after a few more years in management, Howard decided to follow his interests and move back to technical work, joining the System Management Group (SMG) as a senior systems architect. There he designed and developed the Depmodel v1 suite of tools to analyze the structure of Symbian OS automatically. This enabled him to write the System Architecture Overview Documentation for which an understanding of dependencies was essential. The dependency model helped to define the initial system model. More recently, he has joined SMG's Technology Strategy and Analysis team, analyzed the impact of SMP on Symbian OS, researched the technical implications of Moore's Law on Symbian OS and contributed to Symbian's Technology Strategy document.

Murray Read

Murray graduated in Artificial Intelligence and Computer Science at the University of Edinburgh. He worked with NCR and Fortronic on embedded software for cash machines and credit-card terminals. He

then joined Origin, where he worked on radio pagers and the Philips smartphone project with Psion. After that, he worked with STNC on the Psion web-browser project.

Murray started working with Psion/Symbian as a contractor on a web project in 1998. Then he worked on the user interface library for the Nokia 7650, which evolved into the S60 platform, focusing on application architecture and the user interface layout system.

Murray is a Chartered IT Professional, a member of the BCS and a regular competitor in Topcoder programming competitions.

Martin Tasker

Martin joined Psion in 1995 after 13 years in the system-software industry. His first commercial software products were a graphics package and debugger for the BBC Micro in its early 1980s heyday, produced while studying Natural Sciences and Computer Science at Cambridge University. On graduation, he joined IBM where he worked in networking and storage management for eight years, programming mainframes in assembler, working on product development, and delivering performance, routing and management improvements in IBM's global VNET network. He learned C++, object orientation and artificial intelligence during a two-year transport research project at Imperial College, London.

Martin then joined the Protea project at Psion, whose architectural decisions form much of the subject of this book. He became responsible for Protea's documentation and SDKs, along with contributions to its architecture. His output included many technical papers on the distinguishing features of Symbian OS, which form the heart of this book. In 2000, his *Professional Symbian Programming* became the contemporary guide to Symbian OS programming which helped Symbian and its customers to grow their engineering teams to achieve the success we see in the marketplace today. *Professional Symbian Programming* also contained the definitive history of the Protea project and, until this book, the most detailed insight publicly available into the design decisions on the project. Martin then served as Product Manager with responsibility for licensing, SDKs and tools. He now works in a technology-strategy role.

Martin is married with four children. He occasionally relaxes with classical music.

Andrew Thaelke

Andrew joined Symbian (then Psion) in 1994 shortly after graduating from Sidney Sussex college, Cambridge with an MA in Mathematics. Within Symbian he became one of the key developers of OVAL, a rapid

application development language similar to Visual Basic, for the Psion Series 3a computers. He has since worked as developer, designer and architect on projects throughout the lifetime of Symbian OS, and spanning many of its technology areas such as kernel, data storage, messaging, Java and platform security.

Today, he has one of the most senior technical roles within Symbian, influencing both the technical strategy of the organization and the ongoing architectural development of Symbian OS.

David Wood

David spent eight years at Cambridge University, studying mathematics and then philosophy of science. He drifted into teaching and became head of the mathematics department at Ashbourne College in Kensington, where he specialized in helping A-level-retake students move from, for example, a D-grade pass to an A-grade pass in four months. Towards the end of that period, he taught himself C in his spare time, on an Amstrad PCW8512 word processor running CP/M, and was lucky enough to pick up a job as a junior software engineer in Psion's Harcourt Street offices.

At Psion/Symbian he has headed, at various times, the Development, Technical Consulting, Partnering and Research departments. During the formative stages of Symbian OS, he was the primary integrator of application-level and UI framework code into the ROMs of what was called 'Protea', the Psion Series 5 PDA. This experience is described in more detail in David's 2005 book *Symbian for software leaders*.

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