

Mastering KVM Virtualization

Second Edition

Design expert data center virtualization solutions
with the power of Linux KVM

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Packt

BIRMINGHAM—MUMBAI

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25 years ago, a colleague suggested that I should write what he called "a Linux book". I liked the idea and I promised I would. Years rolled by, and here I am, a quarter of a century later, acting on a promise. As Steve Jobs once said, 'Ideas without action aren't ideas. They're regrets.'

To my family – my mother, father, and brother, for putting up with me over the course of the last 25 years – which led to writing this book. To my TA, Jasmin, for both helping me to improve and offering insights into various topics covered in this book.

To my son, Luka, for showing me how young people can be both talented and focused, especially when faced with problems that require innovative solutions.

To my partner, Sanja, for driving me on in everything that I do.

Here's to not having any regrets.

– Vedran Dakic



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Vedran Dakic has a master's in electrical engineering and computing and is an IT trainer, covering system administration, cloud, automatization, and orchestration courses. He is a certified Red Hat, VMware, and Microsoft trainer. He is currently employed as the head of department of operating systems at Algebra University College in Zagreb. As part of his job, he lectures in relation to 3- and 5-year study programs in systems engineering, programming, and multimedia tracks. He also does a lot of consulting and systems integration in relation to his clients' projects – something he has been doing for the past 20 years. His approach is simple – bring real-world experience to all of the courses that he is involved with as this will provide added value for his students and customers.

Humble Devassy Chirammal is a senior software engineer in the Storage Engineering team at Red Hat. He has more than 15 years of IT experience, and his area of expertise is in understanding the full stack in an ecosystem, with emphasis on architecting solutions based on demand. These days he primarily concentrates on Ceph and GlusterFS and its integration to container orchestrator systems like Kubernetes. He has hands-on experience of emerging technologies, such as IaaS and PaaS solutions in Cloud and Containers. In the past, he has worked on intrusion detection systems, Clustering solutions, and Virtualization. As an open source advocate, he is a core contributor to many open source projects like Kubernetes. He actively organizes meetups on Openshift/Kubernetes, Virtualization, GlusterFS, CentOS. His twitter handle is @hchiramm and his website is <https://www.humblec.com>.

This book is dedicated to the loving memory of my parents, C.O. Devassy and Epsy Devassy, whose steady, balanced, and loving guidance has given me the strength and determination to be the person I am today. I would like to thank my wife, Anitha, for standing beside me throughout my career, and for the effort she put into taking care of our son, Heaven, and our daughters, Hail Mariya and Hanna Mariya, while I was writing this book. I would like to thank my brothers, Sible and Fr. Able Chirammal, as well, without whose constant support this book would not have been possible.

Finally, a special thanks to Ulrich Obergfell for being an inspiration that helped me enrich my knowledge in Virtualization.

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I'd like to thank my wife, Chandni, for her unconditional support. She took on the pain of looking after our two naughtiest kids, while I enjoyed writing this book. I'd like like to thank my parents, Dr. Annieamma and Dr. George Vettathu, for their guidance and for pushing me hard to study something new. Finally, I would like to thank my sister, Dr. Wilma, for her guidance, and my brother, Vimal.

About the reviewer

Ranjith Rajaram is employed as a senior principle technical support engineer at a leading open source Enterprise Linux company. He began his career by providing support to web hosting companies and managing servers remotely. Ranjith has also provided technical support to end customers. Early in his career, he worked on Linux, Unix, and FreeBSD platforms.

For the past 15 years, he has been continuously learning something new. This is what he likes and admires about technical support. As a mark of respect to all his fellow technical support engineers, he has included "developing software is humane, but supporting it is divine" in his email signature.

At his current organization, he is involved in implementing, installing, and troubleshooting Linux environment networks. Aside from this, he is also an active contributor to the Linux container space (Docker, Podman), Kubernetes, and OpenShift.

Apart from this book, he has reviewed the first editions of *Mastering KVM Virtualization* and *Learning RHEL Networking*, both available from Packt.

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