

Editorial Board

John Baldwin • Member of the FreeBSD Core Team and Chair of FreeBSD Journal Editorial Board

Tom Jones • FreeBSD Developer, Internet Engineer and Researcher at the University of Aberdeen

Ed Maste • Senior Director of Technology, FreeBSD Foundation and Member of the FreeBSD Core Team

Benedict Reuschling • FreeBSD Documentation Committer and Member of the FreeBSD Core Team

Mariusz Zaborski • FreeBSD Developer

Advisory Board

Anne Dickison • Marketing Director, FreeBSD Foundation

Justin Gibbs • Founder of the FreeBSD Foundation, President and Treasurer of the FreeBSD Foundation Board

Daichi Goto • Director at BSD Consulting Inc. (Tokyo)

Allan Jude • CTO at Klara Inc., the global FreeBSD **Professional Services and Support** company

Dru Lavigne • Author of BSD Hacks and The Best of FreeBSD Basics

Michael W Lucas • Author of more than 40 books including Absolute FreeBSD, the FreeBSD Mastery series, and git commit murder

Kirk McKusick • Lead author of The Design and Implementation book series

George Neville-Neil • Past President of the FreeBSD Foundation Board, and co-author of The Design and Implementation of the FreeBSD **Operating System**

> Hiroki Sato • Director of the FreeBSD Foundation Board, Chair of AsiaBSDCon, and Assistant Professor at Tokyo Institute of Technology

Robert N. M. Watson • Director of the FreeBSD Foundation Board, Founder of the TrustedBSD Project, and University Senior Lecturer at the University of Cambridge

S&W PUBLISHING LLC PO BOX 3757 CHAPEL HILL, NC 27515-3757

Publisher • Walter Andrzejewski walter@freebsdjournal.com

Editor-at-Large • James Maurer jmaurer@freebsdjournal.com

Design & Production • Reuter & Associates

Advertising Sales • Walter Andrzejewski walter@freebsdjournal.com Call 888/290-9469

FreeBSD Journal (ISBN: 978-0-615-88479-0) is published 6 times a year (January/February, March/April, May/June, July/August, September/October, November/December). Published by the FreeBSD Foundation, 3980 Broadway St. STE #103-107, Boulder, CO 80304 ph: 720/207-5142 • fax: 720/222-2350 email: info@freebsdfoundation.org Copyright © 2021 by FreeBSD Foundation. All rights reserved. This magazine may not be reproduced in whole or in part without written permission from the publisher.

LETTER from the Foundation

Welcome to the July/August issue of the FreeBSD Journal!

Summer is ending and a new school year begins in the northern hemisphere. Brian Kidney opens the issue with an article describing a code tracing and instrumentation framework developed on FreeBSD. Benedict Reuschling writes about his Unix for Developers class that spans topics from system administration to shell scripting, and Roller Angel walks us through an interactive workshop for new users of FreeBSD. Anne Dickison rounds out the articles with her piece on effective FreeBSD advocacy.

You'll also find the second installment of Hiroki Sato's series on using IPv6 on FreeBSD as well as Tom Jones' Work-in-Progress column featuring Gleb Smirnoff's piece on recent changes to socket buffers in FreeBSD 14. And, at long last, this issue includes a couple of conference reports which have been few and far between over the past two years. We look forward to more reports in the future as our community starts to meet at a more regular cadence again. By the way, several members of the Journal's editorial board will be in Vienna, Austria in September for EuroBSDCon 2022. We look forward to talking with readers who will be there and plan a report from Vienna in a future issue for those who won't be able to attend.

We value feedback from readers whether in person or via email. If you have feedback on articles, suggestions for topics for a future article, or are interested in writing for the Journal, please email us at info@freebsdjournal.com.

John Baldwin

Member of the FreeBSD Core Team and Chair of FreeBSD Journal Editorial Board