

## 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

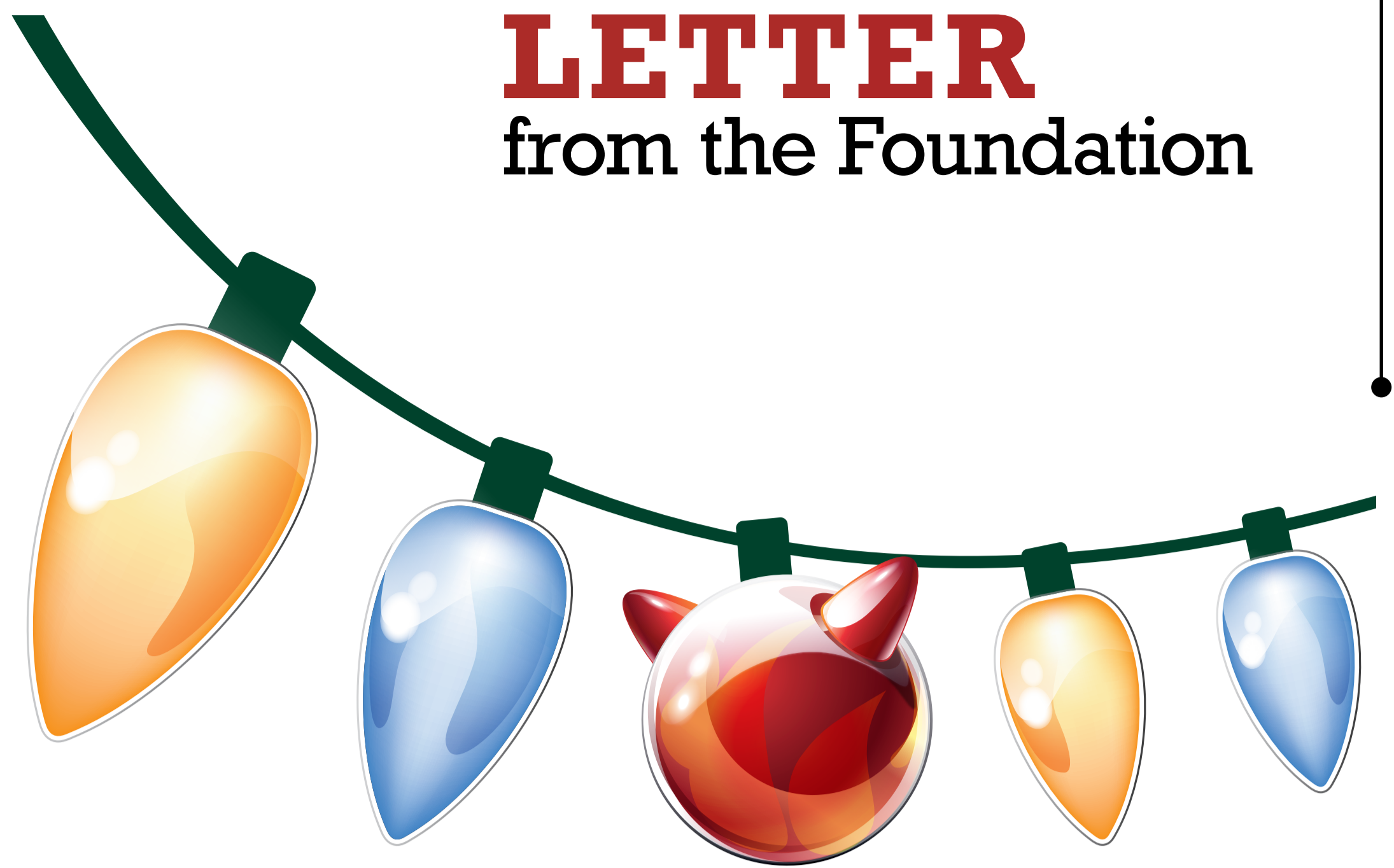
*FreeBSD Journal* (ISBN: 978-0-615-88479-0) is published 6 times a year (January/February, March/April, May/June, July/August, September/October, November/December).

Published by the FreeBSD Foundation,  
3980 Broadway St. STE #103-107, Boulder, CO 80304  
ph: 720/207-5142 • fax: 720/222-2350  
email: info@freebsd.foundation.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



## Dear Readers,

As we embark on the 10th year of publishing *FreeBSD Journal*, I could not be prouder of the investment we've made to produce this high-quality publication for you. When reflecting on the past year's issues, the first thing that stands out to me is the quality of the Journal's content which is written by noteworthy experts in their fields and on a volunteer basis. We are also thankful for the outstanding, volunteer editorial and advisory boards that plan future topics, wrangle authors, and make sure we provide the most helpful and timely content to readers around the globe.

The *FreeBSD Journal* delivers informative and interesting content for folks in our community and beyond with a fresh issue every two months. It reaches anyone interested in Unix, operating systems, system administration, research, product development and more. The FreeBSD Foundation funds this professionally produced publication and makes it widely available because we view it as an investment for anyone who uses what they learn from it to further advance the FreeBSD operating system and the community.

Finally, I want to thank you for enthusiastically reading each issue! We hope you've enjoyed *FreeBSD Journal's* articles and columns this past year and we look forward to continuing it for years to come.

We wish you a wonderful year-end, however you celebrate this holiday season.

## Deb Goodkin

Executive Director  
FreeBSD Foundation