Enhancing Network Management by Switching from Linux to FreeBSD: The Metify Approach

Metify stands out as an innovative force in network management and infrastructure optimization. The company leverages FreeBSD's capabilities to power its groundbreaking software solutions. Metify has established FreeBSD as the cornerstone of its technology stack, moving away from running strictly Linux.

This strategic choice stems from FreeBSD's unparalleled performance in networking environments and its unwavering reliability, traits that are indispensable in the fast-paced landscape of modern networking. Metify's flagship network management software, Mojo, and the versatile networking appliance, Photon, demonstrate the company's commitment to leveraging FreeBSD's capabilities for advanced solutions.

**CHALLENGE**
Metify was running on Linux but needed added stability and the ability to tune a kernel for performance. It also needed tight ZFS integration and ports and packages it could depend on, which Linux lacks. Finally, Metify wanted enhanced security out-of-the-box, open, uncomplicated, and unchanging licensing, and comprehensive documentation.

**SOLUTION**
Metify switched Mojo's underlying operating system layer from Linux to FreeBSD for its Enterprise version of the product.

**IMPACT**
With FreeBSD, Metify simplified and secured its software stack and boosted reliability. Mojo also now provisions, discovers, and automatizes SD-WAN infrastructure.
Making the switch

Ian Evans, the Chief Technology Officer at Metify, recently explained the distinct advantages of FreeBSD over its counterparts. He highlighted FreeBSD's tight integration with the ZFS file system, which ensures data integrity, and efficient storage management, and simplifies the overall system architecture. Additionally, he emphasized the elegance of FreeBSD's kernel design, which creates a streamlined and customizable environment that can be fine-tuned for performance, contrasting it with the complexities often encountered with Linux distributions. Ian also noted the completeness of FreeBSD’s documentation, which is uncommon across the software realm, and highlighted FreeBSD’s incredibly active and enthusiastic community.

“FreeBSD does a fantastic job with documentation in general. You can always find reference materials, and the community seemed a little more active and a little more robust. If we had to reach out or we had to talk to somebody, we found it a little more supportive in that sense and just a little deeper.”
- Ian Evans, CTO, Metify

Metify is dedicated to FreeBSD, going beyond just adopting it. They are making concerted efforts to deploy FreeBSD at scale through a carefully designed automated installation process integrated within Mojo. Metify aims to make FreeBSD consumption more accessible and user-friendly, similar to Linux. By simplifying deployment and configuration processes, Metify is facilitating broader adoption of FreeBSD within enterprise networks, leveraging its inherent strengths in performance and reliability.

Giving back

Metify’s roadmap outlines ambitious goals, including further integrating FreeBSD into its ecosystem. The company plans to upstream contributions and enhance container runtime integration. By promoting FreeBSD adoption and encouraging collaboration within the open source community, Metify not only drives innovation within its products but also contributes to the evolution of networking technologies on a broader scale. It's worth noting that the BSD license provides Metify with the flexibility to implement FreeBSD now and contribute back to the community when it is convenient for them to do so.

"The FreeBSD license offers greater flexibility in terms of usage. We're at a stage where, once our product reaches a certain level, we plan to upstream more. This flexibility in how the code can be used and integrated into our software stack is crucial." - Ian Evans, CTO, Metify
Metify’s strategic embrace of FreeBSD as the foundation of its network management solutions represents a significant point of interest. By harnessing FreeBSD’s high-performance networking capabilities and inherent reliability, Metify is poised to redefine the standards of excellence in network management, setting new benchmarks for efficiency, scalability, and innovation.

**Contribute to the FreeBSD Project**

Whether you’re mentoring, promoting FreeBSD, or participating in forums and mailing lists, your efforts drive innovation and growth of the Project. Support the FreeBSD project today by joining our vibrant community and helping build our long-standing and growing open source ecosystem! Enhance FreeBSD by improving documentation, addressing bug reports, submitting code, and engaging in discussions. Every contribution, big or small, helps evolve FreeBSD into a more stable, secure, and performant open source operating system.