



VYOS SUCCESS STORY

# Empowering Disaster Management: Disaster Science's Success with VyOS

How VyOS Supported Disaster Awareness with Reliable Internet Connectivity

#### Introduction

In the realm of disaster management, timely and reliable information is crucial. Disaster Science, creators of the innovative product Bushfire.io, stands at the forefront of this mission, providing essential updates on natural disasters and community incidents to hundreds of thousands in Australia, Canada, and the USA. This success story explores their technological journey to enhance service reliability and extend their operational reach.

# Challenge

The primary challenge for Disaster Science was establishing a robust internet presence in a colocation with limited access to commercial technical services. They needed a secure, performant, and scalable routing solution capable of handling the urgent demands of disseminating crucial information during emergencies.

## **Solutions Explored**

The team considered several networking options including Cisco and Arista hardware, Cisco's cloud services router, and native Linux setups. Their solution required high availability, essential networking functionalities like NAT and ACLs, and scalability up to 10GbE—all within a manageable cost.



#### Decision

VyOS was selected for its ability to meet these stringent requirements without the prohibitive costs associated with similar solutions. Initial tests with the VyOS Rolling Release, supported by positive interactions with VyOS personnel, solidified this decision.

# Outcome

VyOS has been instrumental in maintaining uninterrupted service, ensuring performance that consistently exceeds Disaster Science's operational needs. The stable ingress and egress traffic data demonstrate the system's reliability, essential for effective disaster communication.

# Impact

The implementation of VyOS has allowed Disaster Science to maintain a robust and reliable platform for Bushfire.io, significantly enhancing community safety during natural disasters. This technology ensures the timely delivery of critical information, ultimately saving lives.



### Conclusion

Disaster Science's use of VyOS highlights the essential role of reliable technical solutions in disaster management. This partnership has fortified their infrastructure, enhancing their ability to support community resilience and respond effectively to emergencies.

## **About Disaster Science**

Disaster Science, through its Bushfire.io platform, is at the forefront of delivering critical, real-time information on natural disasters and community incidents, using advanced technology and data analytics to ensure community safety and preparedness across Australia, Canada, and the USA.

Our journey began in response to Australia's worst-ever bushfires in 2019-2020 when our founder was nearly trapped on the NSW south coast. This crisis highlighted a dire need for accurate, near-real-time information to answer essential questions about disaster directions, intensities, and safe evacuation practices. Motivated by this alarming lack of information and driven by a mission to save lives and protect communities, we assembled a team of experts, engineers, and visionaries to develop Bushfire.io.

Today, our platform has evolved into a comprehensive resource offering innovative tools like 3D wind overlays and intelligent alerting systems, designed to empower people, emergency services, and businesses to navigate the uncertainties of natural disasters with confidence and resilience.



