Adhere

Adhere NetDefender Firewall

Powered by pfSense®
Developed by Adhere Systems LLC

1. Introduction

The Adhere NetDefender Firewall is a robust, enterprise-grade network security solution developed by Adhere Systems LLC. Built on the reliable and feature-rich pfSense® platform, NetDefender offers advanced firewall, VPN, and routing capabilities tailored to meet the needs of small to medium-sized enterprises (SMEs), government agencies, and educational institutions.

2. Key Features

- Stateful Packet Inspection (SPI) Firewall
- NAT (Network Address Translation) Support
- Advanced Routing (Static, RIP, OSPF, BGP)
- Integrated VPN Support (IPsec, OpenVPN, WireGuard)
- Web Interface for Administration (Responsive and Easy to Use)
- Intrusion Detection and Prevention System (IDS/IPS) with Snort/Suricata
- Traffic Shaping and Bandwidth Management
- DNS and DHCP Services
- High Availability (HA) with CARP
- Comprehensive Logging and Monitoring Tools
- Two-Factor Authentication (2FA) for Secure Access
- Package Manager for Enhanced Extensibility

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3. Hardware Specifications

NetDefender is offered in multiple hardware configurations to suit diverse deployment scenarios. Common specifications include:

- CPU: Intel® Celeron®, Core™ i3/i5/i7, or Xeon® (depending on model)
- RAM: 4GB to 32GB DDR4
- Storage: 128GB to 1TB SSD
- Network Interfaces: 2 to 8 Intel® Gigabit or 10-Gigabit Ethernet Ports
- Chassis: Desktop or 1U/2U Rackmount Options
- Power Supply: External or Internal (with redundancy in higher models)

4. Software Specifications

- Operating System: pfSense® CE or Plus
- Kernel: FreeBSD-based
- User Interface: WebGUI (HTTPS)
- Access Control: Role-Based Access, 2FA, SSH Access
- Configuration Backup and Restore
- Multi-WAN Support with Load Balancing and Failover

5. Common Use Cases

- Perimeter Firewall for Corporate Networks
- VPN Gateway for Remote Workforce
- Network Segmentation for Enhanced Security
- Secure Routing for Multi-site Connectivity
- Educational Institutions and Government Offices