

# Modernizing Remote Access: The Strategic Value of Pangolin

The Unified Zero-Trust Private Access Platform

## Executive Summary

In an era where the traditional network perimeter has dissolved, organizations are struggling with the complexity of managing legacy VPNs and fragmented reverse proxy setups. **Pangolin** redefines secure access by combining the best of both worlds into a single, identity-aware platform. Built on the high-performance WireGuard® protocol, Pangolin provides seamless, clientless access to web applications and granular, secure connectivity to private resources with a tunneling client - all without the need for open inbound ports or public IP addresses.

## Business Impact & Efficiency

Implementing Pangolin doesn't just harden your security - it streamlines your entire IT workflow. By connecting to existing identity platforms and making access control simple, Pangolin removes the "VPN support ticket" cycle and teams can refocus on business value.

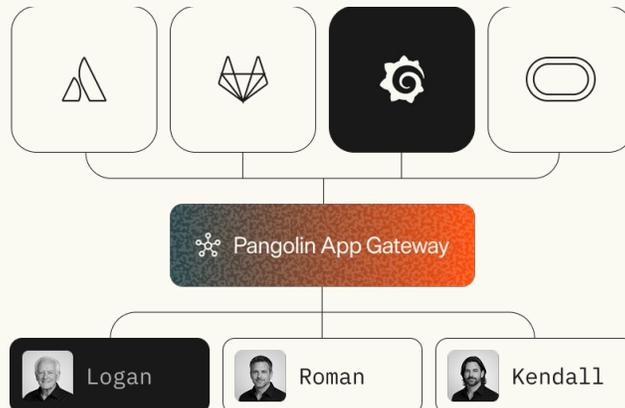
# 80%

Of exploits from public exposure  
and VPN mismanagement

# 42%

Reduction in VPN & firewall  
time investment

*(Note: Data based on internal pilot projections comparing legacy VPN management vs. Pangolin)*



## Why Pangolin? Moving Beyond Legacy Infrastructure

Traditional endpoint security and remote access tools often force a compromise between security, performance, and user experience.

Feature	Traditional VPN	Standard Reverse Proxy	Pangolin
Access Model	Network level	Application level	Identity Aware
Connectivity	Client-heavy	Browser-based	Client and browser
Inbound Ports	Required (Risk)	Required (80/443) (Risk)	None (Outbound Tunnels)
Performance	High overhead	Medium	High (WireGuard® Based)

### 1. Eliminate the Attack Surface

Legacy appliances require open ports, making them visible to scanners and vulnerable to zero-day exploits. Pangolin uses **outbound-only tunnels** via its "Newt" connectors. Your internal infrastructure remains invisible to the public internet, effectively neutralizing DDoS and scanning-based attacks.

### 2. Identity-First Security (Zero Trust)

Traditional VPNs often grant "keys to the kingdom" once a user is connected. Pangolin shifts the focus from the network to the **identity**. Every request is verified against your SSO provider (OIDC, SAML) before it ever reaches your application. You can define access policies based on user roles, geographic location, and device posture.

### 3. Operational Simplicity

Managing separate stacks for external web apps (Reverse Proxies) and internal admin tools (VPNs) doubles the maintenance burden. Pangolin provides a **unified dashboard** to manage sites (networks) resources (applications) across your entire distributed environment.

## Technical Architecture: How It Works

Pangolin utilizes a distributed architecture consisting of two primary components:

- **The Controller (Cloud or Self-Hosted):** The central brain that handles authentication, policy enforcement, and SSL termination.
- **The Newt Connector:** A lightweight agent installed on your private network that establishes an encrypted, outbound WireGuard tunnel to the controller.
- **The User Client:** Runs on all users devices for use to access private remote networks and applications.

When a user requests a resource, Pangolin validates their identity. If authorized, the traffic is routed through the secure tunnel directly to the specific resource. This ensures that even if a user is authorized for a "Web App," they have zero visibility or access to the rest of the network.

## Conclusion: Future-Proof Your Access

Pangolin is more than a replacement for your VPN; it is a fundamental upgrade to your security posture. It offers the speed of modern protocols, the security of Zero Trust, and the simplicity of a single management plane.

### Ready to simplify your secure access?

Visit [docs.pangolin.net](https://docs.pangolin.net) to start your deployment.

## About Pangolin

Pangolin is an open-source infrastructure company that provides secure, zero trust remote access for teams of all sizes. Built to simplify developer workflows and protect critical systems, Pangolin helps companies and individuals connect to their networks, applications, and devices safely - without relying on traditional VPNs. With a focus on device security, usability, and transparency, Pangolin empowers organizations to manage access efficiently while keeping their infrastructure secure.



[pangolin.net](https://pangolin.net)

Fossorial, Inc., 94107 San Francisco, California