

CWD Blade

Extensive Routing Platform

CWD Blade Rev 1.2



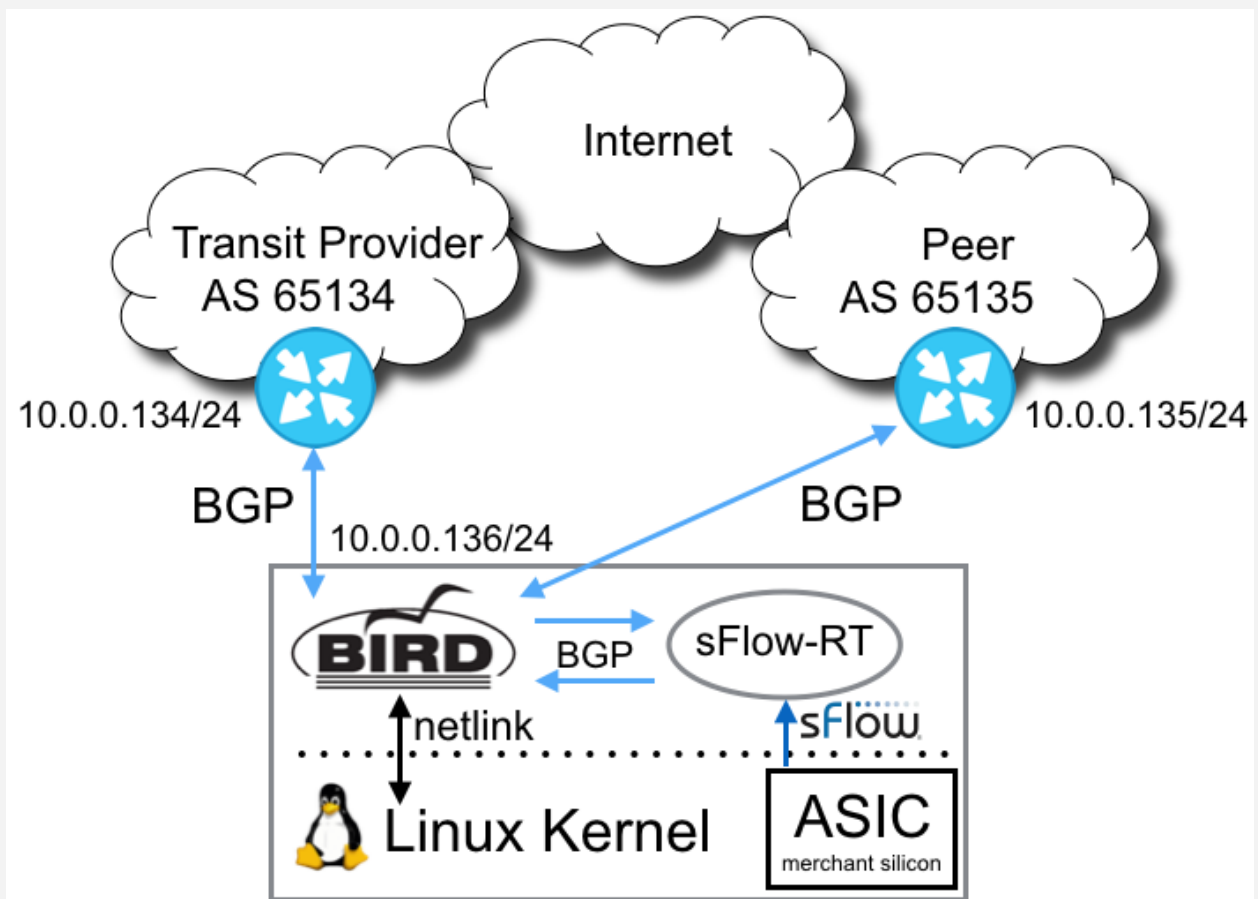
Product Overview

CWD Blade is a robust router and firewall appliance built for simple management and deployment. It offers easy configuration and complies with top telecom and industry standards. The appliance allows network division into multiple zones like WAN, LAN, DMZ, and supports various tunneling protocols (Wireguard, OpenVPN). It features a Stateful Packet Inspection (SPI) firewall with Software Offloading for optimal gigabit wire speeds. Carriers and telecom companies can benefit from Blade's OSPF and BGP integrations, including peer identification support.

The open routing architecture (CWD-WRT) comprises a core routing BIRD daemon for IPV4 and IPV6, which serves as an abstraction layer between the Unix kernel and router clients. It provides the API through a Unix-domain socket or TCP socket for communication. The existing clients include:

- ospfd: Implements Open Shortest Path First (OSPFv2)
- bgpd: Implements Border Gateway Protocol (BGPv4+), including IP multicast and IPv6

- ripd: Implements Routing Information Protocol (RIP) version 1 and 2
- isisd: Implements Intermediate System to Intermediate System (IS-IS)
- ospf6d: Implements Open Shortest Path First (OSPFv3) for IPv6
- ripngd: Implements Routing Information Protocol (RIPng) for IPv6
- itb: Intertable protocol
- pimd: Implements Protocol Independent Multicast (PIM-SSM) for Source-specific multicast



Gigabit Throughput Guarantee

CWD Blade is an excellent choice for gigabit routers in large networks, including distributed government offices, university campuses, and Internet Service Providers (ISPs). It delivers exceptional performance, achieving high speeds beyond local routing subnets. The inclusion of Software Offloading, also known as Flow Control, enhances overall throughput by 12%, allowing for increased traffic passthrough capacity.


```
Connecting to host 192.168.1.1, port 5201
[ 4] local 192.168.1.128 port 34270 connected to 192.168.1.1 port 5201
[ ID] Interval          Transfer          Bandwidth        Retr  Cwnd
[ 4]  0.00-1.00    sec    113 MBytes    950 Mbits/sec    34   228 KBytes
[ 4]  1.00-2.00    sec    112 MBytes    942 Mbits/sec    39   315 KBytes
[ 4]  2.00-3.00    sec    111 MBytes    934 Mbits/sec    21   252 KBytes
[ 4]  3.00-4.00    sec    111 MBytes    931 Mbits/sec    32   222 KBytes
[ 4]  4.00-5.00    sec    112 MBytes    938 Mbits/sec    35   225 KBytes
[ 4]  5.00-6.00    sec    112 MBytes    936 Mbits/sec    28   236 KBytes
[ 4]  6.00-7.00    sec    112 MBytes    940 Mbits/sec    32   201 KBytes
[ 4]  7.00-8.00    sec    112 MBytes    937 Mbits/sec    27   209 KBytes
[ 4]  8.00-9.00    sec    112 MBytes    939 Mbits/sec    34   112 KBytes
[ 4]  9.00-10.00   sec    111 MBytes    935 Mbits/sec    17   226 KBytes
-----
[ ID] Interval          Transfer          Bandwidth        Retr
[ 4]  0.00-10.00   sec    1.09 GBytes    938 Mbits/sec    299      sender
[ 4]  0.00-10.00   sec    1.09 GBytes    937 Mbits/sec                receiver

iperf Done.
```

Performance, Stability & Security

CWD Blade stands out as a stable and reliable solution, consistently delivering high performance. It effectively minimizes latency and lag while significantly boosting network throughput through its advanced bufferbloat control algorithms. With a robust Core Linux OS, it remains resilient against common vulnerabilities, ensuring the security of your network. Unlike other vendors that offer routers with limited capabilities, CWD Blade goes beyond by providing a vast selection of over 3000 packages that can be easily installed, enabling flexible deployment for various scenarios. This versatility empowers you to customize and optimize your network according to your specific needs.

With CWD Blade, you can rely on a robust and dependable system that minimizes downtime



and reduces the risk of disruptions. This stability is particularly valuable for critical environments such as government offices, university campuses, and ISPs, where uninterrupted network connectivity is essential. By providing a solid and stable foundation, CWD Blade enables efficient and reliable data transmission, contributing to enhanced productivity, customer satisfaction, and overall network performance.

CWD Blade leverages the power of OpenWRT to provide a custom-built firewall solution that prioritizes network security. OpenWRT is an open-source operating system specifically designed for routers and embedded devices, known for its robust security features and active community support. With CWD Blade's custom-built WRT firewall, users have access to a wide range of security options and configurations. They can define specific firewall rules, filter network traffic based on source/destination IP addresses, ports, and protocols, and set up port forwarding and network address translation (NAT) to control incoming and outgoing connections. Furthermore, the firewall supports intrusion detection and prevention system (IDPS) functionalities, allowing the detection and mitigation of potential threats or attacks on the network. This proactive approach enhances network security by actively monitoring and blocking suspicious activities.