![6WIND - Virtualized Networking Software]

Challenges

- ▶ *Legacy Limitations*
- ▶ *Data Gravity & AI Workloads*
- ▶ *Flexibility & Sovereignty*
- ▶ *Self-Service & Automation*

Benefits

- ▶ *API-Driven Integration*
- ▶ *Accelerated Service Delivery*
- ▶ *Pay-As-You-Grow Economics*
- ▶ *Lower TCO & Energy Use*
- ▶ *Faster Time to Revenue*
- ▶ *Strategic Control*

Conclusion

- ▶ *Sovereign, multi-cloud interconnect*
- ▶ *Elastic service scaling*
- ▶ *End-to-end automation*
- ▶ *Carrier-grade reliability*

B2B Cloud Services for NaaS Providers

Enabling API-Driven, Cloud-Native Networking at Scale

Executive Summary

The rise of Network-as-a-Service (NaaS) is redefining how enterprises consume network connectivity.

Traditional MPLS and hub-and-spoke IPVPNs can't keep up with a world where applications, AI workloads, and data move freely across multi-cloud platforms, colocation sites, and sovereign cloud regions. NaaS providers must deliver on-demand, software-defined connectivity that is programmable, elastic, and consumption-based.

6WIND's B2B Cloud Services provide the **software building blocks** NaaS operators need to launch, scale, and monetize next-generation network services. Designed for **cloud-native, API-first** operations, these solutions enable performance, security, and agility from the **core to the edge**.

Challenges

Legacy Limitations

Conventional IPVPN/SD-WAN infrastructures are often vendor-locked, slow to scale, and operationally rigid—unfit for the instant service provisioning and elastic delivery models NaaS demands.

Data Gravity & AI Workloads

Traffic patterns now follow data—not fixed sites. Enterprises require deterministic performance between data centers, cloud apps, AI factories, GPU-aaS platforms, and sovereign domains.

Flexibility & Sovereignty

Enterprises face increasing hyperscaler lock-in risks and must comply with regional laws (GDPR, data residency, zero-trust mandates). NaaS platforms need sovereign deployments, flexible interconnects, and full control of network flows.

Self-Service & Automation

Enterprises expect cloud-like networking: APIs, automation, multitenancy, and consumption-based pricing as standard features.

6WIND Solution Overview

6WIND's B2B Cloud Services portfolio is **cloud-ready, API-driven, and performance-optimized** for deployment in:

- ▶ **Public clouds**
- ▶ **Edge co-location facilities**
- ▶ **Private infrastructure**
- ▶ **Telco Cloud environments**

With **flexible licensing models** (pay-as-you-grow, subscription, perpetual), NaaS providers can align deployments with their business economics and launch new services rapidly without overbuilding.

All components share an **API-first architecture**, enabling full integration with orchestration systems, digital platforms, and self-service portals.
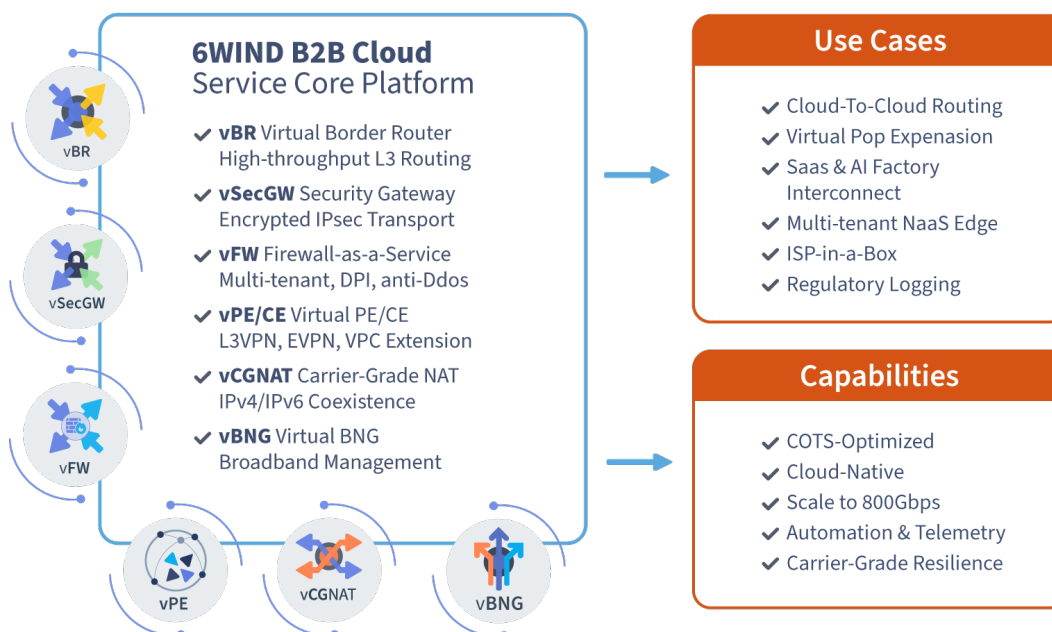
Core Virtualized Components

FUNCTION	DESCRIPTION
Virtual Border Router (vBR)	High-throughput L3 routing for inter-cloud, inter-DC, and on-premises networks, with deterministic low latency.
Security Gateway (SecGW)	IPsec encryption for secure transport; integrates with DPUs such as NVIDIA BlueField for accelerated performance.
Firewall-as-a-Service (vFW)	Multi-tenant distributed firewall with DPI, ACLs, anti-DDoS, and compliance logging.
Virtual PE/CE	Delivers L3VPNs, EVPN, and VPC extensions; integrates with orchestration stacks for automated provisioning.
vCGNAT	IPv4/IPv6 coexistence, public IP sharing, lawful intercept logging, and policy enforcement.
vBNG	Broadband subscriber management, policy control, and large-scale IP session tracking.

Platform Capabilities

- ▶ **COTS-Optimized** – Runs on standard x86 with optional SmartNIC/DPU acceleration.
- ▶ **Cloud-Native** – Supports Kubernetes, OpenStack, and bare metal with Helm charts and declarative APIs.
- ▶ **Performance at Scale** – Scales to **800 Gbps per instance** for AI data flows and ultra-high-bandwidth services.
- ▶ **Automation & Telemetry** – Lifecycle automation via Netconf, REST, and gNMI; full telemetry support.
- ▶ **Carrier-Grade Resilience** – Built-in HA, service chaining, and rollback mechanisms.

6WIND B2B Cloud Services for NaaS Providers

6WIND B2B Cloud Service Core Platform

- ✔ **vBR** Virtual Border Router High-throughput L3 Routing
- ✔ **vSecGW** Security Gateway Encrypted IPsec Transport
- ✔ **vFW** Firewall-as-a-Service Multi-tenant, DPI, anti-Ddos
- ✔ **vPE/CE** Virtual PE/CE L3VPN, EVPN, VPC Extension
- ✔ **vCGNAT** Carrier-Grade NAT IPv4/IPv6 Coexistence
- ✔ **vBNG** Virtual BNG Broadband Management

vBR
vSecGW
vFW
vPE
vCGNAT
vBNG

Use Cases

- ✔ Cloud-To-Cloud Routing
- ✔ Virtual Pop Expenasion
- ✔ Saas & AI Factory Interconnect
- ✔ Multi-tenant NaaS Edge
- ✔ ISP-in-a-Box
- ✔ Regulatory Logging

Capabilities

- ✔ COTS-Optimized
- ✔ Cloud-Native
- ✔ Scale to 800Gbps
- ✔ Automation & Telemetry
- ✔ Carrier-Grade Resilience

6WIND B2B Cloud Services for NaaS—virtualized networking components on a cloud-native, DPU-accelerated platform delivering secure, scalable, and programmable multi-tenant connectivity across cloud, colo, and edge environments.

Business Benefits

▶ **API-Driven Integration** – Seamlessly tie into digital platforms and portals for end-to-end automation.

▶ **Accelerated Service Delivery** – Deploy new PoPs, edge nodes, or AI interconnects in hours, not weeks.

▶ **Pay-As-You-Grow Economics** – Scale horizontally with tenant growth or bandwidth demand; avoid sunk costs.

▶ **Lower TCO & Energy Use** – Consolidate multiple functions (SecGW, NAT, FW, PE) on one x86 node.

▶ **Faster Time to Revenue** – Rapidly launch differentiated services such as AI-factory interconnects or sovereign cloud VPNs.

▶ **Strategic Control** – Maintain full control over routing, security, and tenant management—no hyperscaler dependency.

Use Case Scenarios

USE CASE	ENABLED BY
Cloud-to-Cloud Routing	vBR + SecGW for secure, optimized interconnection between cloud zones/providers.
Virtual POP Expansion	vPE, vFW, and vBR deployed at IXs, colos, or MVE partners.
SaaS & AI Factory Interconnect	Tenant-aware connectivity to AI workloads, data marketplaces, GPU-aaS sites.
Multitenant NaaS Edge	Isolated routing, firewall, and CGNAT for hundreds of tenants.
ISP-in-a-Box	vBNG, vCGNAT, and policy engines for residential and business broadband.
Regulatory Logging	SecGW and CGNAT provide per-session logs and compliance audit trails.

Conclusion

NaaS providers are redefining enterprise connectivity with **real-time, programmable, and trusted networking.**

With **6WIND's B2B Cloud Services**, they gain a cloud-native, high-performance, and API-driven platform that supports:

▶ Sovereign, multi-cloud interconnect

▶ Elastic service scaling

▶ End-to-end automation

▶ Carrier-grade reliability

From AI factories to sovereign cloud zones, 6WIND empowers NaaS providers to innovate faster, operate more efficiently, and maintain strategic control over their networks.