



MAIN VERTICAL	SUB VERTICALS	SERVICES OFFERED	PRIMARY TECHNOLOGY	DESCRIPTION
Optical	DCI + DC	Full end-to-end services: multi-vendor designs, PoC, modulation schemes, subsystem integration, PoC, pre-sales, open initiatives, EFI, NMS and orchestration development	400G—1.2T, ZR, Coherent DSP, Flex Grid	Multi-vendor interop, PTP, complex modulations NRZ to PAM4-8, migrate to 100Gbaud per lane, InP/SiP wafers and co-pack
	SP Metro + Long-haul	Full end-to-end services: multi-vendor designs, highly meshed, optimal modulation schemes, open initiatives, EFI, NMS and orchestration development	100-400G, ZR+, 1x8 WSS, MxN ROADM, CDC	Multi-vendor interop, routed pluggable optics with coherent optics, modulations NRZ to PAM4, TCO analysis,
	Subsea	Proprietary designs and PoC, dispersion management strategies	400-800G ZR, XR	Multi-vendor interoperability and analysis, PoC analysis, TCO, NMS integrations and specialty tool development—baud granularity
	Enterprise+Campus Metro+Access	Full end-to-end services: multi-vendor designs, highly meshed, routed optical, orchestration tools—application acceleration	40-200G, 1x32 WSS, ROADM, IPoDWDM	Multi-vendor interoperability, routed pluggable optics, IPoDWDM, MPLS/DWDM, WAN optimization, TCO analysis
	Cable / MSO Metro + DAA	✓ as above	IPoDWDM, 1G-100G,	Vendor replacement, IoT/5G mid and back haul designs, PoC, FTTH, GPON, DAA-TCO analysis
	RAN	Mid and backhaul path protection designs	100G-400G ROADM CDC, MPLS/DWDM,	Vendor replacement, mid and back haul, OTN designs
OTN, Sonet & Routed Opt.	Mid-haul Metro-Access	OTN frame aggregation of SONET, TDM, Ethernet, Voice, Video Routed Optical Networks, Tandem Connection, Private Line, Agnostic Fabrics	OTN, ODUFlex, GFP, GMPLS	Cost efficient hop-hop optical bypass architectures—OTU2e, OTU4 ODUFlex, GFP resize-map, BWR map, Private Line / Carrier Services
Optics Testing	Optics qualification vendor and 3rd	Multi-vendor, components, chipsets w 1000 test scenarios to quantify and qualify performance metrics	Customized per use case	1000 test scenarios covering: temperature, FEC, I/Q imbalance, skew, BER sampling, throughput, group delay, gain control,
	New product intro NPI	New form factor, new product, new standards—strict verification	Customized per use case	Defect and interoperability focused testing, analytics against database
	Established Interoperability	Established form factor and established product—quality control	Customized per use case	Soak, throughput, and temperature focused testing, analytics against database
Packet	DC Fabric	CLOS design, optimize, multi-vendor, EF&I, L2-3 overlay/underlay	EVPN, EBGP, MPLS, ECMP	Design iterations per use case—CDN, Storage, Edge, Transit, WAN connectivity
	SP	Multivendor and multi-domain design and emulation—GNS3, EVE-NG Cloud VPC to WAN designs	MPLS, SR, NGFW, IPoDWDM, Gateways	WAN connectivity, micro-segmentation, QoS, gateway designs BNG, Transit, Cloud, TDM to IP, DMVPN
	Enterprise+Campus Metro+Access	✓ as above	L2-3 Overlay+Underlay VRF, VPC Peering	✓ as above
Packet Testing	WAN, Web, Metro, OTT, CDN	IP/MPLS layer coordinating with optical to minimize traffic to avoid asynchronous traffic flapping	MPLS, WAN, BGP, IPv4+6, FRR	Routing convergence and redistribution FRR Identify IP links that conform to operator practices and resilient + redistribute FIB rewrite.
TDM 2 IP	DCN	Circuit emulation—pseudowire encapsulation, multi-vendor, RSVP TE	TDM 2 IP/MPLS TDM 2 IP/DWDM	MPLS pseudowire transport
NOC Day 2+	SP NOC	L1-4 monitoring, optimization, escalation, anomaly detection, automation tools	WAN + Netops	Netops and handoff to respective eng. teams
	Enterprise, OTT NOC	L1-4 monitoring, telemetry data, optimization, AI/NLP automation	Netops + AI	Data gathering, intelligent analytics applied to orchestration for service acceleration
Automation+	NOC and SP	OSS/BSS Tools, EPNM, ONAP, ODL, ONOS	Netcracker, Netcool, M6, gRPC, Metasolv, PyATS	Edge service integration NMS, NFV platform
	Optical Design	Multi-vendor and open optical planning tool	GNPy, Netconf, XML	GNPy design and GUI in collaboration with open source initiative
	Optical and IP turn-up and testing	In-house tools for faster optical design, turn-up, and testing	Netconf, Restconf, YANG Model, gRPC, Blue Planet	Accelerated design and installation
	General scripts + Playbooks	Southbound configuration push and integrations	Ansible, Jingo, JSON, GO, Python, gRPC	Improve traditional NetOps tasks, data formats XML, YANG
RFP Quick Response+	Optical + Packet Design Team	Improved customer experience with rapid network feasibility study and RFP responses	IP, MPLS, DWDM, WAN, Gateways, IPoDWDM, OTN	Engage customers from day 1 and empower sales teams with rapid viable design options—hand-off to internal SE teams
Software Testing	New Features	Build test plan and test cases prior to product launch—expedite a clean launch	Python, Linux, SQL, TCL, Perl	Recommend solutions in order to expedite new feature delivery