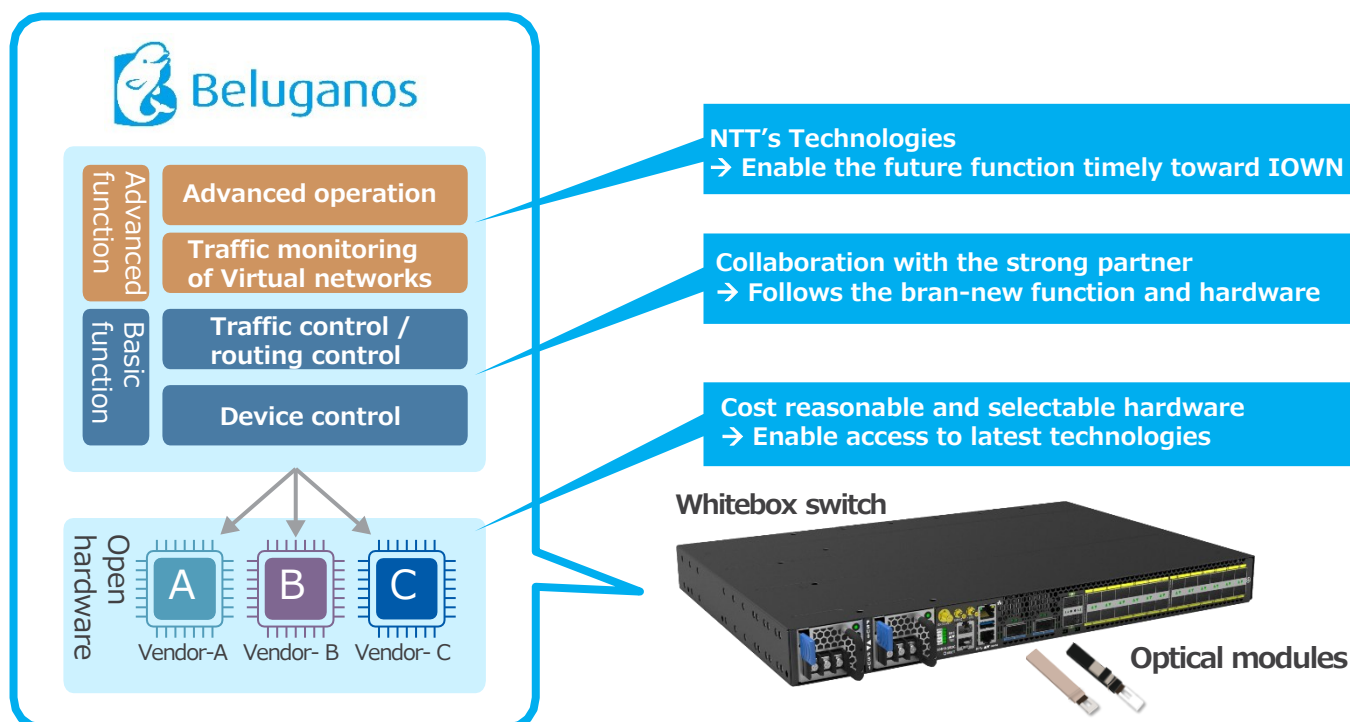




Advanced network operating system "Beluganos" with open hardware offers scalable and affordable alternative to proprietary solutions.

Our state-of-the-art technologies will break through for your challenges against big wave of networking transformation



Recently, our networking needs to be transformed depending on the explosion of data traffic by AI, ML, IoT and so on.

To deal with it, there are many issues to be overcome,

- You can't select each hardware part, and need to choose expensive whole solution of one vendor's
- You can't escape from continuous and expensive operation cost due to one vendor lock-in
- You can't get enough technical support if you use some 3rd vendor products
- You can't reduce the number of network equipment and feel difficulty to get proper performance

"Beluganos" is sure to solve those problems with open hardware. NTT-AT offers you technical support as well.

POINT

1

**High performance
High potential**

Utilizes state-of-the-art IOWN technologies and open hardware to provide high throughput, low latency performance, along with high adaptability to future technologies.

POINT

2

**High reliability
Easy maintenance**

Supported by NTT group, which has much experience of network development and operation and leading open networking community.

POINT

3

**Cost saving from a long
perspective as well**

The same NOS remains usable even after the hardware reaches EoL/EoS and is replaced, and it will lead you to long-term cost reduction.



Outline of Specification

Category	Features
DWDM (Layer1)	QSFP-DD configuration and monitoring (incl. DWDM wavelength selection)
Ethernet (Layer2)	VLAN, STP, LLDP, LAG, MLAG, RSTP, etc.
IP (Layer3)	ARP, BGP, RIP, OSPF, ISIS, BFD, VRRP, etc.
Carrier Ethernet	CFM, ERPS, EFM
Transport	VxLAN-General, SR_MPLS, CFM over VxLAN, ECMP path identification
Multicast	PIM, IGMP
Timing & Synchronization	PTP, SyncE
Management	SNMP, Telemetry, Netconf, Authentication, NTP, tftp/scp, sflow Event manager, Notification of reboot completion

Hardware Line-up: Various line-up on your request

Whitebox switch

Model	400G-IF	IOWN Network Solution * 1	1G-IF	Fan-less
Use-case	Data Center Interconnection, Mobile access		Management/Enterprise	Mobile Access/Enterprise
Vendor	Edgecore	Ufispac	Ufispac	Ufispac
Product name	AS7535-28XB	S9510-28DC	S6301-56ST	S9502-16SMT *2 Planning
Capacity	800Gbps		130Gbps	32Gbps
Interface Port	2 x 100G/400G 2 x 40G/100G, 24 x 1G/10G/25G		48 x 10M/100M/1G (Metal) 8 x 1G/10G	4 x 1G/10G, 8 x 100M/1G 4 x 100M/1G(Metal)
Model	100G-IF	25G-IF		10G-IF
Use-case	Data Center			Enterprise
Vendor	Edgecore	Edgecore	Ufispac	Edgecore
Product name	AS7726-32X	AS7326-56X	S8901-54XC NEW	AS5835-54X
Capacity	3.2Tbps	2.0Tbps	1.8Tbps	1.08Tbps
Interface Port	32 x 40G/100G	48 x 1G/10G/25G 8 x 40G/100G	48 x 1G/10G/25G 6 x 40G/100G	48 x 10G 6 x 40G/100G

*1 NTT News release on 4th, Sep 2024, <https://group.ntt/en/newsrelease/2024/09/04/240904a.html>, *2 Planning to release in Dec. 2025

Optical modules (SFP)

Bandwidth	Model	Adapted communication distance (model name, expected distance)				Example of vendor
		~about 10km	~about 40km	~about 80km	Over 80km	
400G	QSFP-DD	SR4/FR4/LR4	—	—	ZR / Open ZR+	NEC*, FOC*, IOWN Network Solution * 1
100G	QSFP28 / QSFP-DD	SR4/LR4	ER4	ZR4	Open ZR+	
40G	QSFP+	SR4/LR4	ER4	—	—	Smart Optics, II-VI (Finisar) ECI Networks
25G	SFP28	SR/LR	ER	—		
10G	SFP+	SR/LR	ER	ZR		
1G	SFP	T/SX	LX/EX	LH/ZX		

Inquiry

<https://www.ntt-at.com/product/beluganos/>



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