

Specification Sheet for Network Upgrade for Data Center and Research

(1) General Information

Network Switches and devices to support OIST researchers and admin staff, including:

- Additional Nexus switches to facilitate the additional HPC infrastructure
- Additional OOB switches to support management of the network
- Additional Cisco Wireless phones to support researchers in LAB environments, especially clean / wet labs.
- Additional optics to support network connectivity.

(2) System Components –

The implementation required following existing components.

S.No	Product Number	Description	QTY
1	WS-C3650-48FQ-E	Cisco Catalyst 3650 48 Port Full PoE 4x10G Uplink IP Services	12
2	CON-SMBS-WC3654	Support Essentials 8x5xNBD	12
3	PWR-C2-1025WAC	1025W AC Config 2 Power Supply	12
4	PWR-C2-1025WAC/2	1025W AC Config 2 Secondary Power Supply	12
5	CAB-C15-CBN	Cabinet Jumper Power Cord 250 VAC 13A C14-C15 Connectors	24
6	C3650-STACK-KIT	Cisco Catalyst 3650 Stack Module	12
7	C3650-STACK	Cisco Catalyst 3650 Stack Module	24
8	STACK-T2-1M	1M Type 2 Stacking Cable Spare	12
9	S3650UK9-166	Universal	12
10	WS-C3650-24TS-S	Cisco Catalyst 3650 24 Port Data 4x1G Uplink IP Base	12
11	CON-SMBS-WS6524SS	Support Essentials 8x5xNBD	12
12	PWR-C2-250WAC	250W AC Config 2 Power Supply	12
13	PWR-C2-250WAC/2	250W AC Config 2 Secondary Power Supply	12
14	STACK-T2-BLANK	Type 2 Stacking Blank	12
15	CAB-C15-CBN	Cabinet Jumper Power Cord 250 VAC 13A C14-C15 Connector	24
16	S3650UK9-166	Universal	12
17	WS-C3850-24XS-S	Cisco Catalyst 3850 24 Port 10G Fiber Switch IP Base	2
18	CON-SMBS-WSCX3852	Support Essentials 8x5xNBD	2
19	PWR-C1-715WAC	715W AC Config 1 Power Supply	2
20	PWR-C1-715WAC/2	715W AC Config 1 Secondary Power Supply	2
21	CAB-C15-CBN	Cabinet Jumper Power Cord 250 VAC 13A C14-C15 Connectors	4
22	C3850-STACK-NONE	No Stack Cable Selected	2
23	C3850-SPWR-NONE	No Stack Power Cable Selected	2
24	S3850UK9-166	Universal	2
25	C3850-NM-4-10G	Cisco Catalyst 3850 4x 10GE Network Module	2

26	N9K-C9364C	Nexus 9K ACI & NX-OS Spine 64P 40/100G QSFP28	2
27	CON-SNT-N9364C	SNTC-8X5XNBD Nexus 9K ACI NX-OS Spine 64P 40 100G	2
28	N9K-C9300-RMK	Nexus 9K Fixed Rack Mount Kit	2
29	N9K-C9300-ACK	Nexus 9K Fixed Accessory Kit	2
30	NXA-FAN-160CFM-PI	Nexus Fan 160CFM port side intake airflow	6
31	NXA-PAC-1200W-PI	Nexus NEBs AC 1200W PSU-Port Side Intake	4
32	CAB-C13-C14-2M	Power Cord Jumper C13-C14 Connectors 2 Meter Length	4
33	NXOS-703I7.3	Nexus 9500 9300 3000 Base NX-OS Software Rel 7.0(3) I7(3)	2
34	N93-LIC-PAK	N9300 License PAK Expansion	2
35	N93-LAN1K9	LAN Enterprise License for Nexus 9300 Platform	2
36	CON-ECMU-N93LAN	SWSS UPGRADES LAN Enterprise License for Nexus 9300 PI	2
37	N9K-DCNM-PAK	N9000 DCNM License PAK Expansion	2
38	CON-ECMU-N9DCNMPK	SWSS UPGRADES N9000 DCNM License PAK Expansion	2
39	DCNM-LAN-N93-K9	DCNM for LAN Advanced Edt. For Nexus 9300 Switches	2
40	CON-ECMU-N93LANK9	SWSS UPGRADES DCNM for LAN Advanced Edt. For Nexus 9300 switches	2
41	N9K-C93180YC-EX	Nexus 9300 with 48p 10/25G SFP+ and 6p 100G QSFP28	3
42	CON-SNT-93180YCX	SmartNetTotal Care 8x5xNBD	3
43	N3K-C3064-ACC-KIT	Nexus 3K/9K Fixed Accessory Kit	3
44	NXA-FAN-30CFM-B	Nexus 2K/3K/9K Single Fan port side intake airflow	12
45	NXA-PAC-650W-PI	Nexus NEBs AC 650W PSU-Port Side Intake	6
46	CAB-C13-C14-2M	Power Cord Jumper C13/C14 Connectors 2 Meters Length	6
47	NXOS-703I7.3	Nexus 9500 9300 3000 Base NX-OS Software Rel 7.0(3)I7(3)	3
48	N93-LIC-PAK	N9300 License PAK Expansion	3
49	N93-LAN1K9	LAN Enterprise License for Nexus 9300 Platform	3
50	CON-ECMU-N93LAN	SWSS UPGRADES LAN Enterprise License for Nexus 9300 PI	3
51	N9K-DCNM-PAK	N9000 DCNM License PAK Expansion	3
52	CON-ECMU-N9DCNMPK	SWSS UPGRADES N9000 DCNM License PAK Expansion	3
53	DCNM-LAN-N93-K9	DCNM for LAN Advanced Edt. For Nexus 9300 switches	3
54	CON-ECMU-N93LANK9	SWSS UPGRADES DCNM for LAN Advanced Edt. For Nexus 9300 switches	3
55	N2K-C2348UPQ	Nexus 2000 10GE UP FEX: 48x1-10GE SFP+;6x40G QSFP	32

56	CON-SNT-C2348UPQ	SNTC-8X5XNBD Nexus 2000 10GE UP FEX; 48x1/10GE SFP+	32
57	CAB-C13-C14-2M	Power Cord Jumper C13-C14 Connectors 2 Meter Length	64
58	N2200-PAC-400WB-SN	N2200-PAC-400W-B for Service Purposes	64
59	NXA-FAN-30CFM-B-SN	Service Specific-Fan	96
60	N2348UPQ-BA-BUN	Port Side Intake airflow pack: N2K-C2348UPQ 2AC PS 3Fan	32
61	CON-SNT-2348PQBA	SNTC-8X5XNBD Reverse airflow pack N2K-C	32
62	DCNM-LAN-N93-K9=	DCNM for LAN Advanced Edt. For Nexus 9300 Switches	5
63	CON-ECMUS-N93LANK9	SOLN SUPP SWSS DCNM for LAN Advanced Edt. For Nexus 9300 switches	5
64	DCNM-LAN-N5K-K9=	DCNM for LAN Advanced Edt. for Nexus 5000	3
65	CON-ECMUS-N5LDCNM	SOLN SUPP SWSS DCNM for LAN Advanced Edt. for Nexus 5000	3
66	VG204XM	Cisco VG204 Analog Voice Gateway	15
67	CON-SNT-VG204XM	SmartNetTotalCare 8x5xNBD	15
68	SVG2XIPV-15603M	Cisco VG20X Series IOS IP VOICE	15
69	CAB-JPN	AC Power Cord (JAPAN) C13 JIS C 8303 2.5m	15
70	CAB-ETH-S-RJ45	Yellow Cable for Ethernet Straight-through RJ-45 6 feet	15
71	PWR-30W-AC	Power Supply 30 Watt AC	15
72	PWR-30W-AC=	Power Supply 30 Watt AC	1
73	CP-8821-K9-BUN	Cisco Unified Wireless IP Phone 8821 World Mode Bundle	20
74	CON-SNT-CP88K9BN	SmartNetTotalCare 8x5xNBD	20
75	CP-DSKCH-8821=	Cisco 8821 Desk Top Charger	20
76	CP-PWR-8821-JP	Cisco 8821 Power Supply for Japan	20
77	CP-BATT-8821	Cisco 8821 Battery Extended	20
78	MR53-HW	Meraki MR53 Cloud Managed AP	2
79	CON-ROB-MR53-HW	RMA ONLY 8X5XBD Meraki MR53 Cloud managed AP	2
80	LIC-ENT-1YR	Meraki MR Enterprise License 1YR	2
81	QSFP-40G-SR4=	40 BASE-SR4 QSFP Transceiver Module with MPO Connector	128
82	SFP-10G-LR=	10 BASE-LR SFP Module	20
83	SFP-10G-SR=	10 BASE-SR SFP Module	148
84	GLC-LH-SMD=	1000BASE LX/LH SFP transceiver module MMF/SMF 1310nm Dom	12

(3) Switch specifications and capabilities

This implementation should be executed based on the vendors global best practices.

3850 Capabilities

3850-XS Models	WS-C3850-24XS-S
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Native Optics	SFP+
Number of Ports	24 port 1/10 Gigabit Ethernet SFP+, 4 port network module

3650 Capabilities

3650-TS Models	WS-C3650-24TS-S
Native Optics	SFP
Number of Ports	24 port 1 Gigabit Ethernet SFP, 4 port network module
3650-FQ Models	WS-C3650-48FQ-E
Native Optics	SFP
Number of Ports	48 port 1 Gigabit Ethernet SFP, 4 port network module

N9K-C9364C Capabilities

N9300 Models	N9K-C9364C
Native Optics	SFP+, QSFP+
Number of Ports	64 x 40/100-Gbps QSFP28 ports

N93180YC-EX Capabilities

N9300 Models	N93180YC-EX
Native Optics	SFP+, QSFP+
Number of Ports	48 x 1/10/25-Gbps, 6 x 40/100-Gbps QSFP28 ports

N2K-C2348UPQ Capabilities

N2K-2300 Models	N2K-C2348UPQ
Native Optics	SFP+
Number of Ports	48 port 1/10-Gbps SFP+, 6 x 40/100-Gbps QSFP28 port

MR53 Capabilities

MR53 Models	MR53-HW
Interfaces	1x 100/1000/2.5G BASE-T & 1x 10/100/1000 BASE-T (RJ45)
Radios	2.4 GHz 802.11b/g/n client access radio 5 GHz 802.11a/n/ac client access radio
802.11ac Wave 2 and 802.11n Capabilities	5 GHz 4x4:4 radio supporting 160 MHz channel widths 2.4 GHz 4x4:4 radio supporting 40 MHz channel widths

(4) Location for the delivery

学校法人沖縄科学技術大学院大学学園（沖縄県国頭郡恩納村字谷茶 1919-1 学校法人沖縄科学技術大学院大学学園 Lab1,Lab2,Lab3,Center 棟において、本学担当者が指定する箇所。

(5) Completion Due Date

30th September 2018

(6) Test and Inspection

Bid Winning vendor should show the person in charge at OIST IT that all the features covered in the specification works using the system.

(7) Operation & Knowledge transfer

Bid Winning vendor should provide instructions and comments accompanying products to the IT Network Team and explain how to implement the capabilities delivered in this engagement.

(8) Delivery Handover Documents

Provide products materials and documentation from manufacturer.

Delivery plan document.

(9) Warranty & Assurance

General Vendor support

(13) Warranty and Support

All maintenance, licensing, support, and any other costs must be itemized per quote.

The bid should include the first fiscal year of all costs, including maintenance, licensing, and support.

(14) Other

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