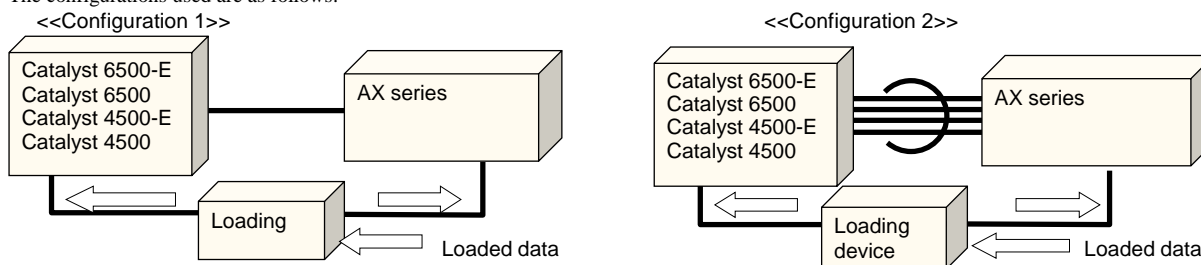# Catalyst 6500/4500 - AX Series Interconnectivity

We have verified the interconnectivity between Cisco products (Catalyst 6500-E/Catalyst 6500/Catalyst 4500-E/Catalyst 4500) and ALAXALA products (AX Series). (Rev.1)

2010.3.31

1. Configuration

The configurations used are as follows:

<<Configuration 1>>

<<Configuration 2>>

Catalyst 6500-E (WS-C6506-E)　:Cisco IOS 12.2 (33) SXH3

Catalyst 4500-E (WS-C4507R-E):Cisco IOS 12.2 (46) SG

Catalyst 6500 (WS-C6506)　:Cisco IOS 12.2 (18) SXF9

Catalyst 4500 (WS-C4507R):Cisco IOS 12.2 (25) EWA4

2. Results

We have verified the interconnectivity between Cisco Catalyst 6500-E/6500/4500-E/4500 and AX products. The verified items and results are as follows:

Verified item				Result
Layer 1	Link-up and communications		UTP	Auto Nego (10/100TX) Auto Nego (10/100/1000T) 10BASE-T Fixed 100BASE-TX Fixed	OK
			Optical	Auto Nego (1000BASE-X) 1000BASE-X Fixed 10GBASE-R Fixed	OK
	Jumbo frame		UTP	Auto Nego (10/100TX) Auto Nego (10/100/1000T)	OK
			Optical	Auto Nego (1000BASE-X) 10GBASE-R Fixed	
	Link aggregation	static	UTP	Auto Nego (10/100/1000T)	OK
			Optical	Auto Nego (1000BASE-X) 10GBASE-R Fixed	
		lacp	UTP	Auto Nego (10/100/1000T)	OK
			Optical	Auto Nego (1000BASE-X) 10GBASE-R Fixed	
Layer 2	VLAN			tag-vlan	OK
	Redundancy	STP Basic		STP	OK
				RSTP	
		STP Extended		MSTP	OK
				PVST+	
				RAPID-PVST+	
Layer 3	Routing			RIP1	OK
				RIP2	
				OSPF	
				BGP4	
	Multicast			PIM-SM	OK
				PIM-SSM	
	IPv6 routing			Dual stack	OK

3. Notes

The points to be noted when connecting Catalyst and AX products are as follows:

Layer	No.	Description
Layer 1	1	For 10 Mbps UTP or 100 Mbps UTP fixed connection, use a crossover cable.
Layer 2	1	MST provides no interconnectivity between the preceding standards implemented in older IOS releases and AX. Interconnection with the IEEE 802.1s standard (MST) must meet the following conditions： • Catalyst 6500: IOS Release 12.2 (18) SXF or later • Catalyst 4500: IOS Release 12.2 (25) SG or later
	2	IEEE 802.3ah/UDLD provide no interconnectivity between Catalyst and AX.
Layer 3	1	To interoperate between the Catalyst 6500/4500 and AX series to run IPv6 multicasting, the range of priority values that can be set to determine a rendezvous point differs. Set the priority to a value between 0 and 192.

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* The information in this document consists of results verified under an environment specified by ALAXALA.
 We do not guarantee the same results under all conditions, and behavior might be different in an actual environment.