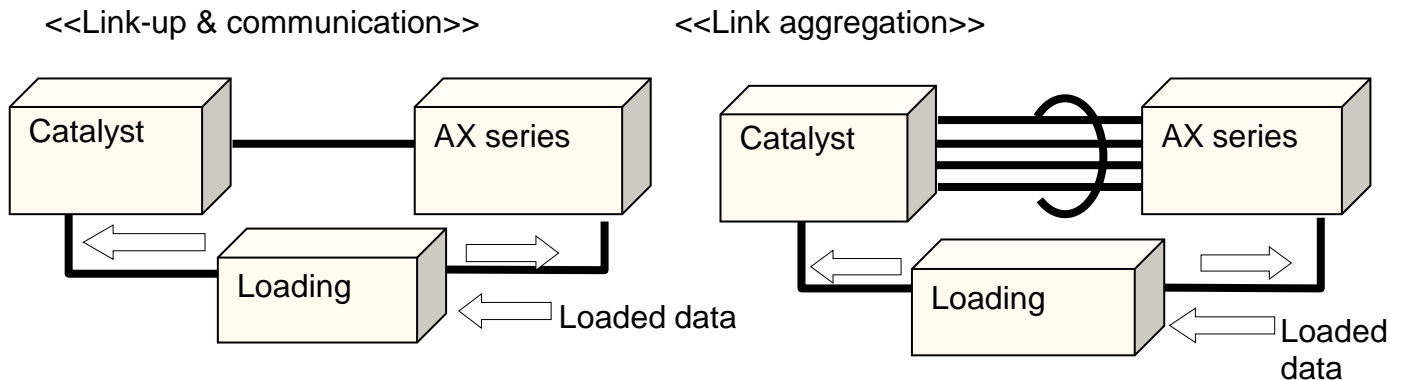


We have verified the interconnectivity between Cisco box switches and ALAXALA products. (Rev. 0)
2008.12.5

1. Configurations (Link-Up & Communication and Link Aggregation)



2. Results (Link-Up & Communication and Link Aggregation)

Model	Interface	Link-up & communication	Link aggregation	
		Result	Static	LACP
			Result	Result
Catalyst 3750-E (Cisco IOS : 12.2 (40) SE)	UTP	OK	OK	OK
	Optical	OK	OK	OK
Catalyst 3560-E (Cisco IOS : 12.2 (40) SE)	UTP	OK	OK	OK
	Optical	OK	OK	OK
Catalyst 2960G (Cisco IOS : 12.2 (44) SE2)	UTP	OK	OK	OK
	Optical	OK	OK	OK
Catalyst 2960 (Cisco IOS : 12.2 (44) SE2)	UTP	OK	OK	OK
	Optical	OK	OK	OK
Catalyst 2960LANLite (Cisco IOS : 12.2 (44) SE)	UTP	OK	OK	OK
	Optical	OK	OK	OK
Catalyst 2950 (Cisco IOS : 12.1 (22) EA11)	UTP	OK	OK	OK
	Optical	Not supported	Not supported	Not supported
Catalyst Express 520 (Cisco IOS : 12.2 (35) EX)	UTP	OK	OK	OK
	Optical	Not supported	Not supported	Not supported

Tested interfaces

UTP : Auto Nego (10/100TX), Auto Nego (10/100/1000T), 10BASE-T fixed, 100BASE-TX fixed
Optical : Auto Nego (1000BASE-X), 1000BASE-X fixed

Comments on the results

Link-up and communication

All the models have achieved the transmission speed and the half duplex/full duplex communication expectations.

To use 10 Mbps and 100 Mbps fixed connections, use a crossover cable.

Link aggregation

In most cases, a switchover has been completed within one second of a communication interruption.

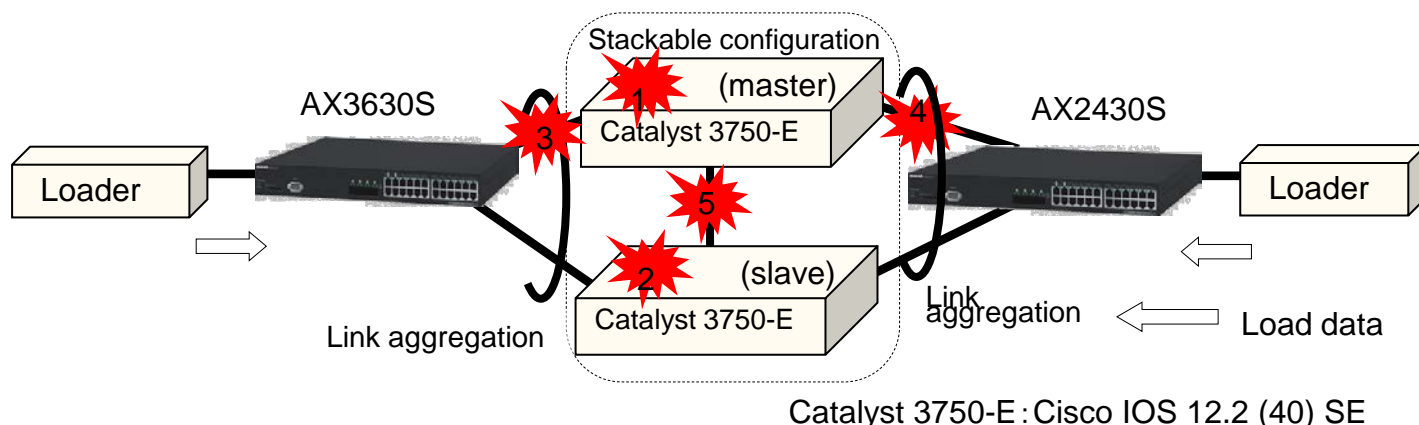
However, the communication interruption time will become longer if a line fault is detected when 1000BASE-T is used.

This is due to the physical layer standard (IEEE 802.1ab) for link-down detection.

Reference: Line fault detection time (ms) specified in IEEE 802.1ab

Clock master: 750±10, clock slave: 350±5

3. Configuration (Stackable Configuration)



Location of failure

- | | |
|--|--------------------------------|
| 1. Stack configuration switch (master) | : Power shut off |
| 2. Stack configuration switch (slave) | : Power shut off |
| 3. Optical cable | : Cable disconnected |
| 4. UTP cable | : Cable disconnected |
| 5. Stack cable | : One stack cable disconnected |

4. Result (Stackable configuration)

Test item		Link aggregated			Comment
		Static	LACP (Long)	LACP (Short)	
		Result	Result	Result	
Stackable component switch (master) failure	Error occurrence	OK	OK	OK	(Note)
	Error recovery	OK	OK	OK	
Stackable component switch (slave) failure	Error occurrence	OK	OK	OK	
	Error recovery	OK	OK	OK	
Line fault (optical)	Error occurrence	OK	OK	OK	Switchover within one second possible
	Error recovery	OK	OK	OK	
Line fault (UTP)	Error occurrence	OK	OK	OK	
	Error recovery	OK	OK	OK	
Stackable cable failure	Error occurrence	OK	OK	OK	No impact on communication
	Error recovery	OK	OK	OK	

Note: If a stackable device (master) failure occurs in a LACP configuration, the Catalyst changes the address information notified in the LACPDU from the MAC address of the stackable switch (master) to that of the stackable switch (slave).

On the other hand, the AX continues to recognize the MAC address of the master switch as the partner device's address until it fails to receive the LACPDU three times. This causes a longer communication interruption.

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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.