Juniper EX4200 - AX Series Interconnectivity

AlaxalA

We have verified the interconnectivity between Juniper EX4200
and ALAXALA products (AX series).

1. Evaluation on link-up/communication and link aggregation

2010.2.26

<<Link-up/communication>>   <<Link aggregation>>
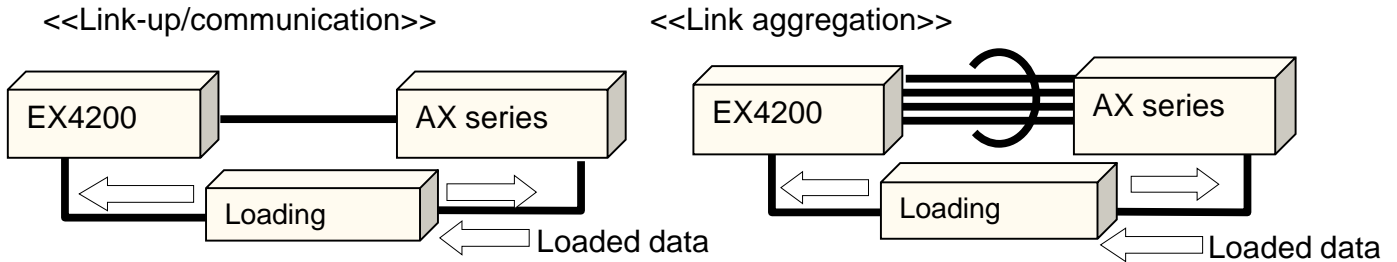
Results

Device type	Interface	Link-up/ communication	Link aggregation	
			Static	LACP
		Result	Result	Result
EX4200-24T	UTP	OK	OK	OK

Interfaces used for evaluation
   UTP: Auto Nego(10/100TX), Auto Nego(10/100/1000T), 10BASE-T(fixed), 100BASE-TX(fixed),
        1000BASE-T(fixed)

Link-up/communication
The results showed the expected transmission speeds in both half-duplex/full-duplex modes.

Link aggregation
Switching was achieved within 1 sec. of disconnection time in most
However, disconnection time in line fault detection with 1000BASE-T is longer than with 100BASE-TX.
This is due to the physical layer standard for link-down detection (IEEE802.1ab).
   [Reference] Time periods (ms) specified in IEEE802.1ab for line fault detection
           clock master: 750±10, clock slave: 350±5
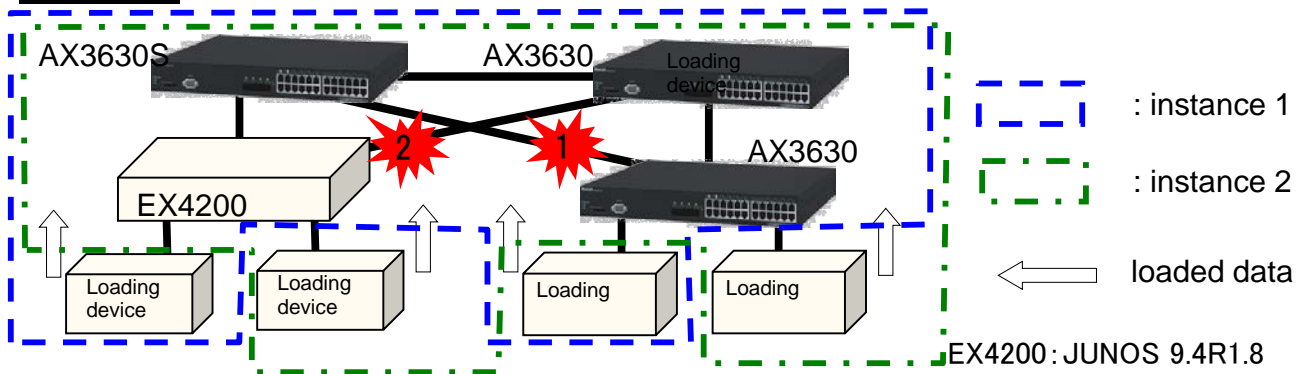
2. STP, RSTP

EX4200:JUNOS 9.4R1.8

Results

Device type	Interface	STP	RSTP
		Result	Result
EX4200-24T	UTP	OK	OK

STP configuration, RSTP configuration
Packets were transmitted without causing a loop and also transmitted after topology change upon
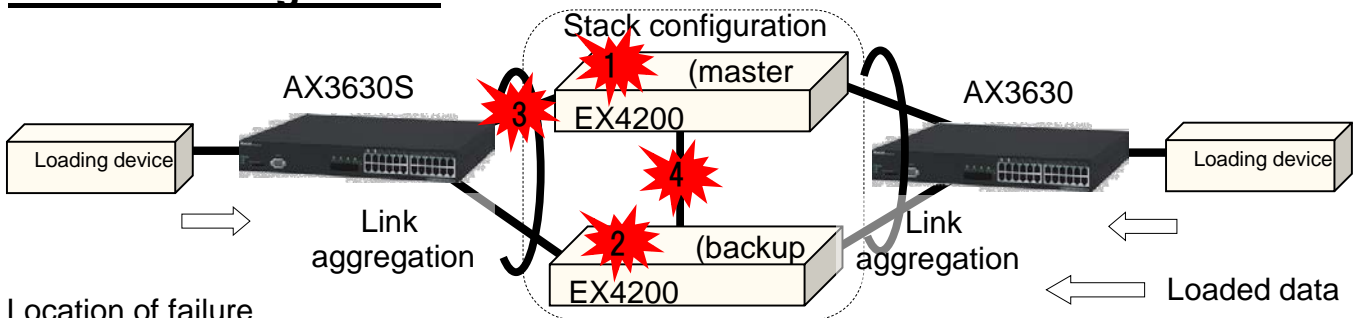line fault occurrence/recovery.

3. MSTP

: instance 1

: instance 2

← loaded data

AX3630S   AX3630   Loading device   AX3630

EX4200   Loading device   Loading device   Loading   Loading   AX3630

EX4200：JUNOS 9.4R1.8

Results

Device type	Interface	Result
EX4200-24T	UTP	OK

MSTP configuration
Packets were transmitted without causing a loop. In each instance, topology change was achieved upon line fault ocurrence/recovery and communication was establishded.

4. Stack configuration

Stack configuration

AX3630S   1 (master EX4200   AX3630

Loading device   3   Loading device

Link aggregation   4   Link aggregation

2 (backup EX4200   Loaded data

EX4200：JUNOS 9.4R1.8

Location of failure
1 Stack configuration device (master)   : power shut off
2 Stack configuration device (backup)   : power shut off
3 UTP cable   : cable disconnected
4 Stack cable   : one stack cable disconnected

Results

Verified items		Link aggregation			Remarks
		Static	LACP(Long)	LACP(Short)	
		Result	Result	Result	
Stack configuration dev (master)	Fault occurrence	OK	OK	OK	Confirmed that packets could flow without causing communication failure.
	Fault recovery	OK	OK	OK	
Stack configuration dev (backup)	Fault occurrence	OK	OK	OK	
	Fault recovery	OK	OK	OK	
UTP cable	Fault occurrence	OK	OK	OK	
	Fault recovery	OK	OK	OK	
Stack cable	Fault occurrence	OK	OK	OK	
	Fault recovery	OK	OK	OK	

Juniper Networks and JUNOS are registered trademakrks of Juniper Networks, Inc. in the United States and other countries.
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.