

**White Paper**



# AX supports STP group

***The Key to Achieving Availability,  
Scalability and Performance***

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# A10 AX STP group white paper

## AX supports STP Groups

AX Release 2.0 enables you to use the AX device in a network that runs Spanning Tree or Multiple Spanning Tree Protocol (MSTP).

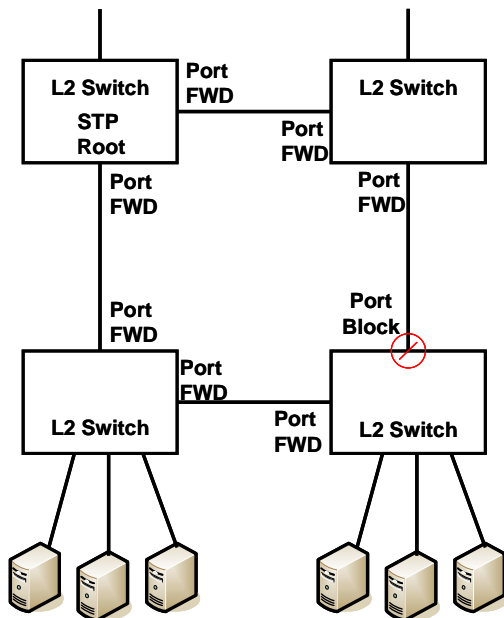
By default, the AX device drops MSTP Bridge Protocol Data Units (BPDUs) on tagged interfaces, because the BPDUs are untagged. This behavior can interfere with accurate loop detection. You can enable the AX device to accept and forward these BPDUs (support to detect BPDUs and forward BPDUs).

To enable the AX device to accept MSTP BPDUs on tagged interfaces, configure an STP group for those related interfaces.

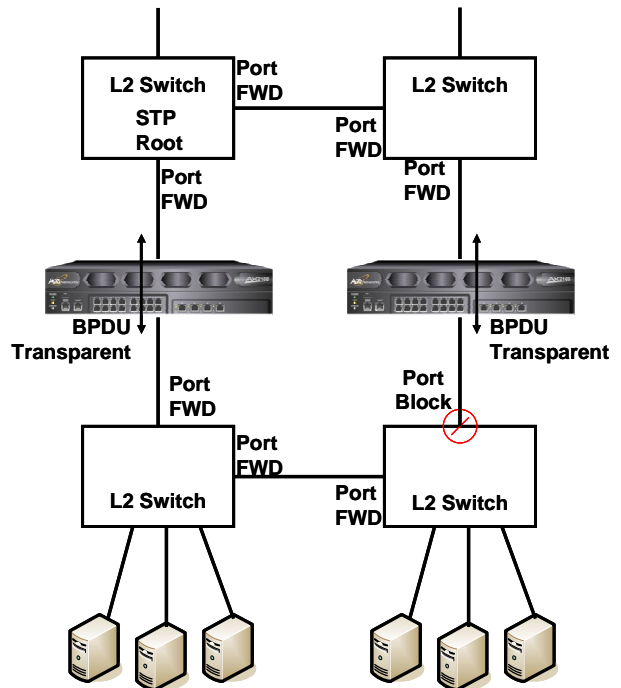
An STP group is a set of tagged Ethernet interfaces that will accept and broadcast MSTP BPDUs among themselves. When an interface in an STP group receives an MSTP BPDU (a packet addressed to MAC address 01-80-C2-00-00-00), the interface broadcasts the BPDU to all the other interfaces in the STP group.

With the STP group support, AX device can work in a Spanning Tree enable network without any problem. More over, AX device can speed up whole spanning tree network calculation and stabilize.

(1) Normal STP network



(2) AX works in STP network



You can configure up to 8 STP groups.

Rules for trunk interfaces:

- BPDUs are broadcast only to the lead interface in the trunk.
- If a BPDU is received on an Ethernet interface that belongs to a trunk, the BPDU is not broadcast to any other members of the same trunk.

### ***USING THE GUI***

GUI configuration of this option is not supported in the current release.

### ***USING THE CLI***

To configure an STP group, use the following command at the global configuration level of the

CLI:

```
[no] stp-group number
```

The *number* can be 1-8. This command creates the group and changes the CLI to the configuration level for the group.

To add Ethernet interfaces to the group, use the following command at the configuration level for

the group:

```
[no] ethernet portnum [to portnum] [ethernet portnum] ...
```

To verify the STP group configuration, use the following command:

```
show stp-group [number]
```

### **CLI Example**

The following commands create STP group 1 containing Ethernet ports 1-3, and verify the configuration:

```
AX(config)#stp-group 1
AX (config-stg-group:1)#ethernet 1 to 3
AX(config-stp-group:1)#show stp-group
STP Group 1 members: ethernet 1 to 3
```