

EKI-9300 Series VLAN Configuration SOP

■ Configure VLAN with WebGUI

Revision Date	Revision	Description	Author
Feb/2018	V1.0	Initial release	ICG AE Eddie.Wei / Raimen Liu

Abstract

- ❖ **This SOP explains how to configure VLAN on Advantech EKI-9300 series industrial ethernet managed switch by WebGUI.**
- ❖ **Related products:**
EKI-9312, EKI-9312P, EKI-9316, EKI-9316P, EKI-9228G-8CMI, EKI-9228G-8COI
- ❖ **Requirement: Advantech managed switch, RJ45 ethernet cable, PC**





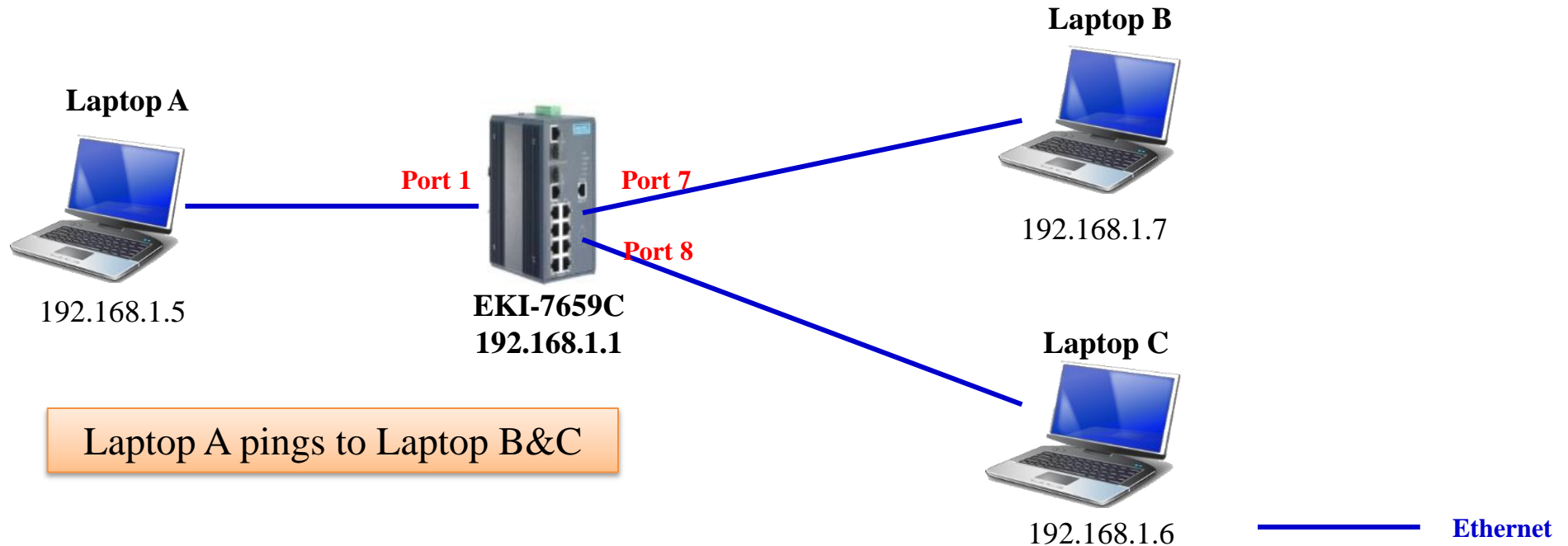
Configure VLAN with WebGUI

Configure VLAN with WebGUI

■ Goal:

- Enable VLAN by *port-based* successfully.
- VLAN members can communicate with each other.

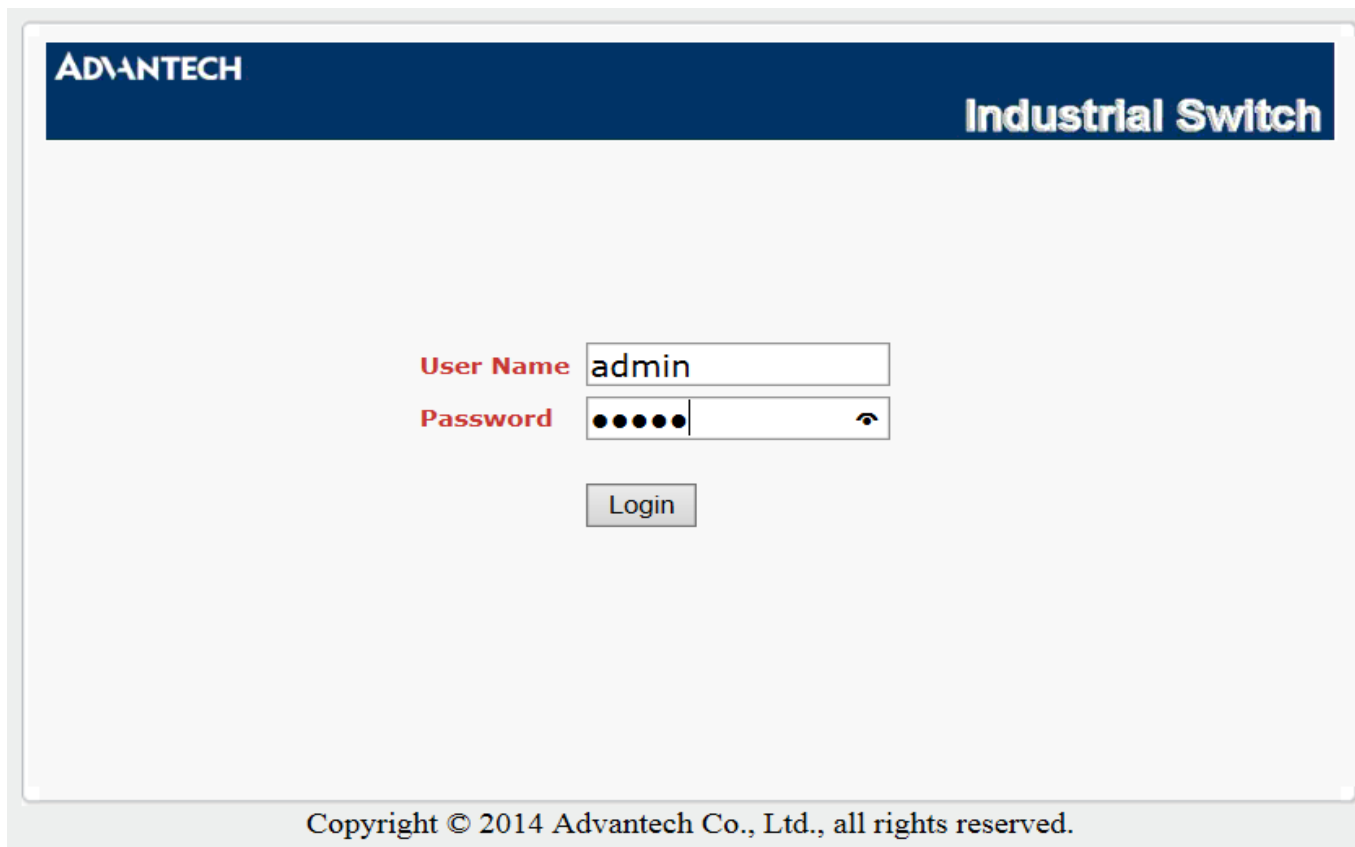
■ Topology:



Configure VLAN with WebGUI

■ Setting:

- Step 1: Logging the switch with admin/admin as Username/Password by default.



The screenshot shows the login interface of an Advantech Industrial Switch. At the top, there is a dark blue header bar with the 'ADVANTECH' logo on the left and 'Industrial Switch' on the right. Below the header, the main content area is light gray. In the center, there are two input fields: 'User Name' with the text 'admin' and 'Password' with five black dots. To the right of the password field is an eye icon for toggling visibility. Below these fields is a 'Login' button. At the bottom of the page, a copyright notice reads: 'Copyright © 2014 Advantech Co., Ltd., all rights reserved.'

Configure VLAN with WebGUI

- Setting (Both SW1 and SW2 use the same setting):
 - Step 2: Under VLAN Membership. Please select Create and then input “2” to create VLAN 2.

ADVANTECH Industrial Switch

Management

Switching

MAC Address Table

Interface Setting

Interface Statistics

Port Mirroring

VLAN Setting

VLAN Membership

VLAN Database

Port-based VLAN

Protocol-based VLAN

IP Subnet-based VLAN

MAC-based VLAN

QinQ

GARP

Port Channel

X-Ring Pro

Spanning Tree

Flow Control

Multicast

Security

QoS

Maintenance

VLAN Configuration

VLAN ID List

VLAN Name

VLAN Type

VLAN Participation All

Participation All

VLAN Participation

Interface

Interface Status

Participation

Tagging

ge0/1	Exclude	Autodetect	Untagged
ge0/2	Exclude	Autodetect	Untagged
ge0/3	Exclude	Autodetect	Untagged
ge0/4	Exclude	Autodetect	Untagged
ge0/5	Exclude	Autodetect	Untagged
ge0/6	Exclude	Autodetect	Untagged
ge0/7	Exclude	Autodetect	Untagged
ge0/8	Exclude	Autodetect	Untagged
ge0/9	Exclude	Autodetect	Untagged
ge0/10	Exclude	Autodetect	Untagged
ge0/11	Exclude	Autodetect	Untagged
ge0/12	Exclude	Autodetect	Untagged
ge0/13	Exclude	Autodetect	Untagged
ge0/14	Exclude	Autodetect	Untagged

Configure VLAN with WebGUI

- Setting (Both SW1 and SW2 use the same setting):
 - Step 3: Under VLAN Membership. Selects VLAN 2 and changes port 5 (ge0/5) Participation as “Include” with “Tagged”. Then changes port 15 (ge0/15) Participation as “Include” with “Untagged”. So now port 15 is a member of VLAN 2 (Access port) and port 5 is VLAN trunk port with tag = 2.
 - Notice: Please keep *VLAN 1* as default setting.

ADVANTECH Industrial Switch

VLAN Configuration

VLAN ID List: 2 (selected)

VLAN Name: VLAN0002 (0 to 32 characters)

VLAN Type: Static

VLAN Participation All: ☐ Participation All: Autodetect ☒ Tagging All ☐ Flood Unknown Multicast

Interface	Interface Status	Participation	Tagging
ge0/1	Exclude	Autodetect	Untagged
ge0/2	Exclude	Autodetect	Untagged
ge0/3	Exclude	Autodetect	Untagged
ge0/4	Exclude	Autodetect	Untagged
ge0/5	Include	Include	Tagged
ge0/6	Exclude	Autodetect	Untagged
ge0/7	Exclude	Autodetect	Untagged
ge0/8	Exclude	Autodetect	Untagged
ge0/9	Exclude	Autodetect	Untagged
ge0/10	Exclude	Autodetect	Untagged
ge0/11	Exclude	Autodetect	Untagged
ge0/12	Exclude	Autodetect	Untagged
ge0/13	Exclude	Autodetect	Untagged
ge0/14	Exclude	Autodetect	Untagged
ge0/15	Include	Include	Untagged
ge0/16	Exclude	Autodetect	Untagged

Configure VLAN with WebGUI

- Setting (Both SW1 and SW2 use the same setting):
 - Step 4: Under VLAN Database, you can confirm now how many VLAN we have already created.

ADVANTECH Industrial Switch

Management

Switching

MAC Address Table

Interface Setting

Interface Statistics

Port Mirroring

VLAN Setting

VLAN Membership

VLAN Database

Port-based VLAN

Configuration

Status

Protocol-based VLAN

IP Subnet-based VLAN

MAC-based VLAN

VLAN Status

VLAN ID	VLAN Name	VLAN Type	Unknown Multicast
1	default	Default	Flooding
2	VLAN0002	Static	Discarding

Refresh

Configure VLAN with WebGUI

- Setting (Both SW1 and SW2 use the same setting):
 - Step 5: Under *Port-based VLAN/Configuration*, now changes the **Interface** to ge0/15 (port 15) and modify the **Port VLAN ID (PVID)** as “2” and press “**Submit**”.

ADVANTECH Industrial Switch

Management

Switching

MAC Address Table

Interface Setting

Interface Statistics

Port Mirroring

VLAN Setting

VLAN Membership

VLAN Database

Port-based VLAN

Configuration

Status

Protocol-based VLAN

IP Subnet-based VLAN

MAC-based VLAN

VLAN Port Configuration

Interface: ge0/15

Port VLAN ID: 2 (1 to 4093)

Acceptable Frame Types: Admit All

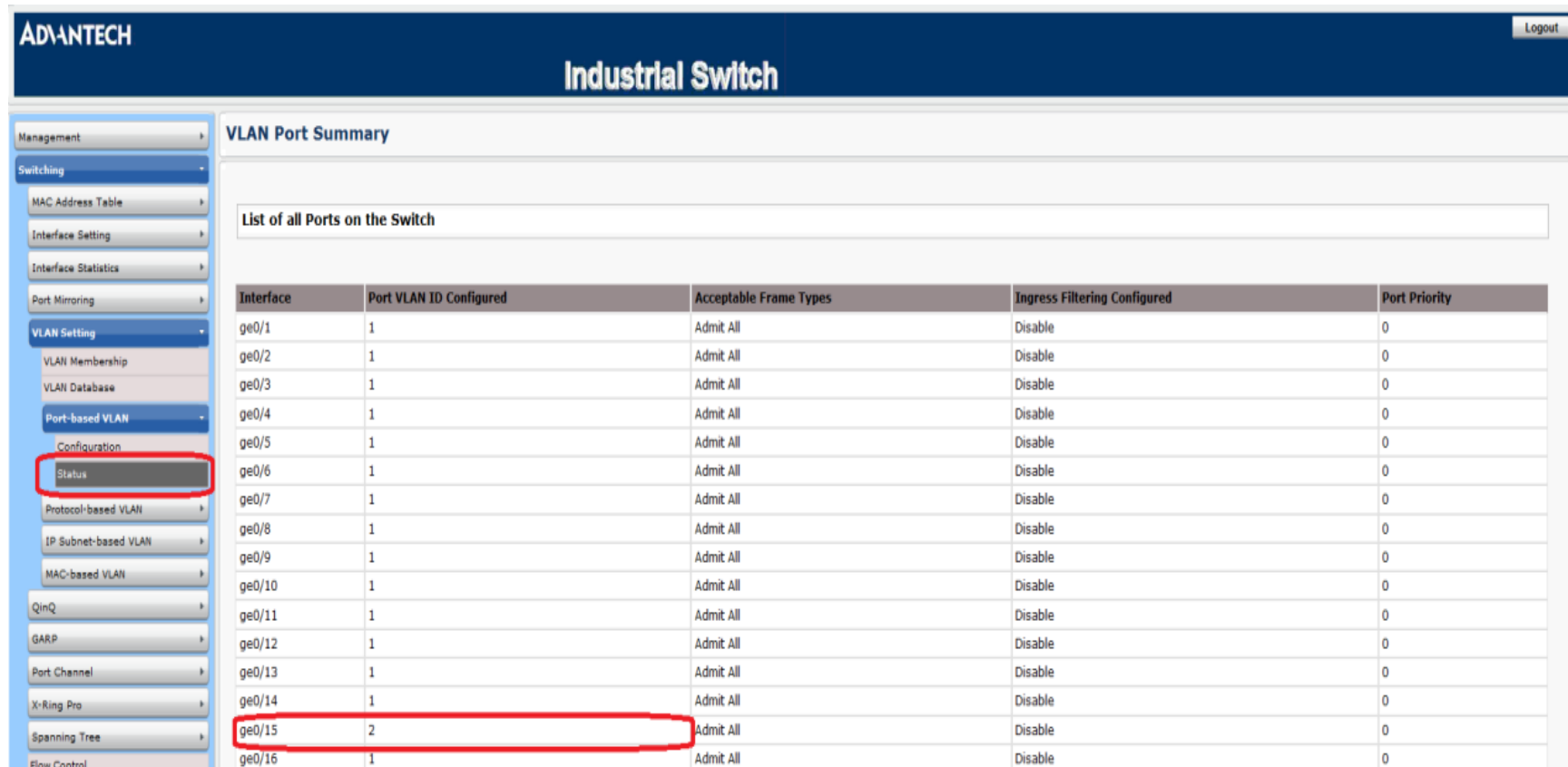
Ingress Filtering: Disable

Port Priority: 0 (0 to 7)

Submit

Configure VLAN with WebGUI

- Setting (Both SW1 and SW2 use the same setting):
 - Step 6: The last step, you can double check ge0/15 (port 15), its PVID have been changed to “2”. And now we can make sure port 15 of SW1 & SW2 belong to VLAN 2 and will use port 5 with tag = 2 connecting to the other switch.



ADVANTECH Industrial Switch

Logout

Management

Switching

MAC Address Table

Interface Setting

Interface Statistics

Port Mirroring

VLAN Setting

VLAN Membership

VLAN Database

Port-based VLAN

Configuration

Status

Protocol-based VLAN

IP Subnet-based VLAN

MAC-based VLAN

QinQ

GARP

Port Channel

X-Ring Pro

Spanning Tree

Flow Control

VLAN Port Summary

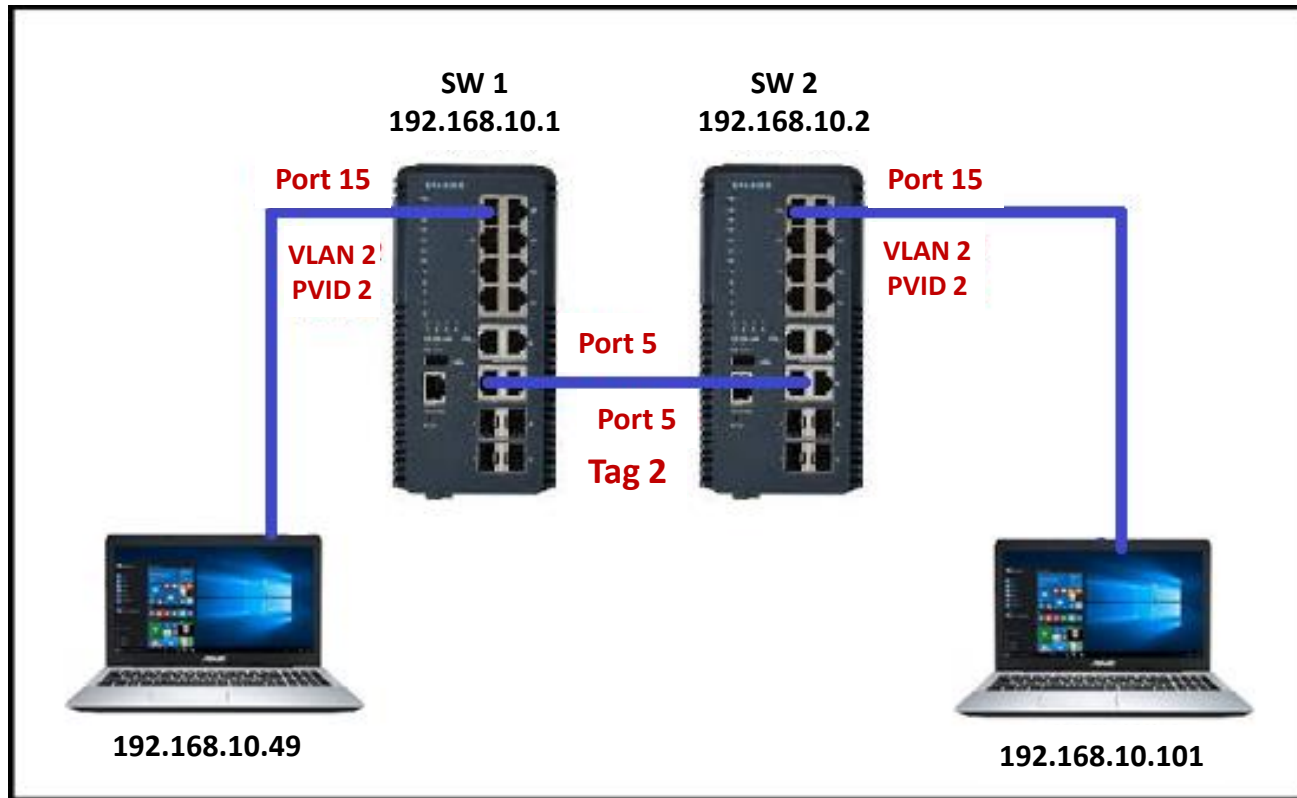
List of all Ports on the Switch

Interface	Port VLAN ID Configured	Acceptable Frame Types	Ingress Filtering Configured	Port Priority
ge0/1	1	Admit All	Disable	0
ge0/2	1	Admit All	Disable	0
ge0/3	1	Admit All	Disable	0
ge0/4	1	Admit All	Disable	0
ge0/5	1	Admit All	Disable	0
ge0/6	1	Admit All	Disable	0
ge0/7	1	Admit All	Disable	0
ge0/8	1	Admit All	Disable	0
ge0/9	1	Admit All	Disable	0
ge0/10	1	Admit All	Disable	0
ge0/11	1	Admit All	Disable	0
ge0/12	1	Admit All	Disable	0
ge0/13	1	Admit All	Disable	0
ge0/14	1	Admit All	Disable	0
ge0/15	2	Admit All	Disable	0
ge0/16	1	Admit All	Disable	0

Configure VLAN with WebGUI

■ Result:

- After configuring on SW1 and SW2, the laptop 192.168.10.49 on SW1 can communicate with laptop 192.168.10.101 on SW2 now. Because SW1 port 15 and SW2 port 15 are all belonging to VLAN 2 member.





Enabling an Intelligent Planet

Enabling an Intelligent Planet

ADVANTECH