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Enabling an Intelligent Planet

Modbus Gateway EKI-122X Redundancy - By Bridge and Virtual Gateway

Advantech iConnectivity

AE Audrey Wang

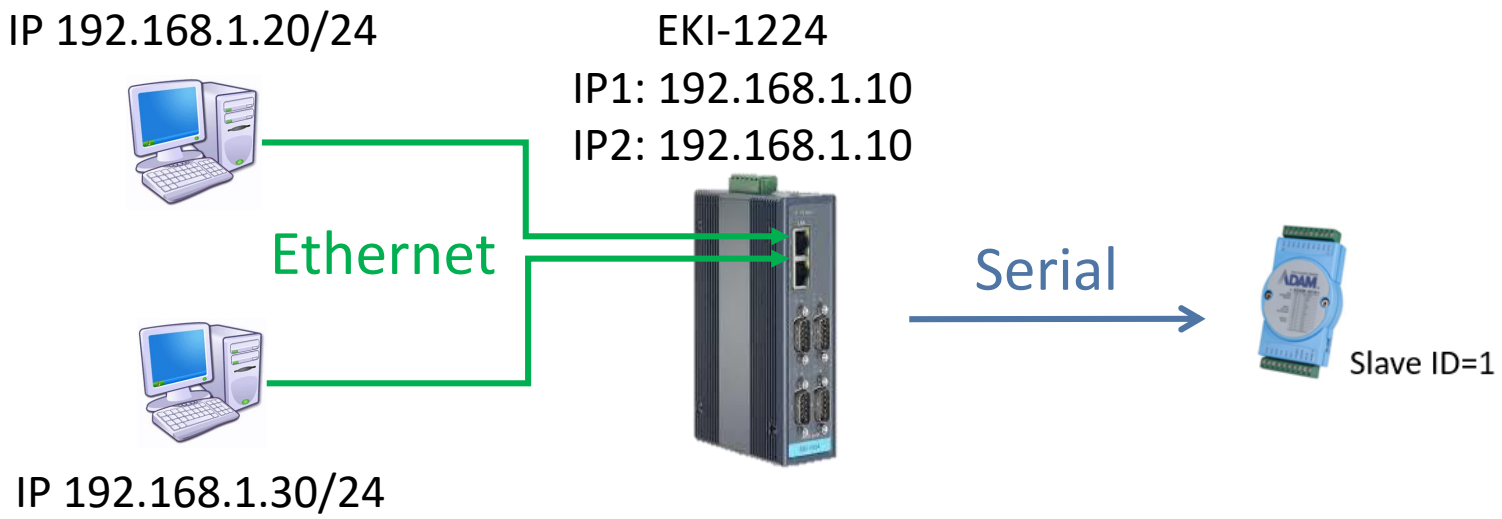
Outline

- Redundant Topology
- Setting SOP

Redundant Topology

Redundant Topology - Bridge

- Bridge
  - Set the 2 Ethernet interfaces as Bridge mode, and set the Ethernet Bridge with static IP. This allows the 2 Ethernet Ports became a 2-port switch using the same IP.



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Interconnected solution

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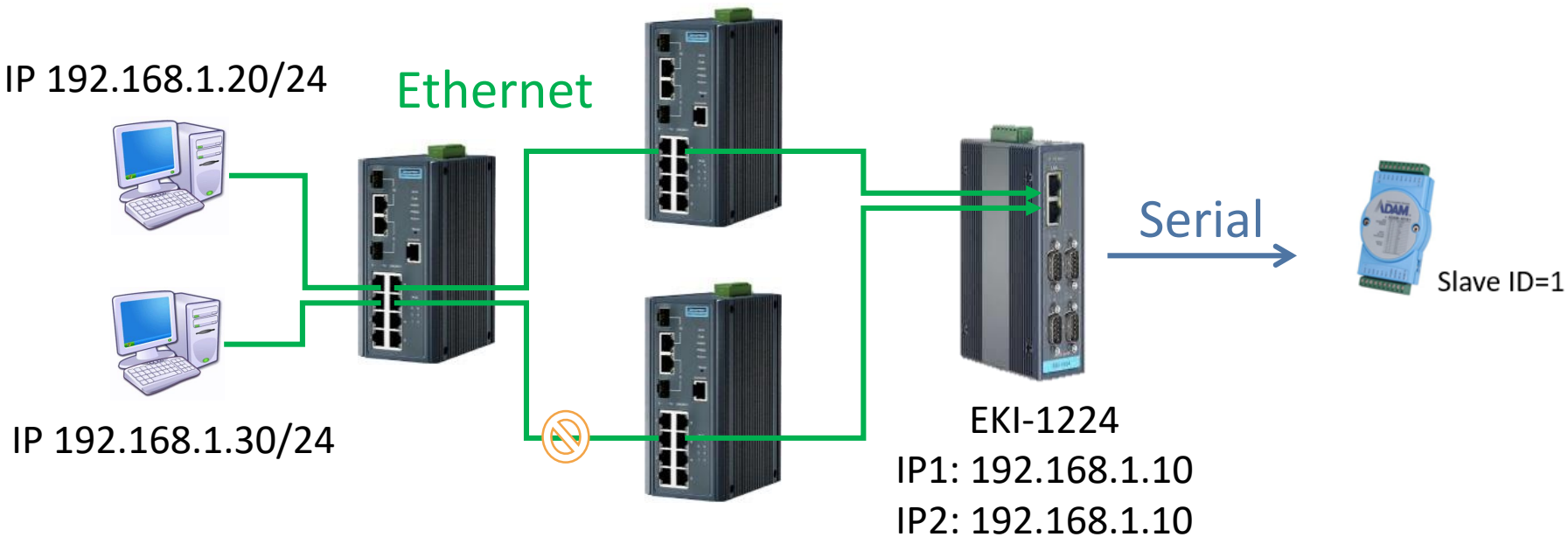
- Bridge – STP Enable
  - Support STP that could work with other STP-Enabled devices.
  - The block port will be determined by all the devices running STP.



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Interconnected solution

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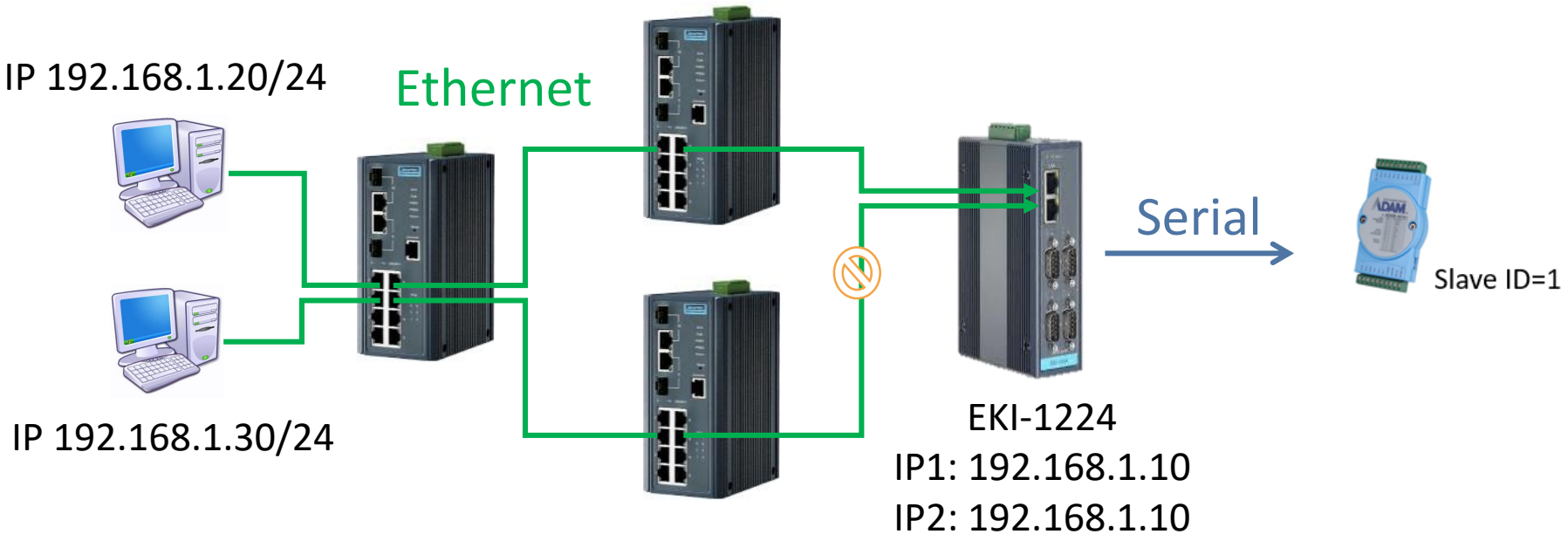
- Bridge – Redundant Mode Enable
  - Support Redundant Mode to link both Ethernet cables to the same switch and block one of the link by EKI itself.
  - Default is to block Eth2.



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Interconnected solution

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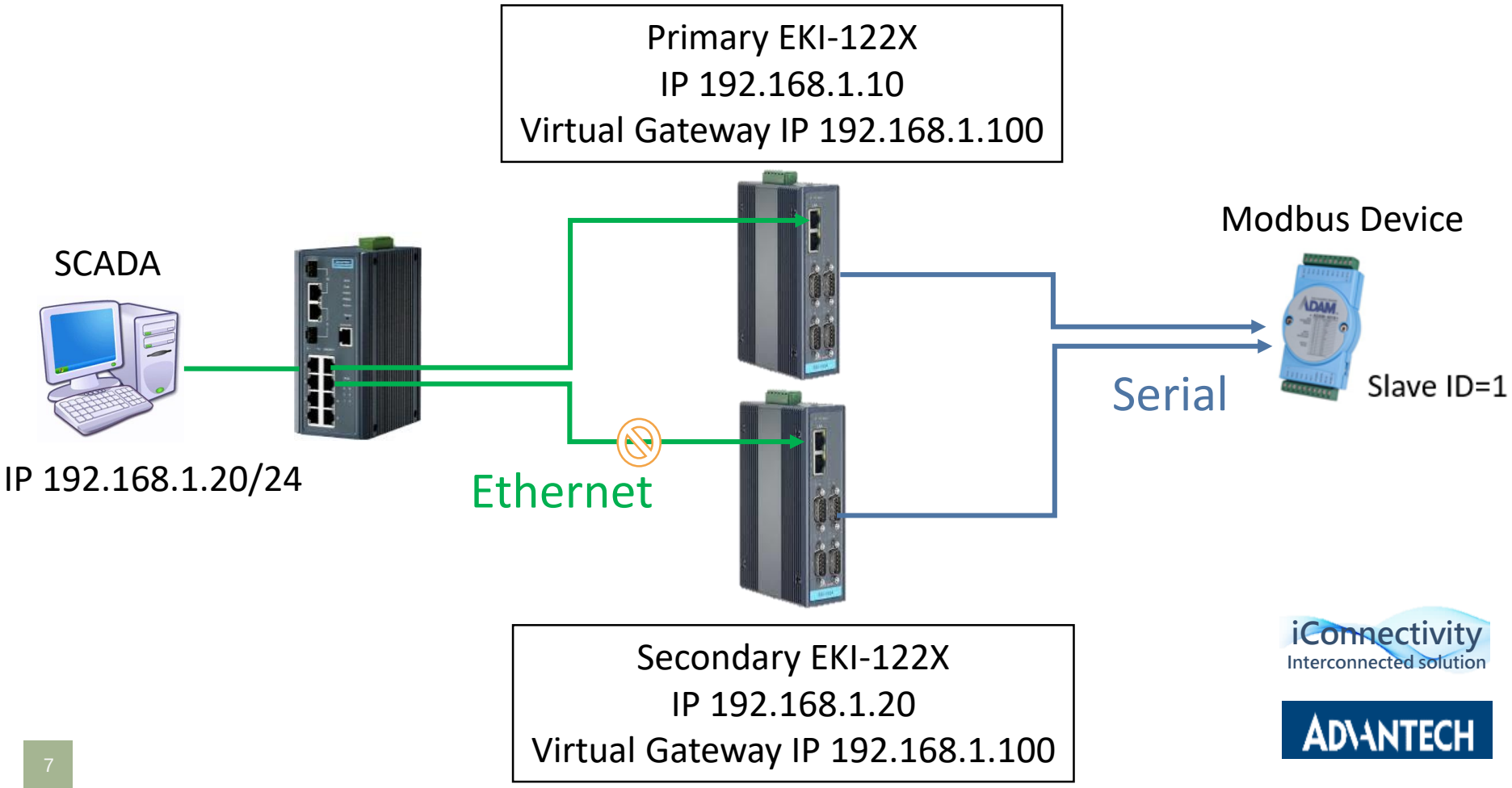
Redundant Topology - Virtual Gateway

- Virtual Gateway
  - Virtual gateway is redundant function for EKI in the same network.
  - Use 2 EKI-122X and both devices can set virtual gateway in one IP.
  - The SCADA builds the connection by the virtual gateway IP.



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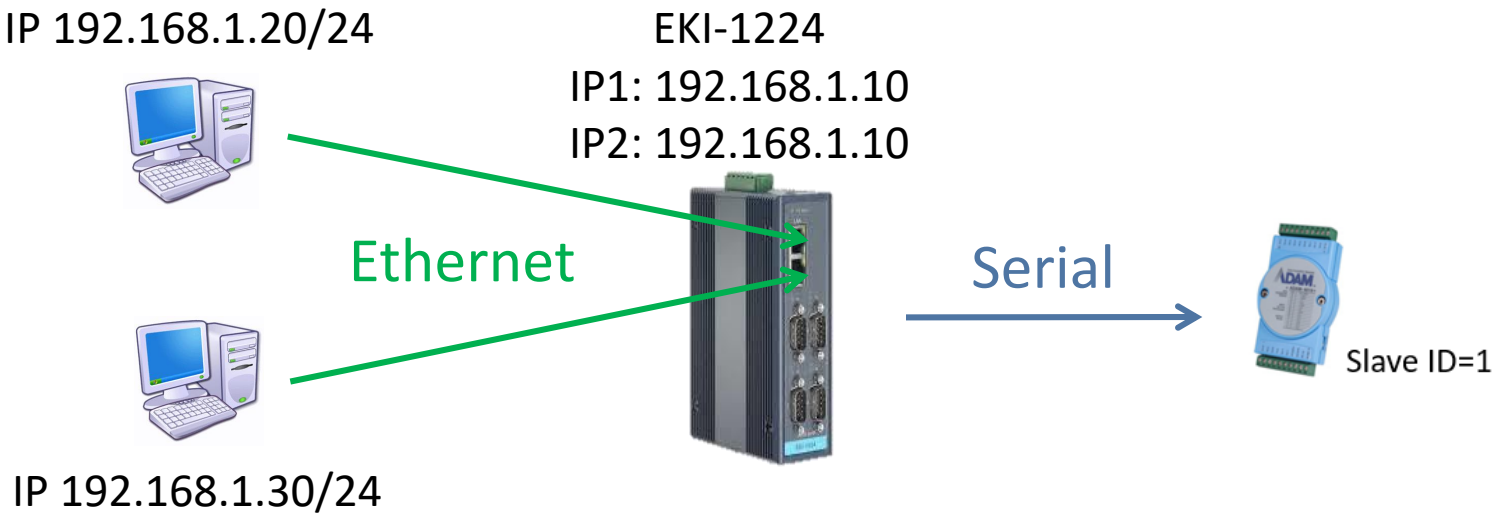
Configuration SOP

Redundant Topology - Bridge

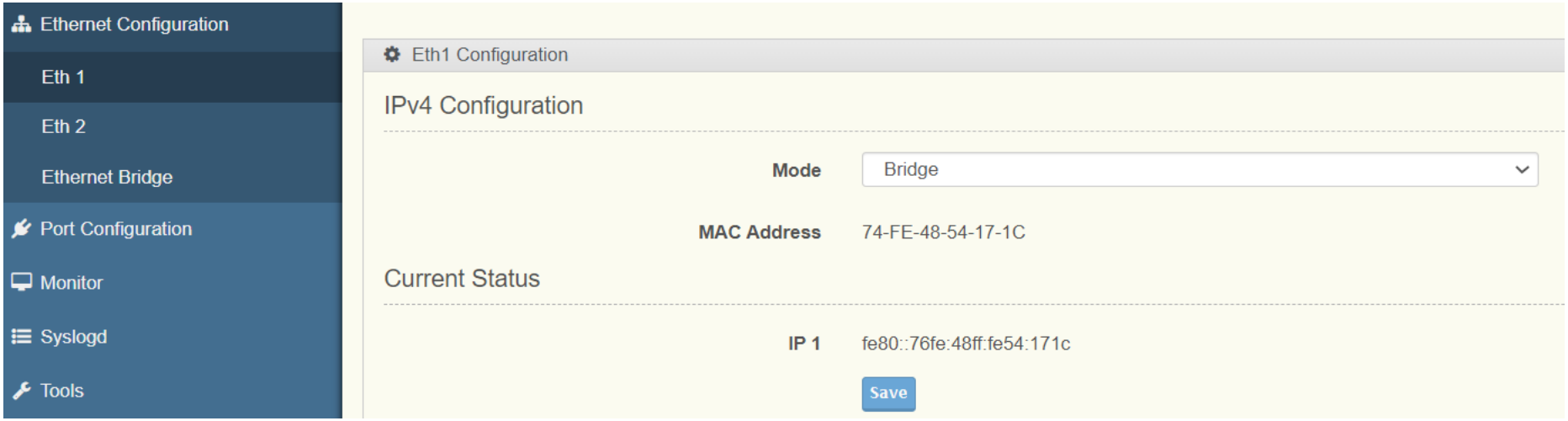
- Bridge

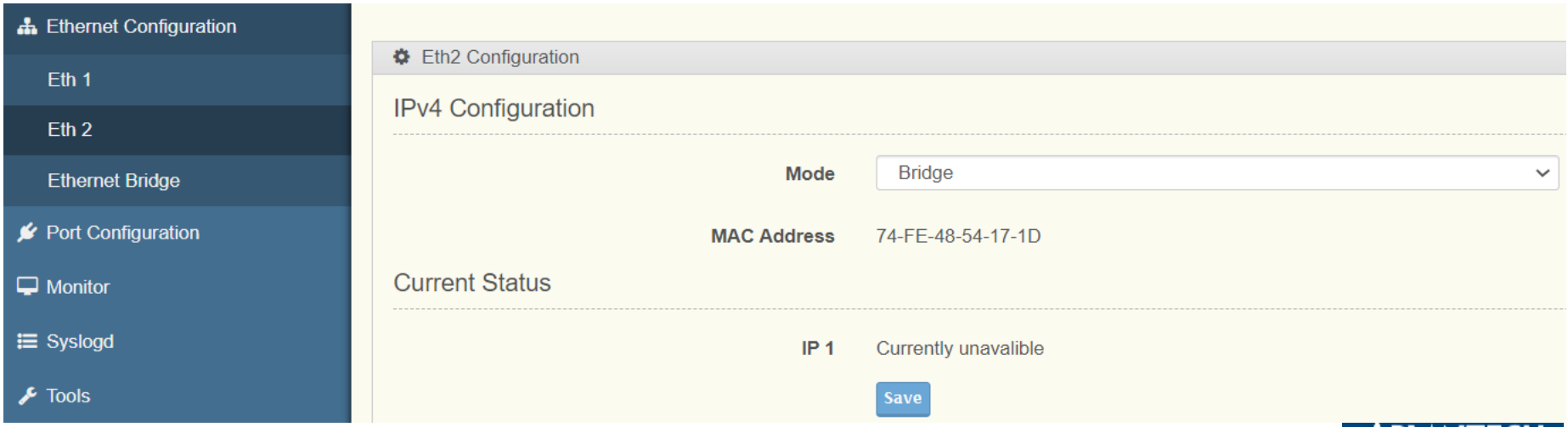


Configuration – Bridge (1/2)

- IP Setting

  Set Eth1 and Eth2 in Bridge mode.

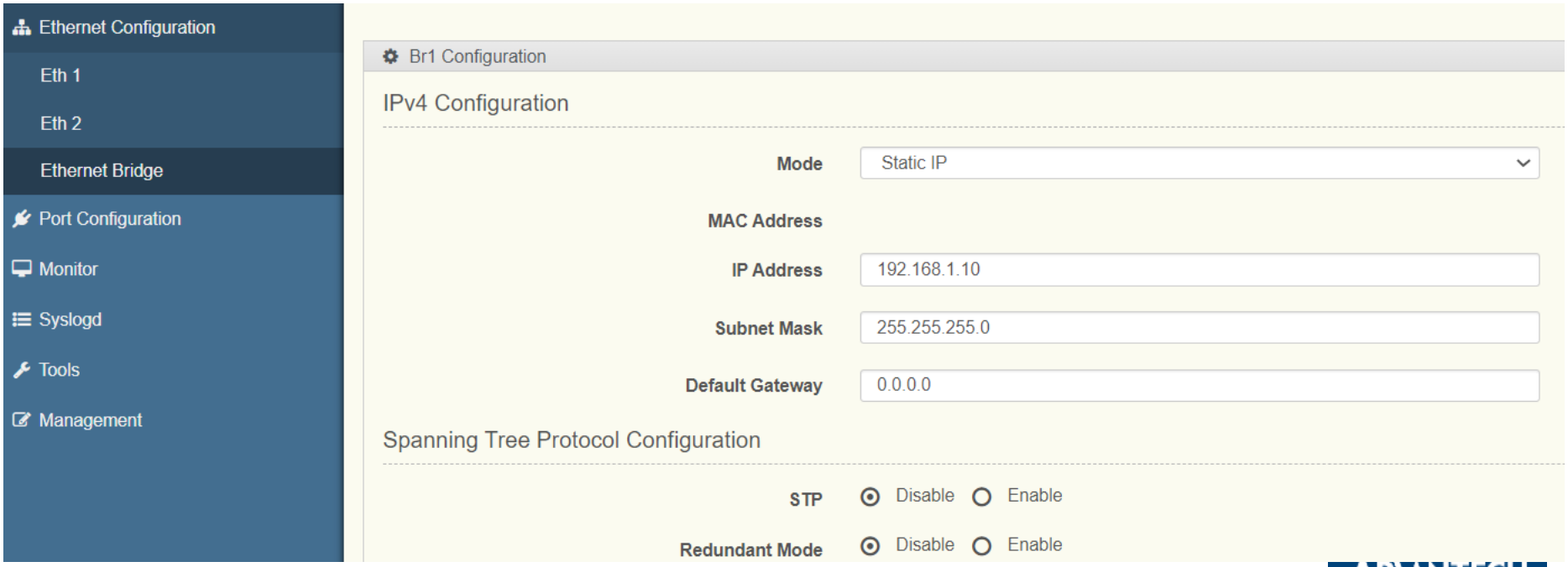




Configuration – Bridge (2/2)

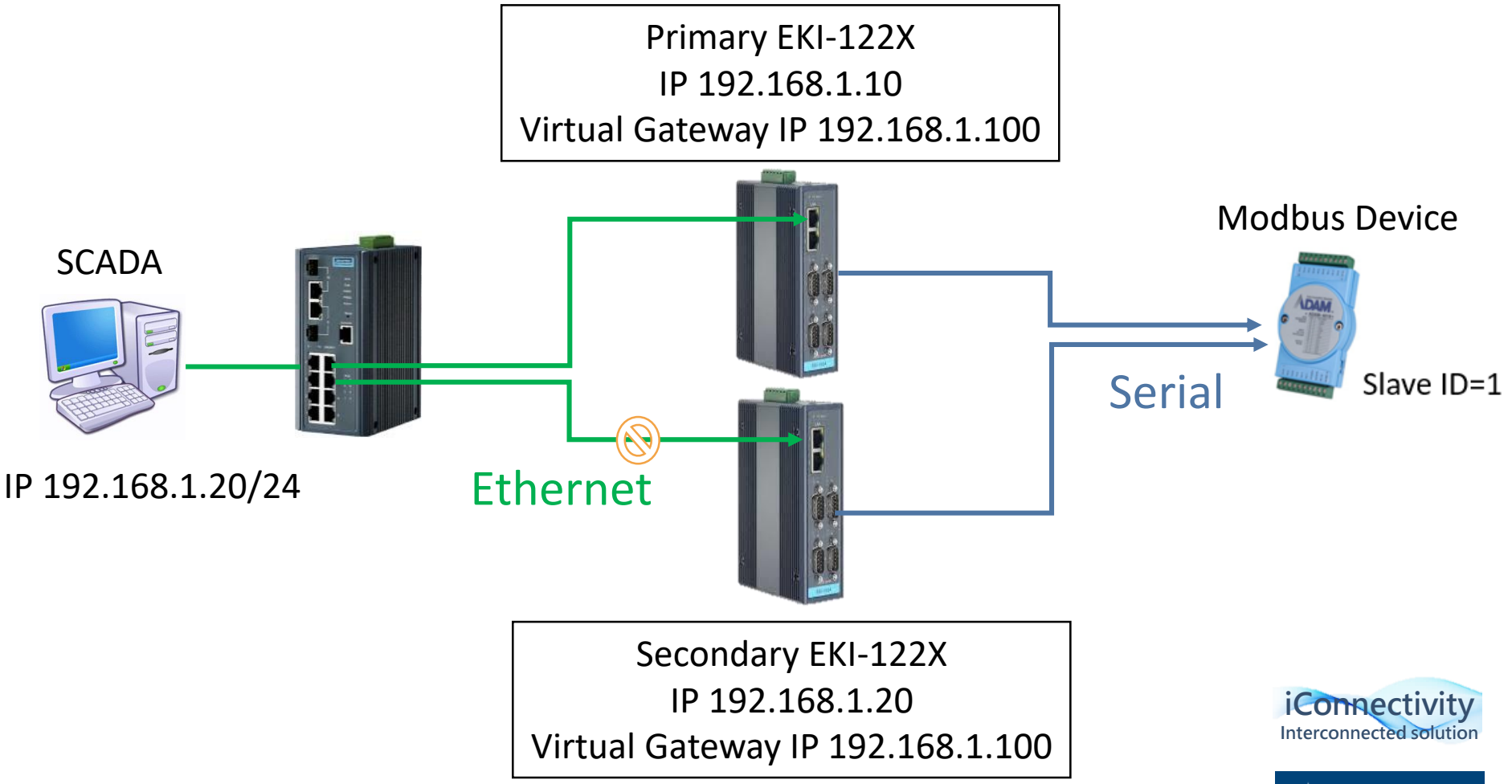
- Ethernet Bridge Setting

  Both Eth interface use the same IP. Users can enable STP or Redundant mode.
  STP mode runs spanning tree protocol with other connected devices .
  Redundant mode will block one Eth port on EKI-122X and it will judge to active the block port automatically.



Configuration - Virtual Gateway

- Virtual Gateway



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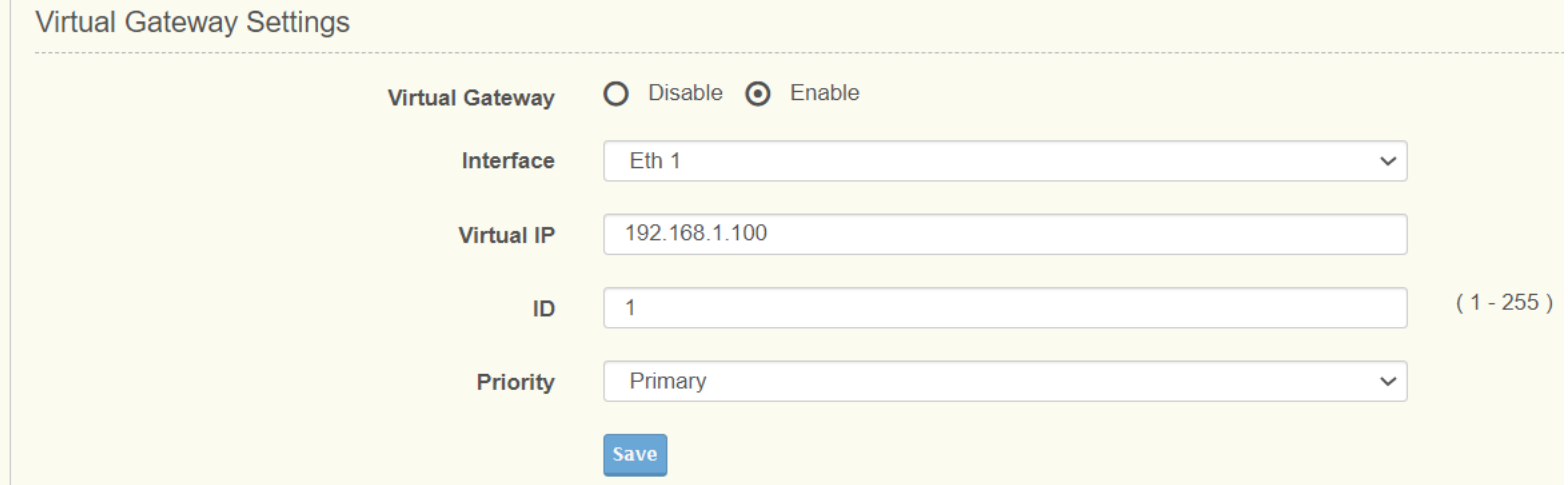
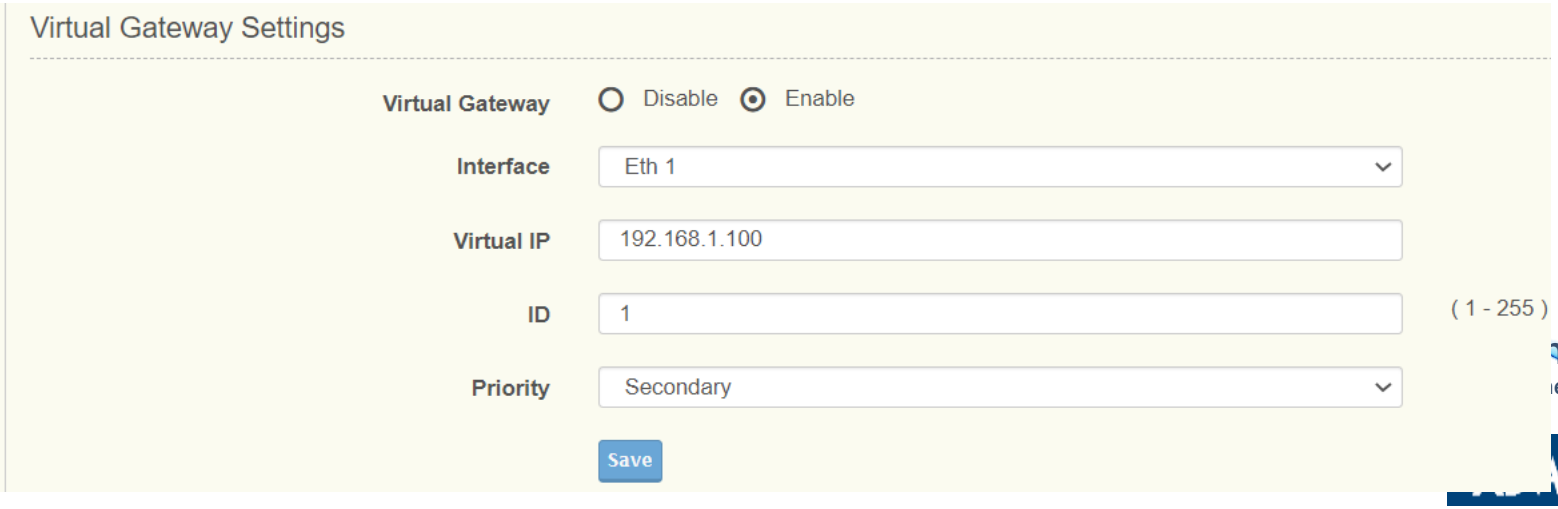
Configuration - Virtual Gateway

- Virtual Gateway Settings

Primary EKI-122X



Secondary EKI-122X



Co-Creating the Future of the IoT World

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