

## VN5620 Configurations

Network Interfaces for Automotive Ethernet

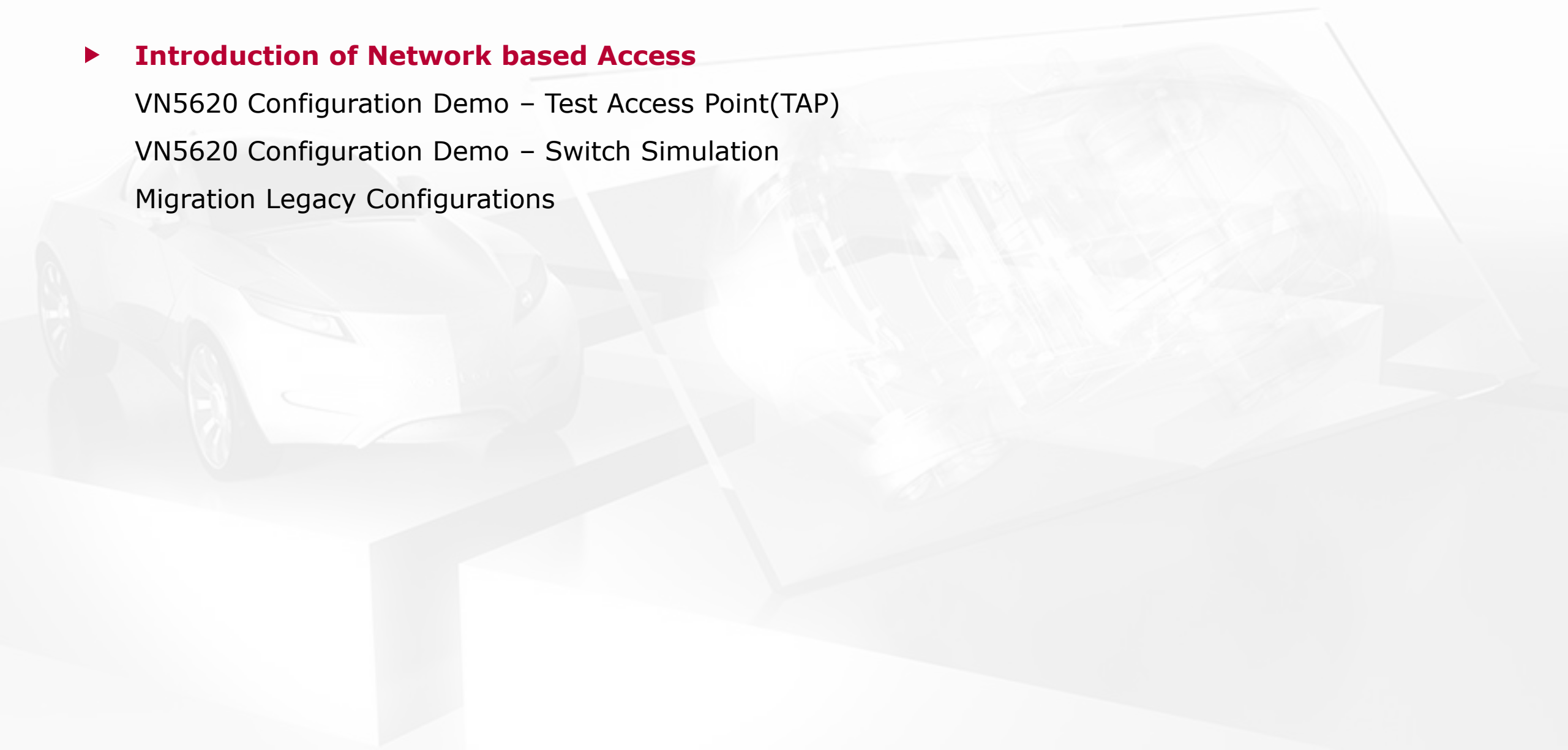
## Agenda

- ▶ **Introduction of Network based Access**

  - VN5620 Configuration Demo – Test Access Point(TAP)

  - VN5620 Configuration Demo – Switch Simulation

  - Migration Legacy Configurations



# 3<sup>rd</sup> generation of Ethernet Interface Software



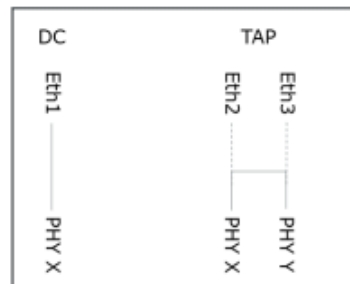
With VN5610(A), VN5640 and VT6306 interfaces, all device firmware versions, including version 11.1 can be used. Newer interfaces (e.g. VN5430, VN5620, ...) will only support device firmware versions  $\geq$  11.1. The device firmware version depends on the installed driver version.

CANoe Option .Ethernet supports the firmware version 11.1 from CANoe version 12.0.

Hardware	Details
Virtual CAN Bus 1	<b>Device</b> VN5620 1 (000342)
VN5620 1 (000342)	Type USB 3.0, connected with SuperSpeed 5 GBit/s
Network Devices	Article number 007192
Application	Serial number 000342
Global Settings	Driver version 11.4.14
Driver status	Firmware version 11.4.14
License	Hardware revision 2.0
	Capabilities CAN, D/A IO, ETHERNET
	Features Vector License-Management

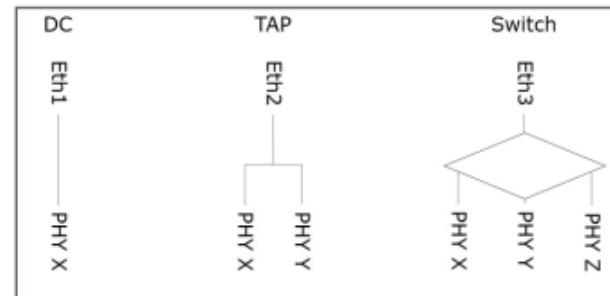
## Generation 1

- ▶ Introduced for the VN5610, VN5610(A)
- ▶ Supports: Direct Connection, TAP
- ▶ Channel-based access



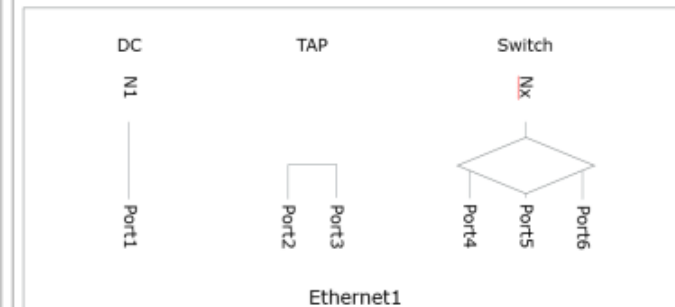
## Generation 2

- ▶ Introduced for the VN5640
- ▶ Supports: Direct Connection, TAP, Switch
- ▶ Channel-based access



## Generation 3

- ▶ Introduced for VN5620, VN5430
- ▶ Supports: Direct Connection, TAP, Switch
- ▶ Network based-access



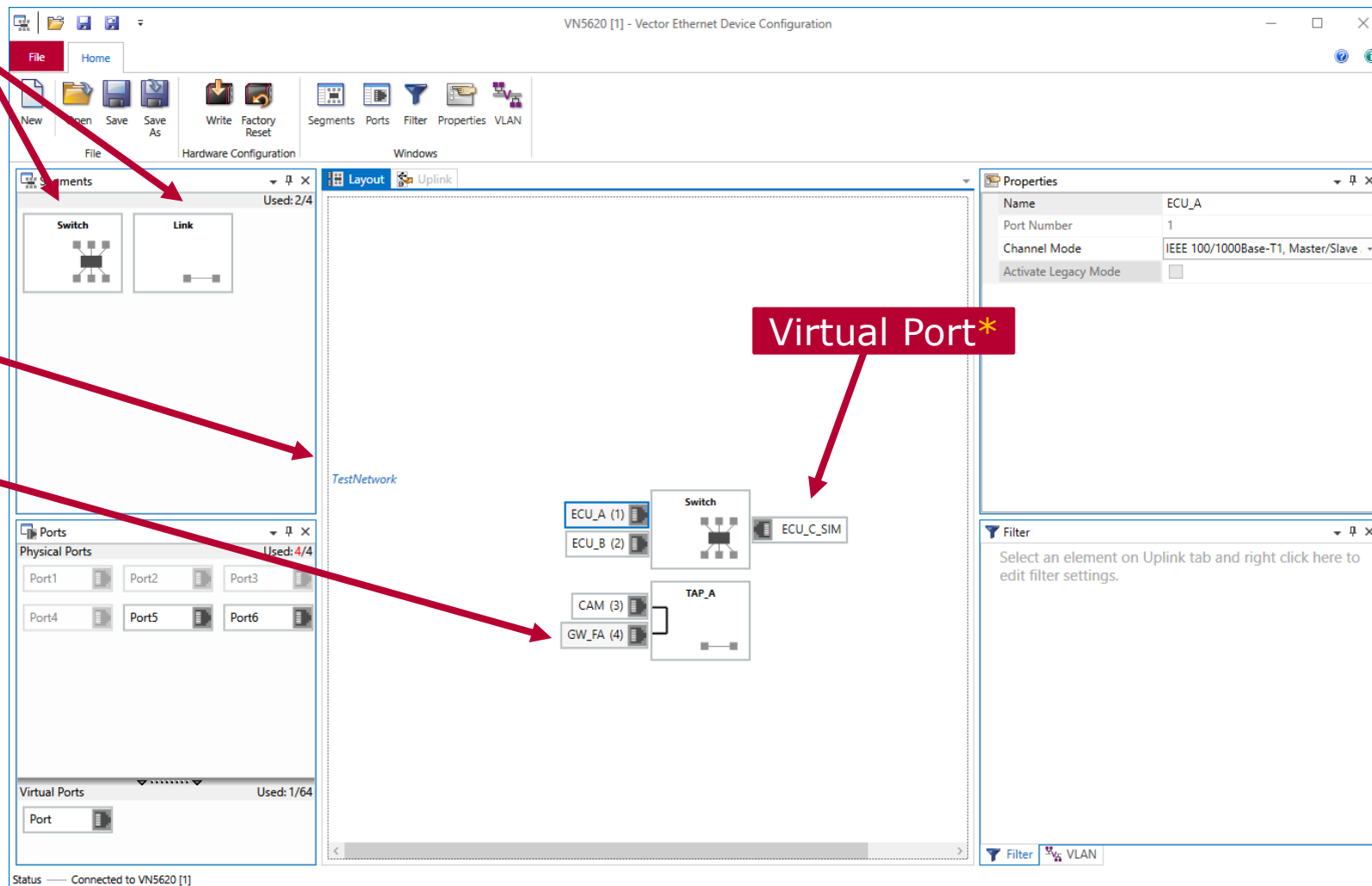
# Network based access

Segmentation Elements

Network

Physical Port

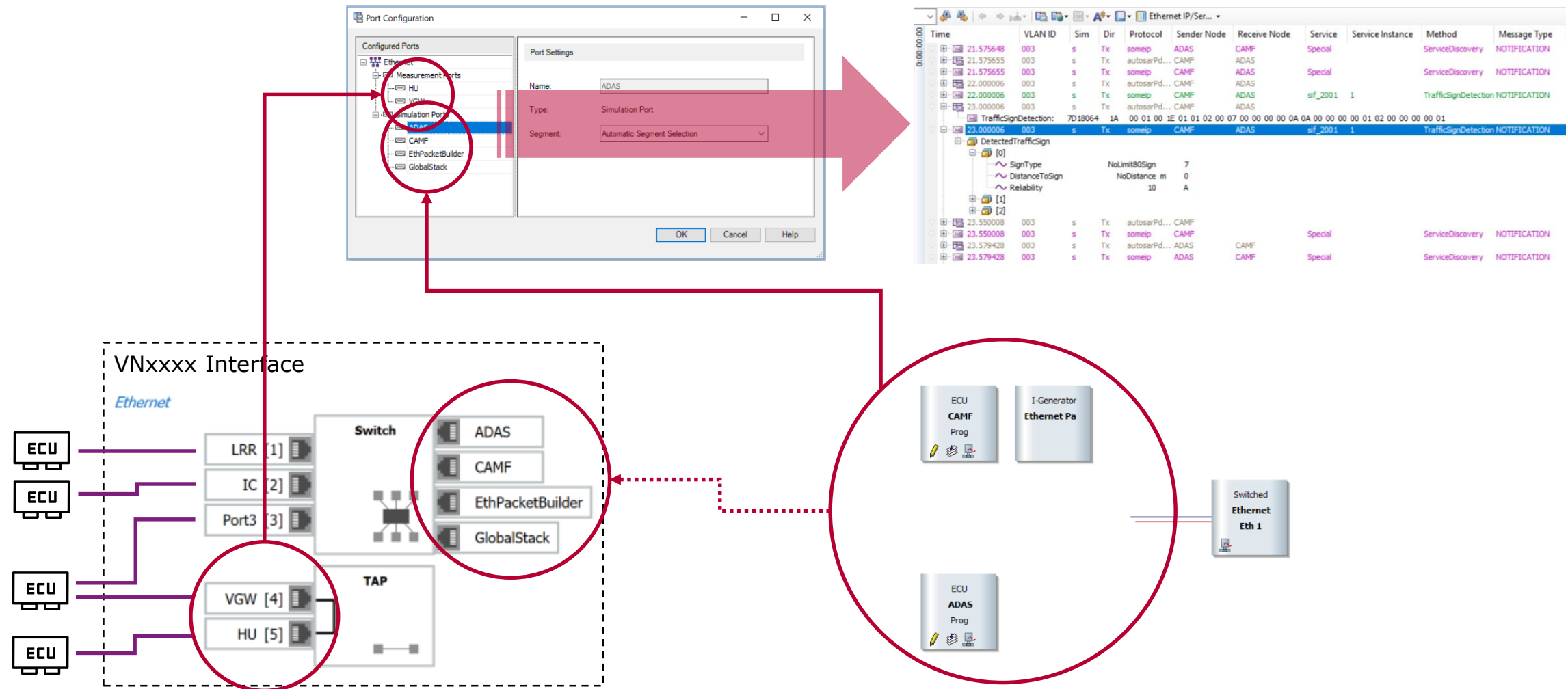
Virtual Port\*



\*dynamically attached by PC Tools (e.g. CANoe, CANape)

# Network based access

- ▶ Accessing the Ethernet network interface devices by means of the network based access



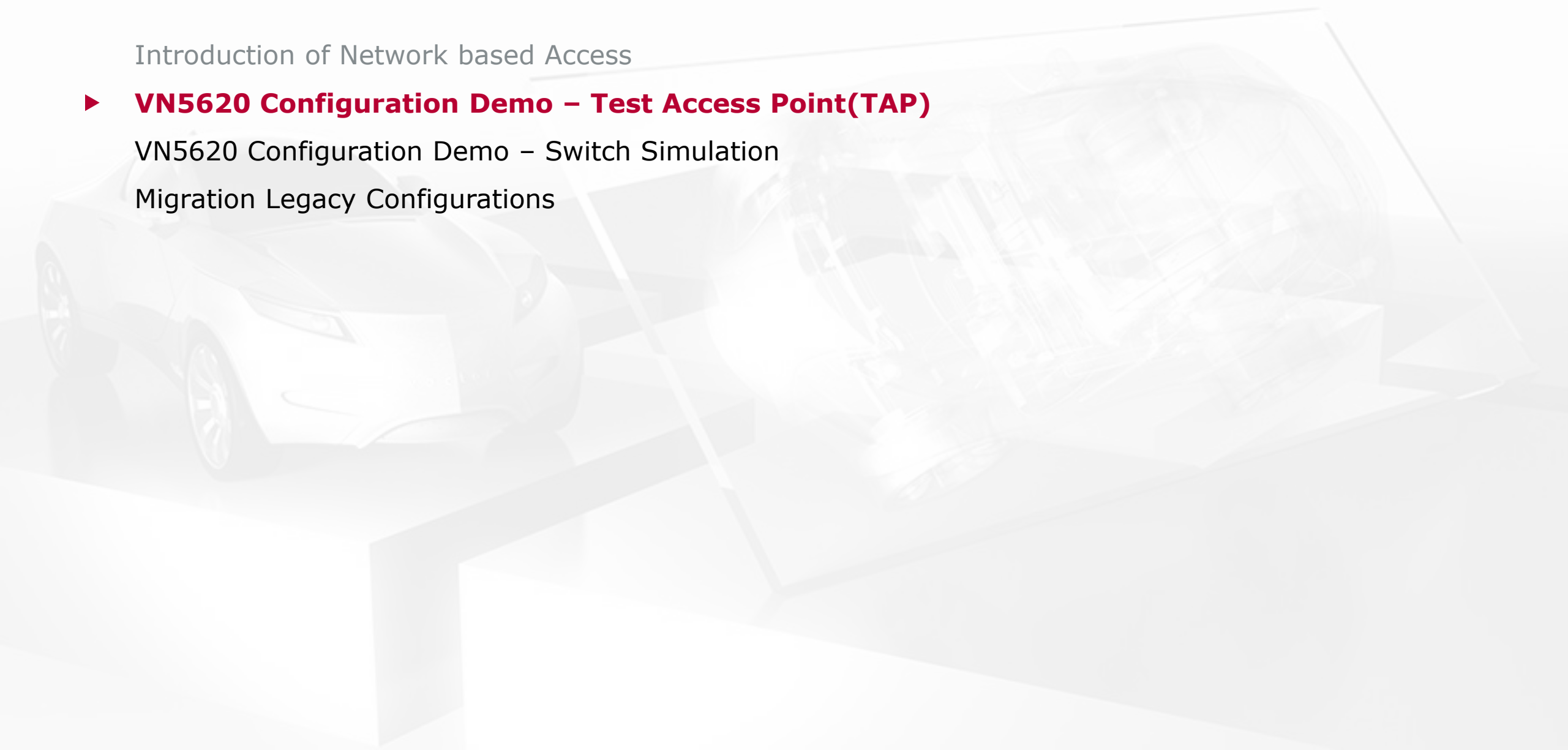
## Agenda

Introduction of Network based Access

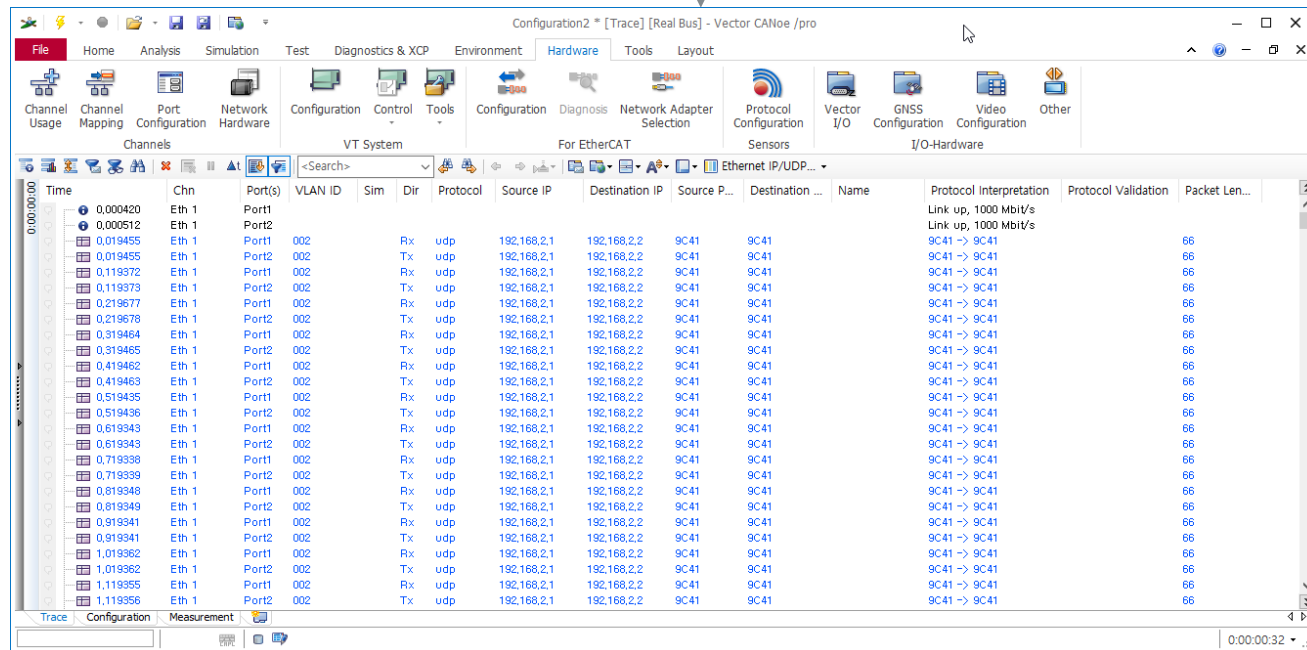
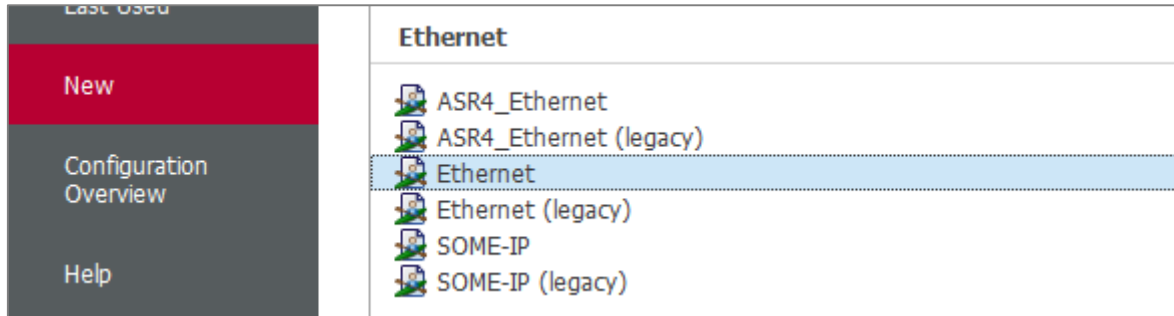
▶ **VN5620 Configuration Demo – Test Access Point(TAP)**

VN5620 Configuration Demo – Switch Simulation

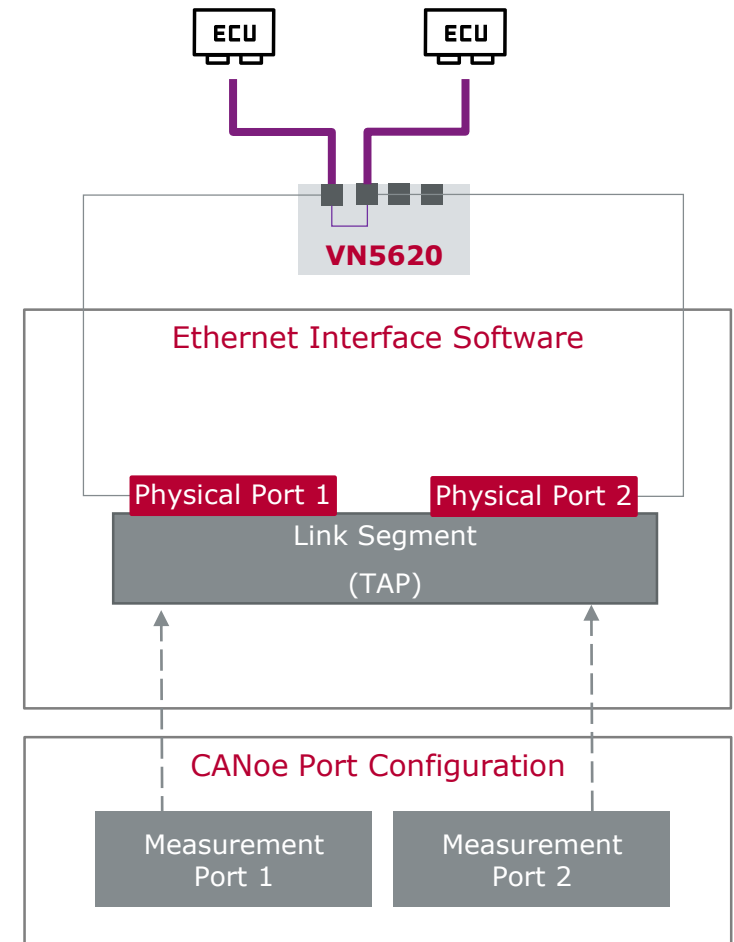
Migration Legacy Configurations



# Demo Example



- CANoe -



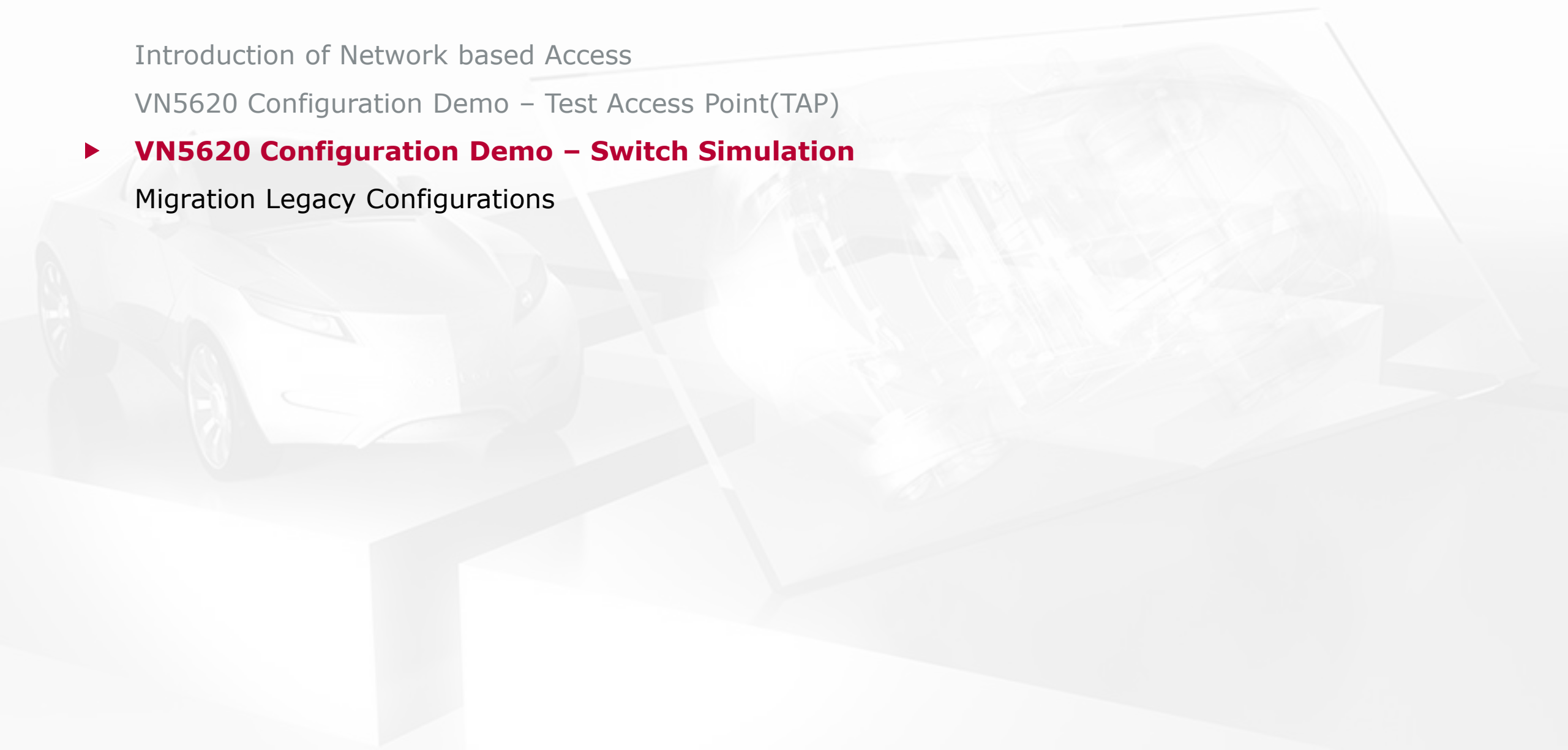
## Agenda

Introduction of Network based Access

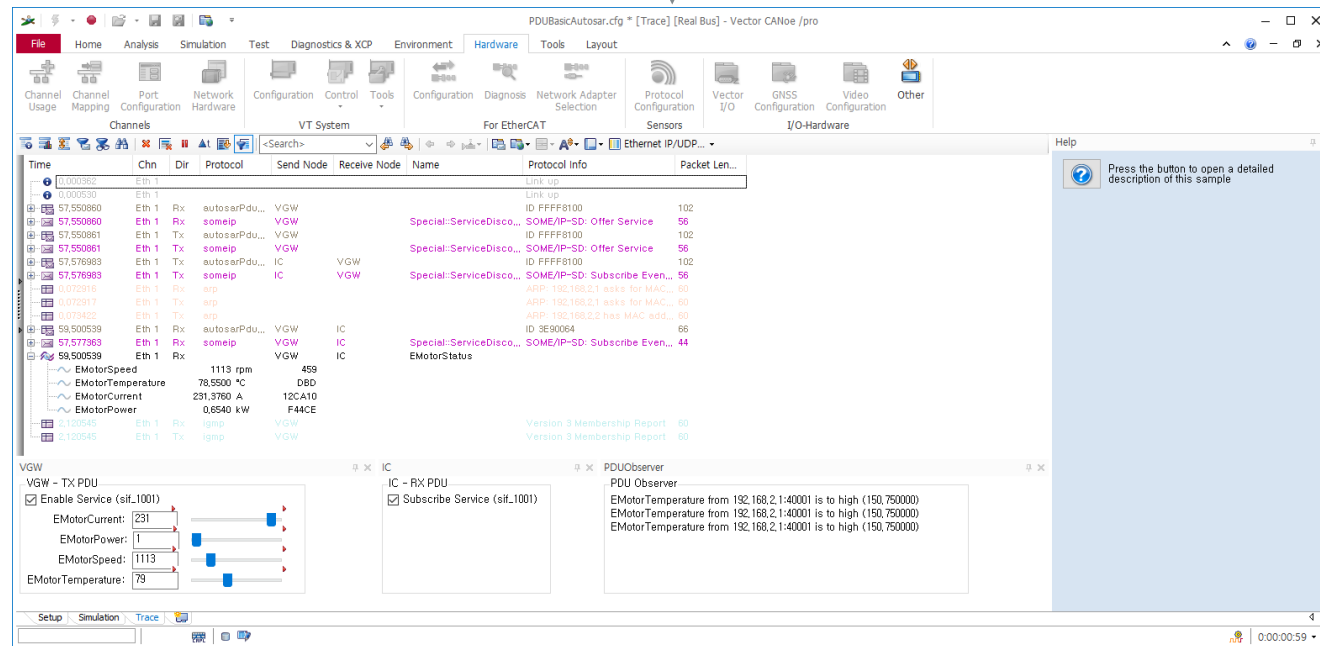
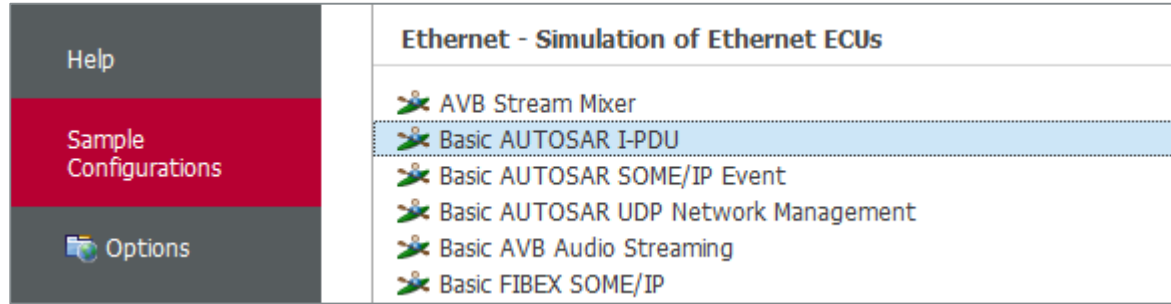
VN5620 Configuration Demo – Test Access Point(TAP)

▶ **VN5620 Configuration Demo – Switch Simulation**

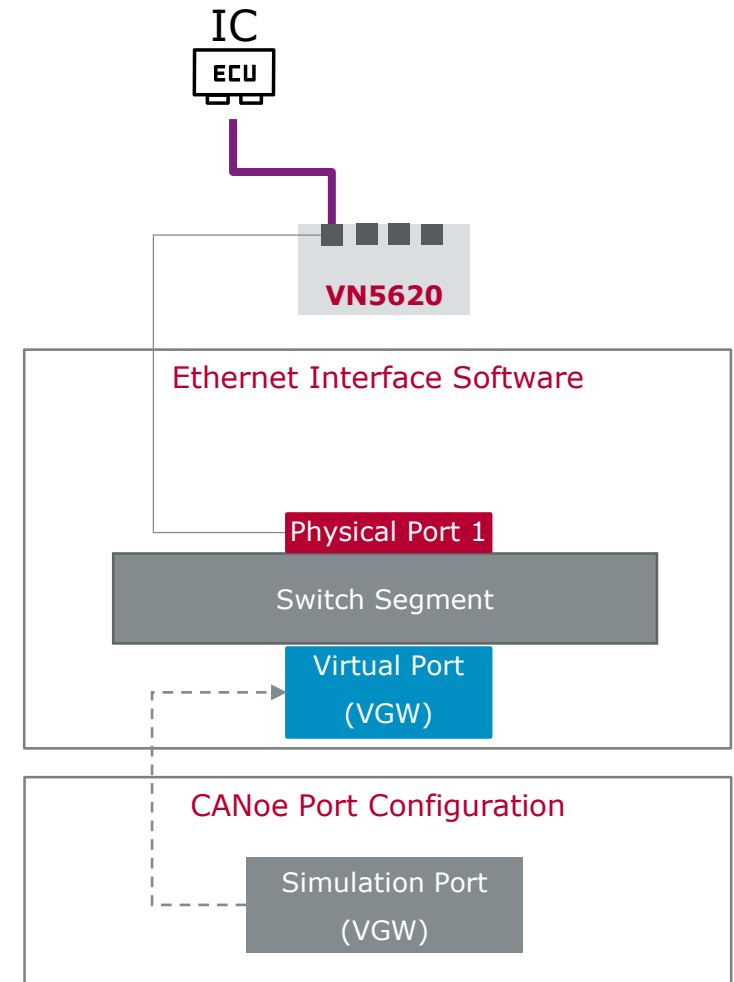
Migration Legacy Configurations



## Demo Example



- CANoe -



## Agenda

Introduction of Network based Access

VN5620 Configuration Demo – Test Access Point(TAP)

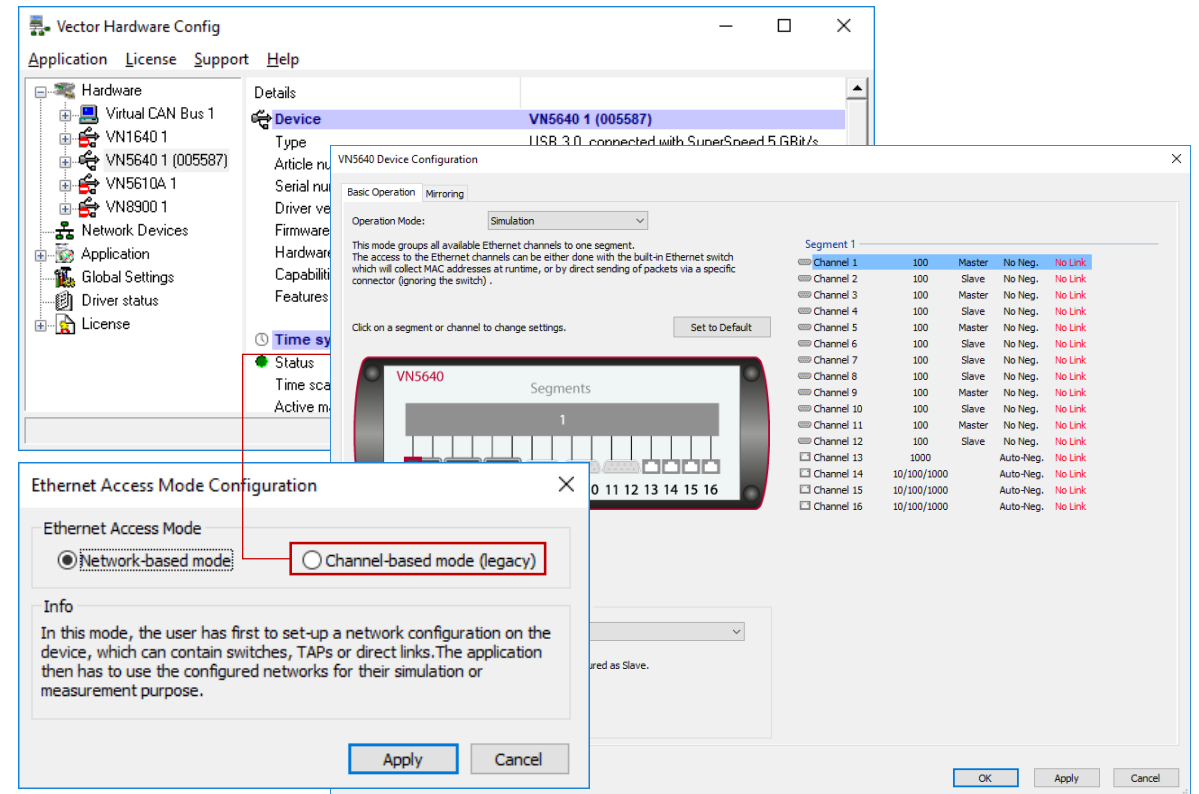
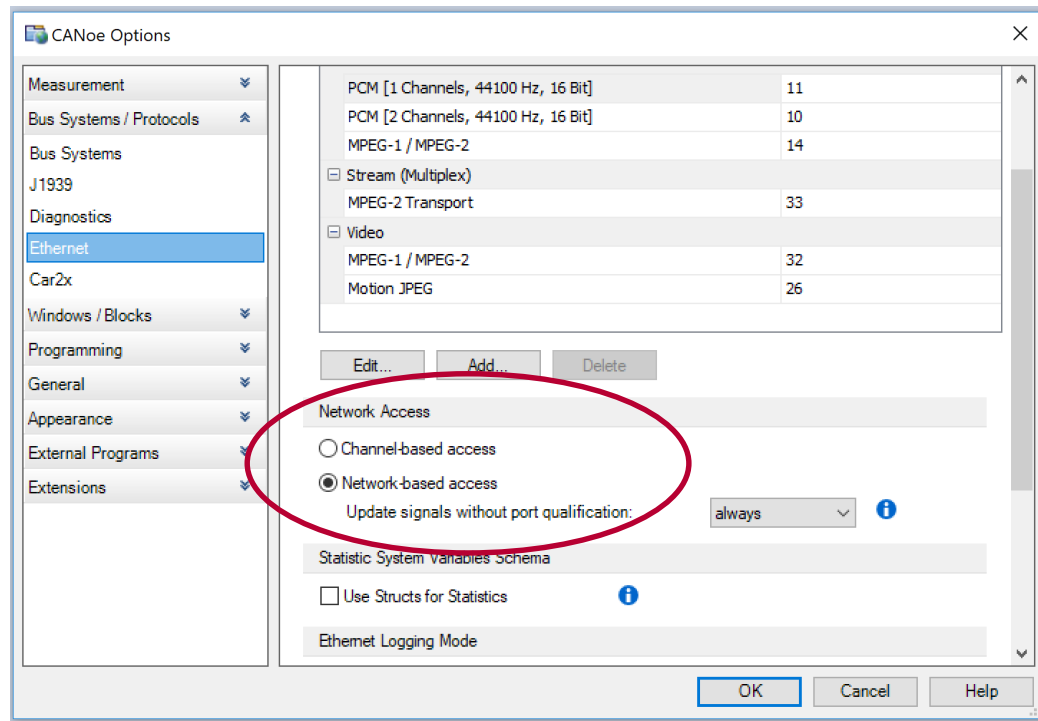
VN5620 Configuration Demo – Switch Simulation

▶ **Migration Legacy Configurations**



# Manual Migration

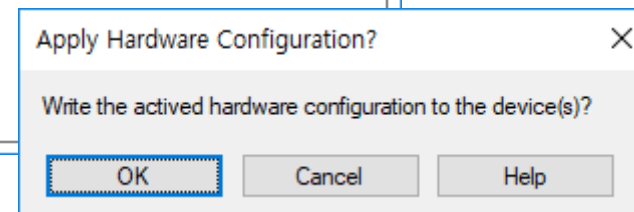
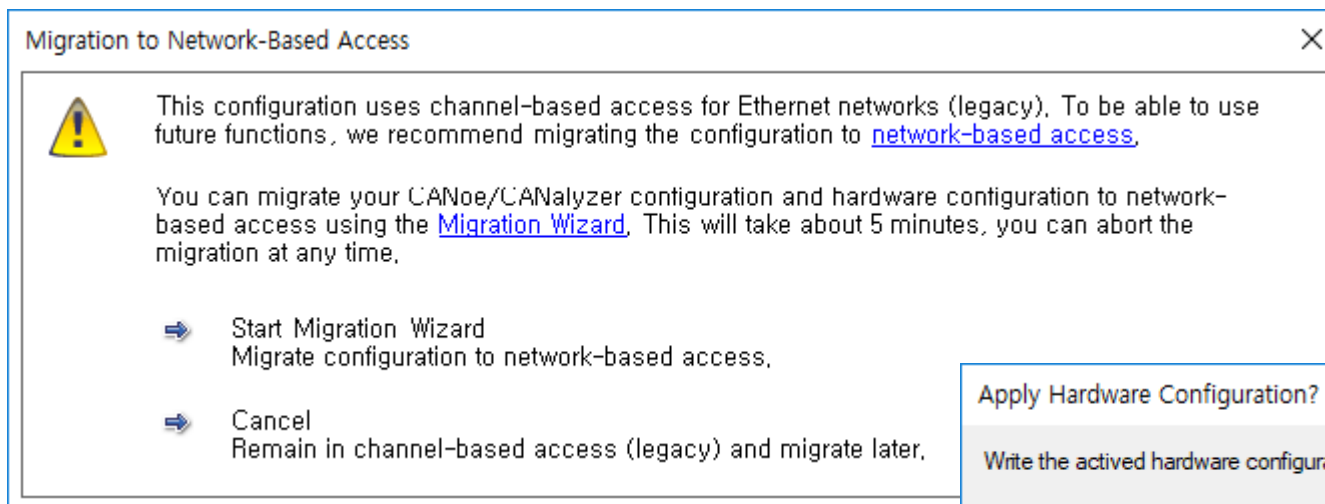
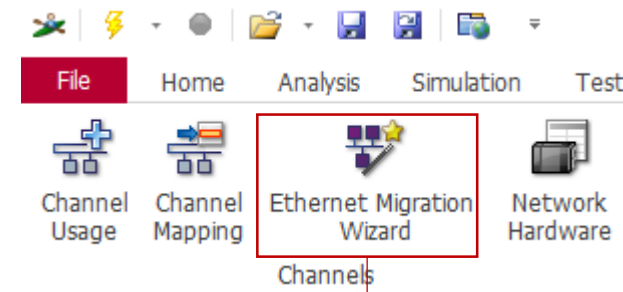
- ▶ Accessing the Ethernet network interface devices by means of the network based access
  - ▶ Previous channel based access is still supported for backward compatibility reasons only
- ▶ All hardware related topics are now available at the Ethernet network interface devices
  - ▶ Definition of complex Ethernet network topologies
  - ▶ Hardware filter capabilities



Channel-based mode (legacy)

## Migration Wizard

- ▶ Migrates CANoe/CANalyzer configurations
- ▶ Start Automatically and Manually
- ▶ Generate Hardware Configuration based on legacy Settings
- ▶ Fall back to legacy mode possible



## References

- ▶ **Vector Home Page** : VN5620/VN5430 – 차량용 Ethernet 및 CAN/CAN FD를 위한 고성능 네트워크 인터페이스
- ▶ **CANoe Help**
  - ▶ CANoe » Ethernet » Network-based Access
  - ▶ CANoe » Ethernet » Ethernet Migration Wizard
- ▶ **Application Notes**
  - ▶ AN-IND-1-023\_Ethernet\_VN\_Family\_From\_Firmware\_Version\_11.1.pdf
- ▶ **Support Email** : Support@kr.vector.com
- ▶ **Youtube – Vector Korea channel**
  - ▶ “차량용 Ethernet을 위한 벡터 네트워크 인터페이스”



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