Scania Workshop Suite (SWS) – workshop network configuration and installation wizard

Contents

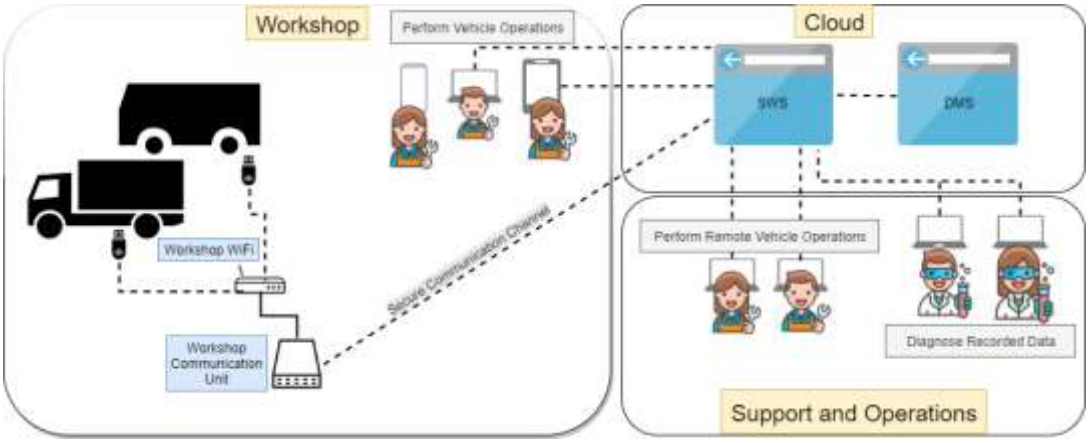
Overview

Network adjustments must be made in order for SWS to work in a workshop.

Workshop Communicator Unit (WCU) is a local communication unit between Vehicle Communicator interface (VCI) and Scania Workshop Suite (SWS). The WCU is a prerequisite and a requirement in order for a workshop to be able to work with SWS.

WCU must be installed in the workshop and all traffic between VCI and WCU should be kept within the workshop.
It is recommended that a workshop has 2 WCUs working in parallel for redundancy and availability. The WCUs are linked to the specific workshop.

VCI is connected to a Scania product via the OBD II contactor. VCI uses Wi-Fi to communicate with WCU.



Infrastructure overview

Network requirements

Introduction

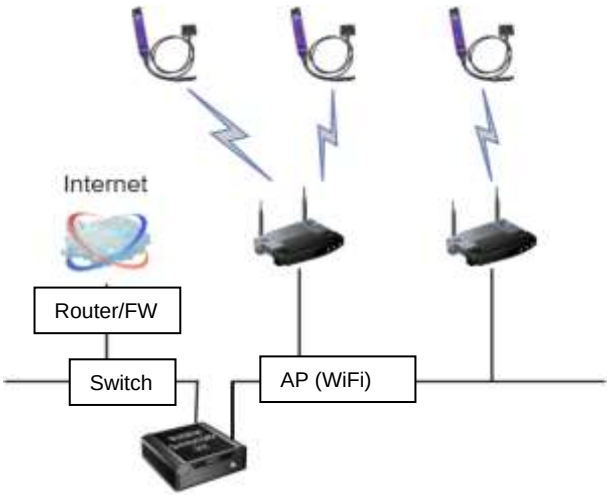
For Scania workshops categories 1 and 2, the network must be adapted according to this document.
Independent workshops are subject to the same requirements that the network must be suitable for SWS.

SWS sets high requirements on the wireless network of the workshop because the VCI units communicate via Wi-Fi.
The communication unit must be installed on site in the workshop and must have a stable Internet connection. A local installation means high speed, low latency and few lost data packages between WCU and VCI.
If the workshop already has a well functioning wireless network in its facilities, it will probably be sufficient to install WCU.

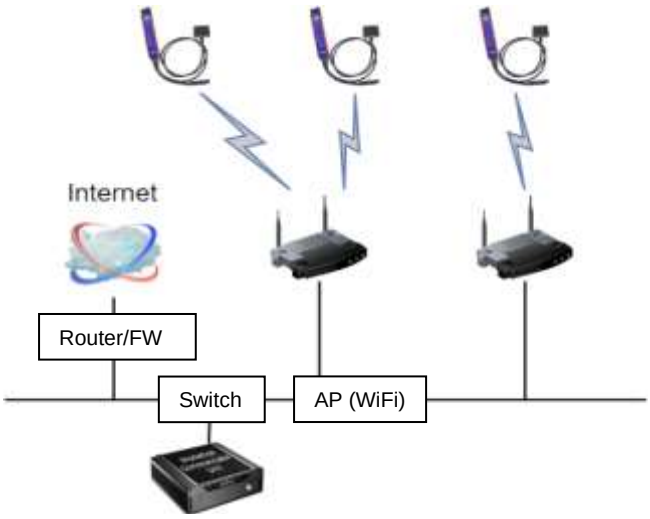
Customise the infrastructure of the network according to the chapters Network infrastructure, Wireless infrastructure, and Workshop firewall below.
For Scania workshops categories 1 and 2, please check if the network meets Scania's security requirements concerning IT networks. If you have or plan to have a direct connection to Scania Enterprise Network (SCENE), the implementation must comply with alternative 1 in the Chapter Network infrastructure. Independent workshops select which one of alternatives 1 and 2 the workshop should be adapted to.

Network infrastructure

WCU can be connected according to either alternative 1 or alternative 2 below. The communication unit comes with 2 Ethernet contactors to support the installation when the network is physically segmented.



Alternative 1 for network infrastructure (Recommended)



Alternative 2 for network infrastructure

Wireless infrastructure

In order for the scanning of the VCI units to work, WCU must be connected to the same network, Virtual Local Area Network (VLAN), as the VCI units. The network must support broadcast and multi calls in order for WCU to be able to find the connected VCI units. Connect only WCU and VCI units to VLAN WCU-VCI.

The VCI3 network must have 2.4 GHz activated and be in mode **N** because VCI3 does not support mixed mode. Mixed mode can cause the VCI3 unit to malfunction.
The network should use spectrum 20 MHz for best performance.

The VCI4 network works with 2.4 GHz and 5 GHz. Scania recommends 5 GHz.

Workshop firewall

The software in the WCU needs to communicate with the cloud services. In order to reach the services, the workshop firewall must have the following ports (from the inside to the outside) open.

Port		Service	Form
53		DNS	UDP
80		HTTP	TCP
123		NTP	TCP/UDP
443		HTTPS	TCP
8883		AWS IoT HUB	TCP

Firewall inspection rules

Check that no HTTPS inspection has been activated. As a result of activation, WCU does not trust the firewall certificate and the communication is discontinued.
Check that any URL filtering is adjusted to allow the communication that is required by WCU (depending on the categorisation behaviour of various supplier firewalls).

Firewall and service filtering

- To verify that the firewall is correctly configured, proceed as follows: Connect a computer to the Internet with the same network cable as the one used for WCU.
- Then open a web browser (Edge or Chrome) and test the URLs below (all must work):
  - https://device-provisioner.sws-prod.prod.aws.scania.com:443
  - https://device-provisioner.sws-prod.prod.aws.scania.com:80
  - https://seipa.scania.com/SCIS613/aftersales/eculoginservice/v2
  - https://seipa.scania.com/SCIS614/aftersales/ecusoftwareservice/v2
  - https://seipa.scania.com/SCIS615/aftersales/ecuupdateloggingservice/v1
  - https://seipa.scania.com/SCIS616/aftersales/ecuupdatepartsservice/v1

- URLs 1-6 are displayed in web browser tabs if the firewall has been configured correctly, see the screenshot example below for https://device-provisioner.sws-prod.prod.aws.scania.com:80:

- SEIPA URLs have been set up correctly if they are reachable:
  - If set up correctly, an error message is displayed.
  - If set up incorrectly, a time-out message is displayed and the URL addresses cannot be reached.