



# Grant secure and remote access to critical company resources

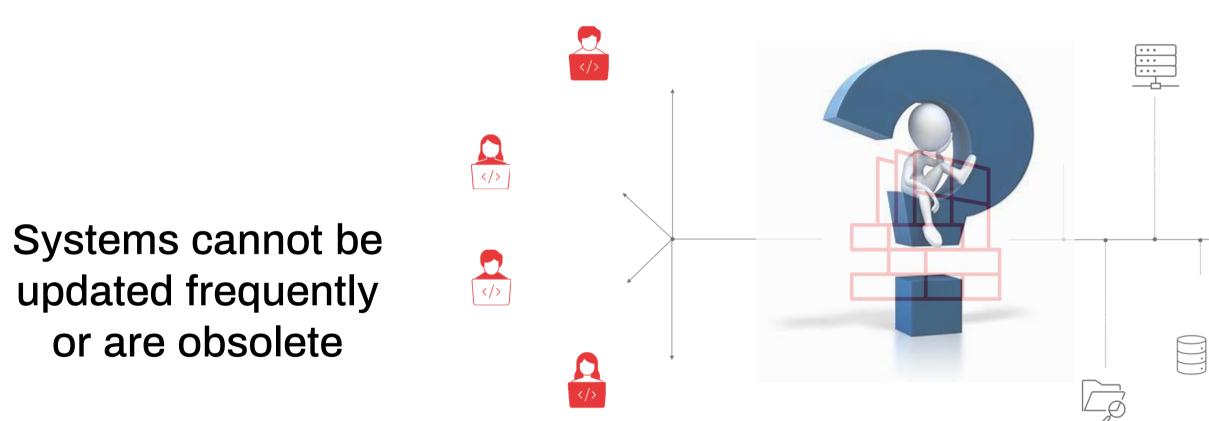


### Giuseppe Faranda-Cordella CEO & Co-founder Drivesec srl

October 17, 2022

### The Challenge – How to grant access to remote users...

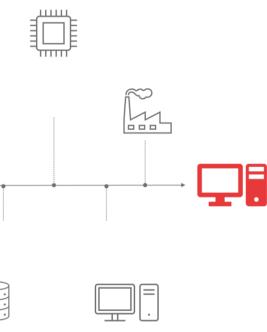
Access to Server, Database, Documents, 3D printer, PLC line...



In all cases it is important to keep the integrity, confidentiality, and security of data, systems, and resources while taking advantage of **remote access** in term of **flexibility, cost saving and timing** 



#### By Internal or external remote user



Don't want to give continuous access or keep the resources always on

I need to share assets with weaker protocol

## The Challenge – ... Keeping in mind security

Adopting the highest security standards



In many cases, VPN based solutions are not applicable or advisable

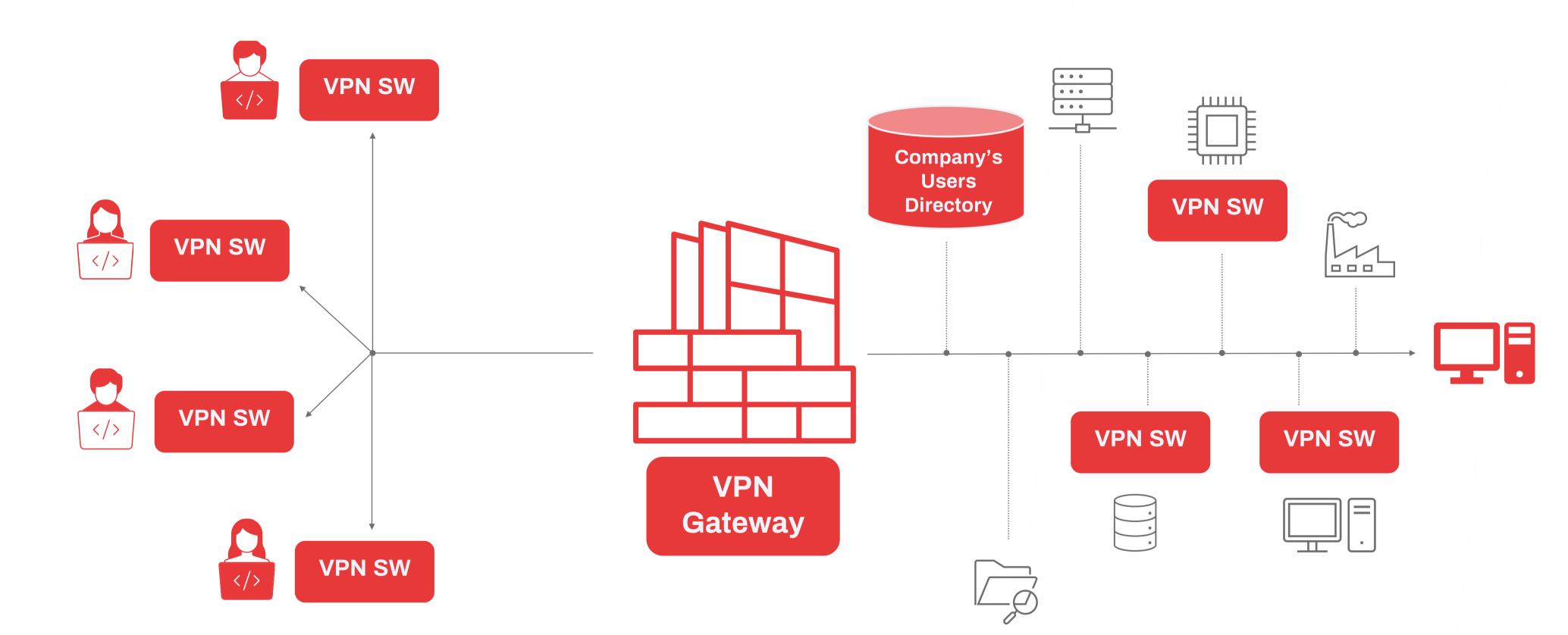


#### Isolating assets on alternative infrastructure

#### Managing temporary access (limiting time)

#### Allowing full access when remote users are not fully trustable

# Traditional VPN based approach



### **Changing the Paradigm**

develop an innovative, easy-to-use, fully-configurable, and secure system to quickly share any type of TCP/IP-based resources, granting security, integrity, and confidentiality

provide a solution that is scalable to fit the needs of Companies of any size (from micro to large) without interfering with existing ICT infrastructure



# REMOTE ON DEMAND SECURE ACCESS TO ANY TCP/IP-based RESOURCES



# Introducing **Access-0**



Access-o allows secure remote access to any Company assets using an on-demand Peer to Peer schema

Accesso enables secure remote connectivity to any resources accessible via an internet-based protocol

Access-o is specifically designed to allow on-demand access to critical Company resources (manufacturing systems, legacy systems, servers, data repository, 3D printers)

Access-o requires near-zero setup time, no specific ITC skills, doesn't require any SW installation or configuration on the target resource, and is fully autonomous

Access-o enables the forwarding of weaker protocols, allowing users to run their insecure applications as usual while taking advantage of its security features

Access-o relies on a security framework that enforces mandatory strong (M2F) authentication and guarantees on-demand connectivity via secure channels

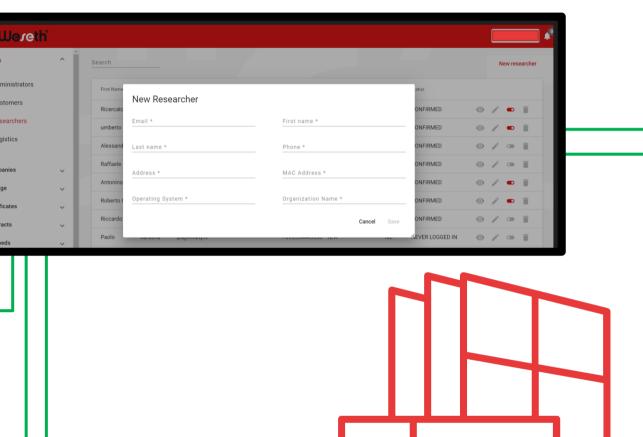
Access-o uses the Drivesec patented Weseth platform

### driverer

# Remote connectivity via





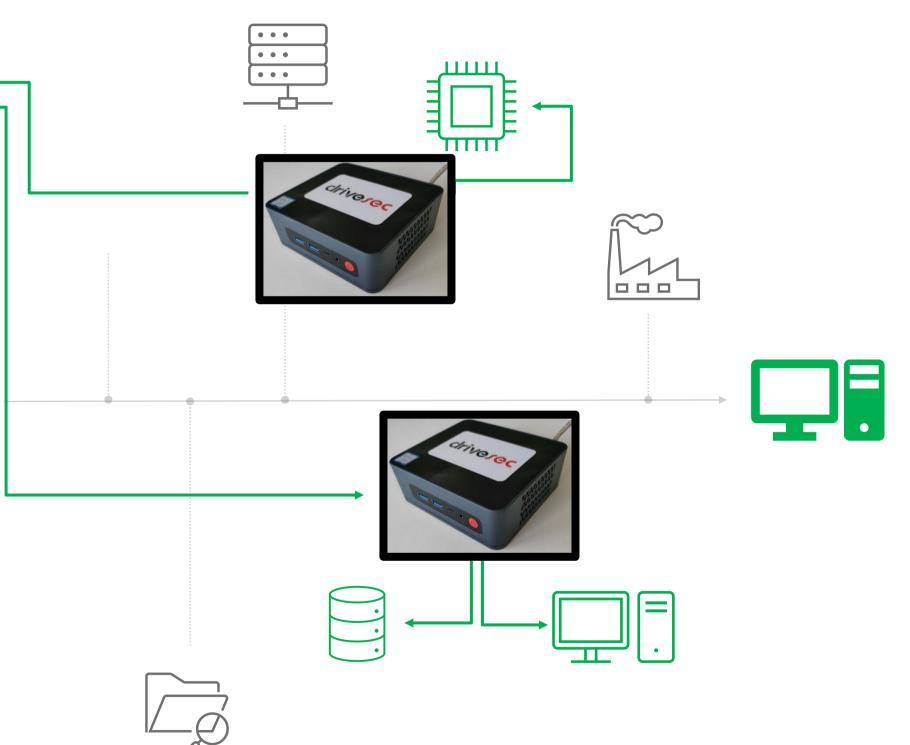




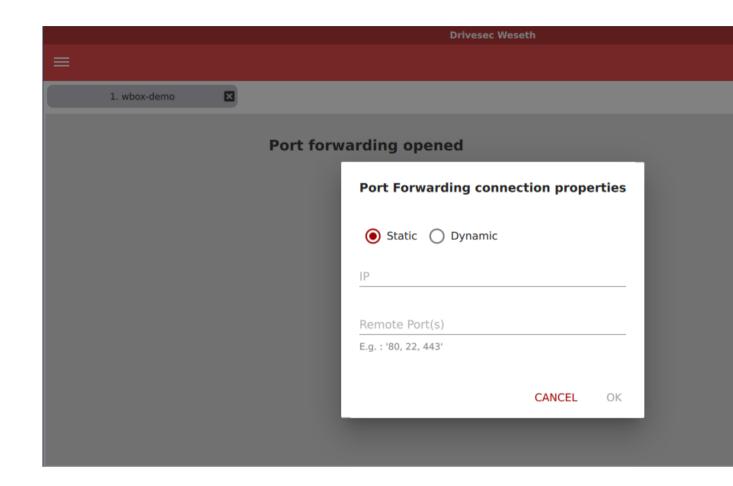








# **Accesso** Client



Port Forwarding allows remote access to an asset that is reachable by its own IP address

Access can be granted to different network services on different ports (e.g., FTP, SSH, HTTP)

### drive**sec**



that is reachable by its own IP address s on different ports (e.g. FTP SSH



## Static Port Forwarding

	Drivesec Weseth	0 _ 0 =	
≡		umberto ricercatore 🔻	≡
1. wbox-demo			1. wbox-demo-SEi8
	Port forwarding opened Port Forwarding connection propertie	es	
	Static O Dynamic		
	Remote Port(s)		
	E.g. : '80, 22, 443'	κ	

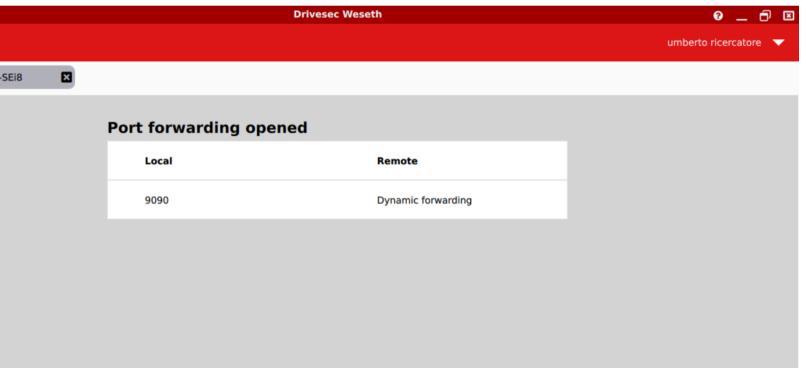
#### drivesec

Drivesec Weseth
Image: Comparison of the sector of t

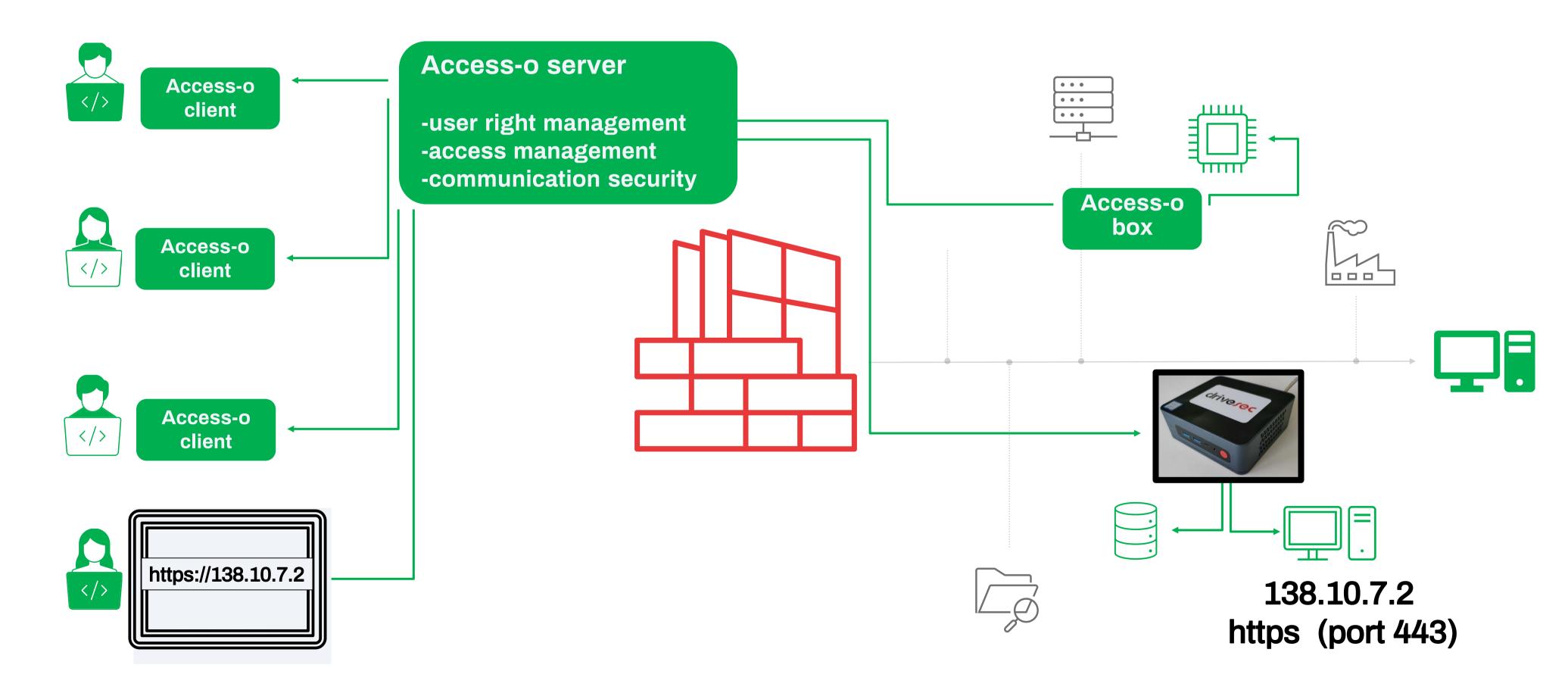


## **Dynamic Port Forwarding**

	Drivesec Weseth	0_00
		umberto ricercatore 🤝
1. wbox-demo		1. wbox-demo
Po	rt forwarding opened Port Forwarding connection properties O Static O Dynamic Local Port E.g. : '9090'	



# Dynamic port forwarding

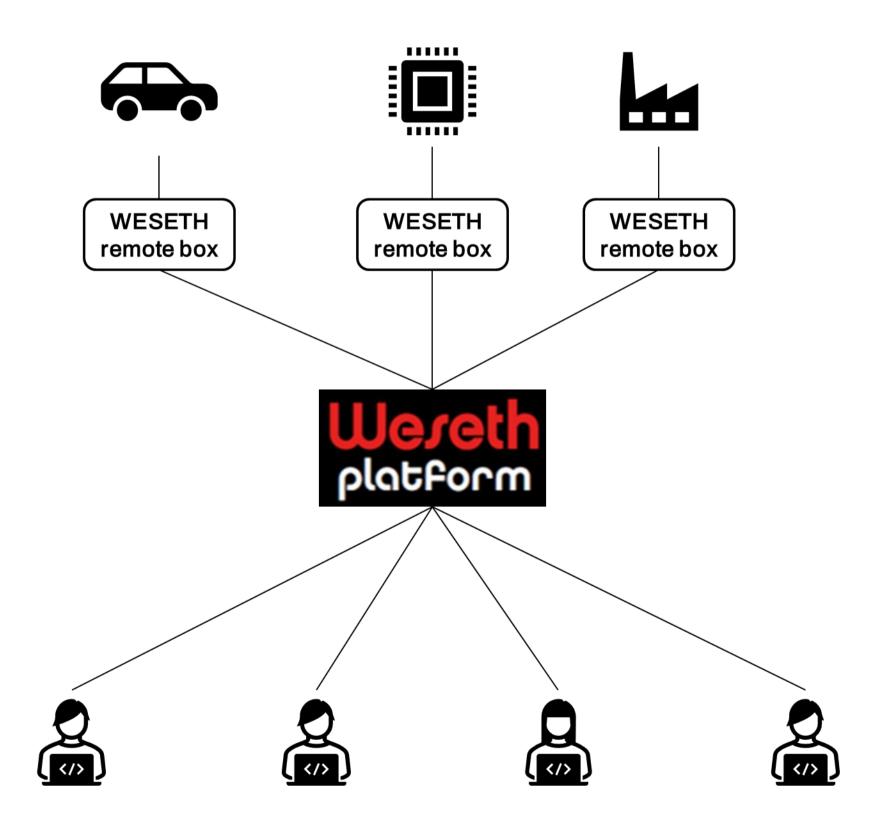


# **ACCESS-O** vs VPN

- $\checkmark$  No need to install sw on the resources to be shared
- ✓ No interaction with Companies' ICT infrastructure
- $\checkmark$  Zero installation time and no ICT skills needed
- ✓ Manage logs and give full control on Users management
- ✓ Guarantee access on demand
- ✓ Gives natively full control to all attached networks
- $\checkmark$  Can be configurable and re-programmable



# Accesso uses Uleseth®





 $\bullet$ 

 $\bullet$ 



WESETH builds a secure pipe for all remotization activities

• WESETH provides secure remote access to internal and external resources

This can make remote work more flexible, less expensive and significantly more efficienct

# Run a PoC with



Go to www.drivesec.com and choose to subscribe to an Access-o POC

PoC can last up to 3 months and allow the sharing of unlimited resources physically connected to the Access-o box

Allows an unlimited number of users

Cost is 1.500 euro per 3 months of platform usage

Info on Access-o and Weseth can be asked to info@drivesec.com



# WESETH Platform

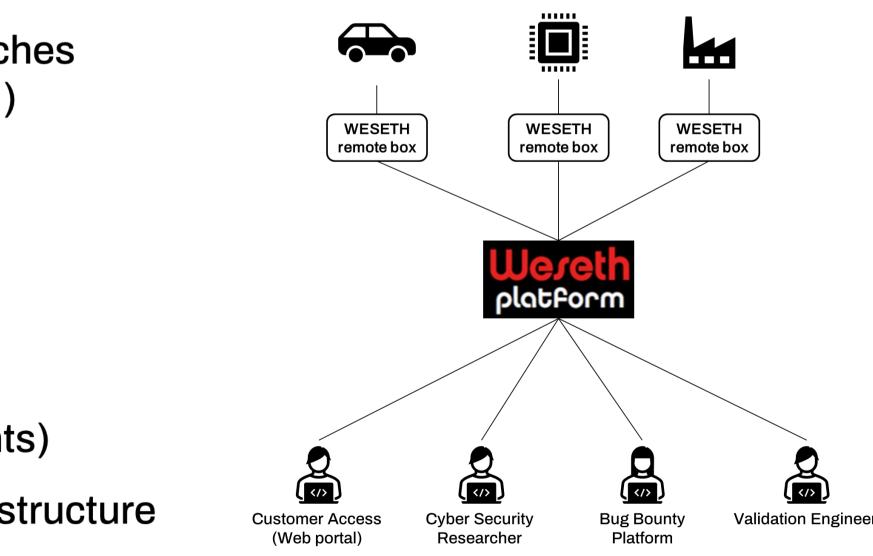




A Remote Engineering Platform with focus on Cybersecurity Feature Testing

- Enable Remote Engineering services on components, benches and vehicles (SW re-flash, diagnosis, functional testing, ...)
- Support the compliance with UN Regulation 155
- Remote verification of security posture through penetration testing and vulnerability assessment
- Enable new model to validate in remote way the vehicle features (checking either functional or security requirements)
- Highly secured Platform decoupled from Customer IT infrastructure





# Access-o Advantages

### Secure remote access

to any automotive system or test vehicle

## **Requirements verification during integration**

and system test

## Full traceability of operations

increase control on penetration test execution

## **Reduce number of test parts/benches**

by allowing the sharing of resources through arbitrated remote access

### Session recording and playback

of engineering activities

### **Zero Setup time**

between decision to run pen test and real execution

## **Remote engineering operations**

remote re-flash, data collection, remote diagnostic





Info@drivesec.com www.drivesec.com

