



VicOne

Driving Automotive Cybersecurity Forward

連網車- 整車攻防演練 Demo

Reece Chen



Abstract



Scenario Introduction

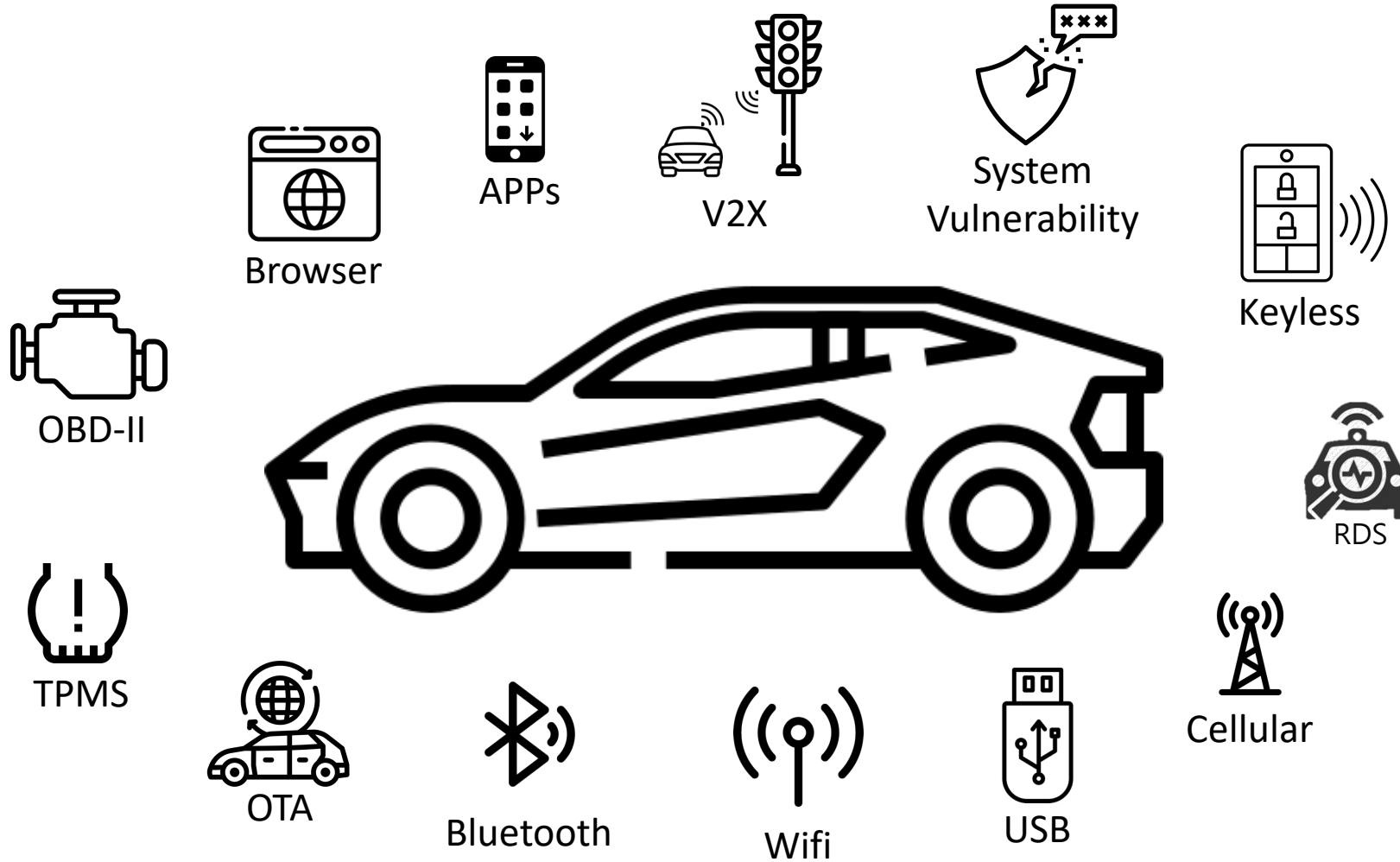
Hacking demo

xZETA – Vulnerability Management

Hacking demo – xCarbon On

xNexus – Detection and Response

Attack Vector



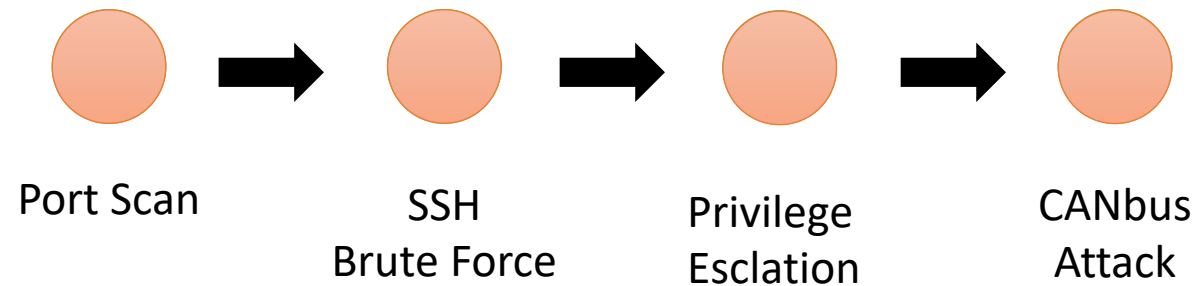
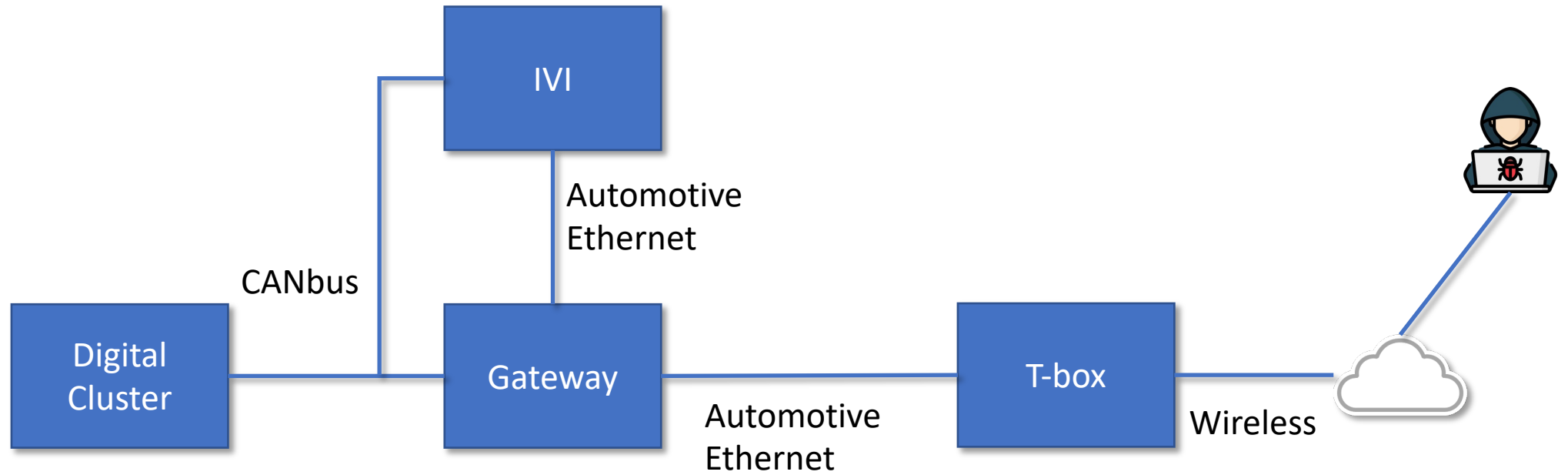
Demo

without xCarbon

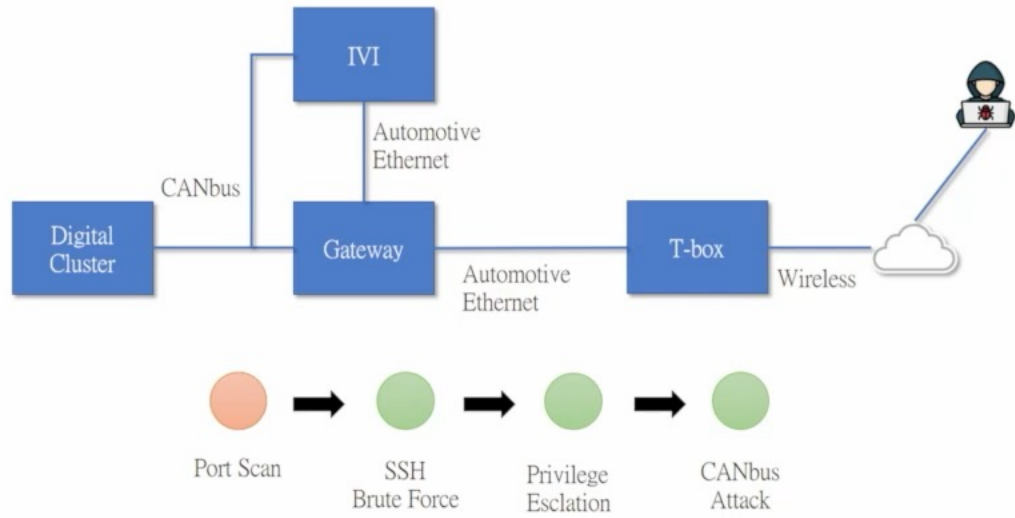


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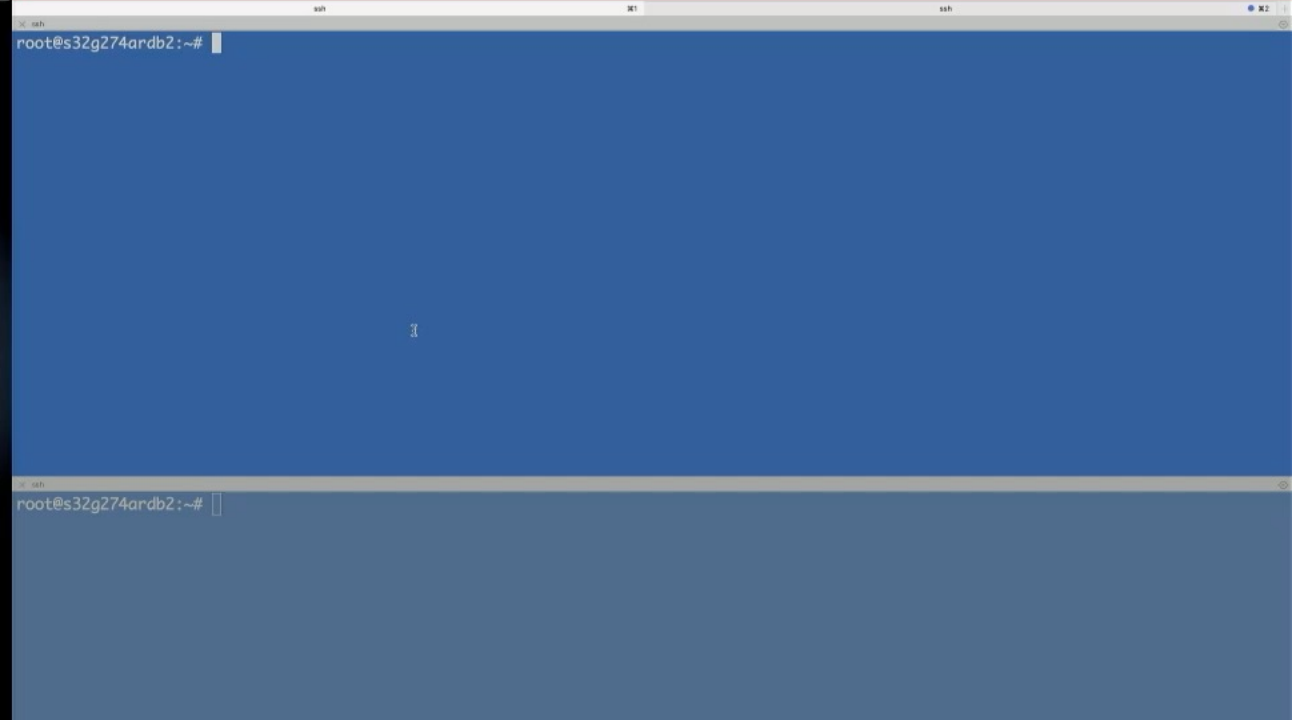
Scenario



Scenario



```
ben_lee@TW-BENLEE attacker % nmap -n -pT:21-25,80,139,8080 --packet-trace 192.168.100.5
```



Demo - xZETA

Vulnerability Management



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Demo - xCarbon



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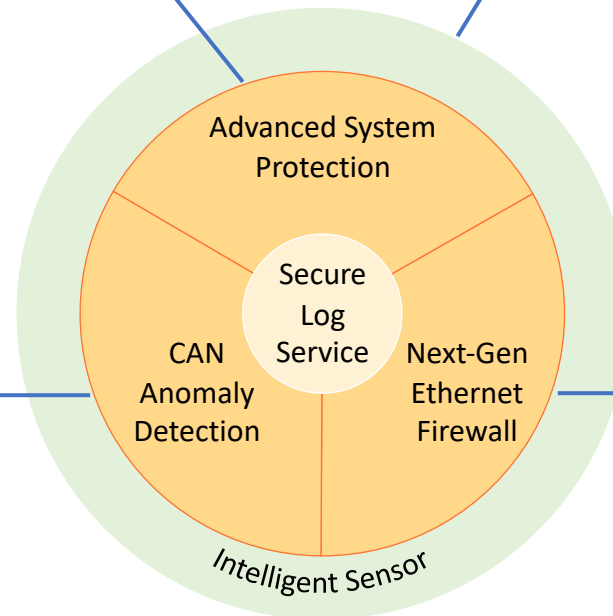
VicOne xCarbon

- Only permitted applications can be executed
- System exploit protection

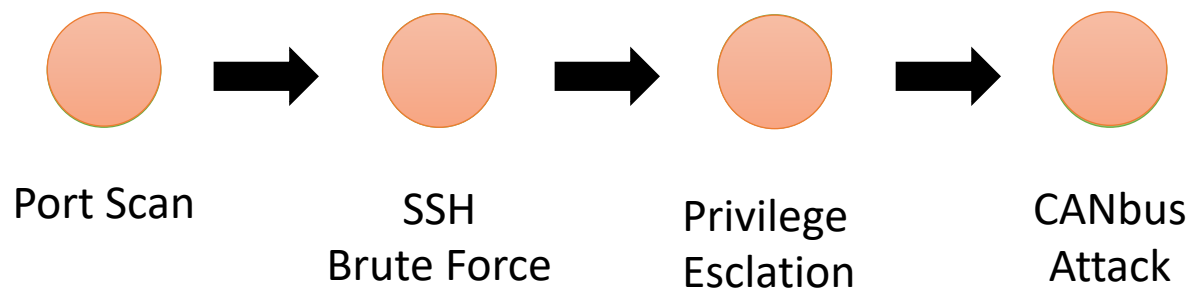
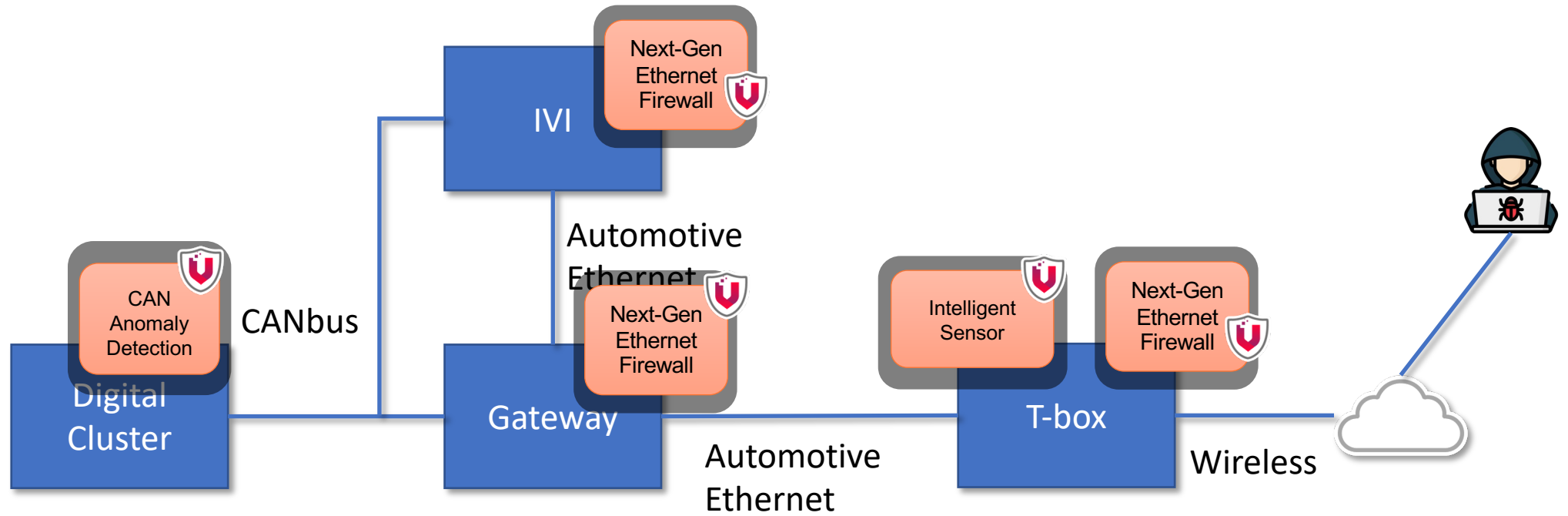
- Collects system activities and critical events

- Detect malicious CANbus frame

- Ethernet intrusion detection
- Virtual patch for network vulnerability
- Domain / IP filtering



Scenario



Demo - xNexus

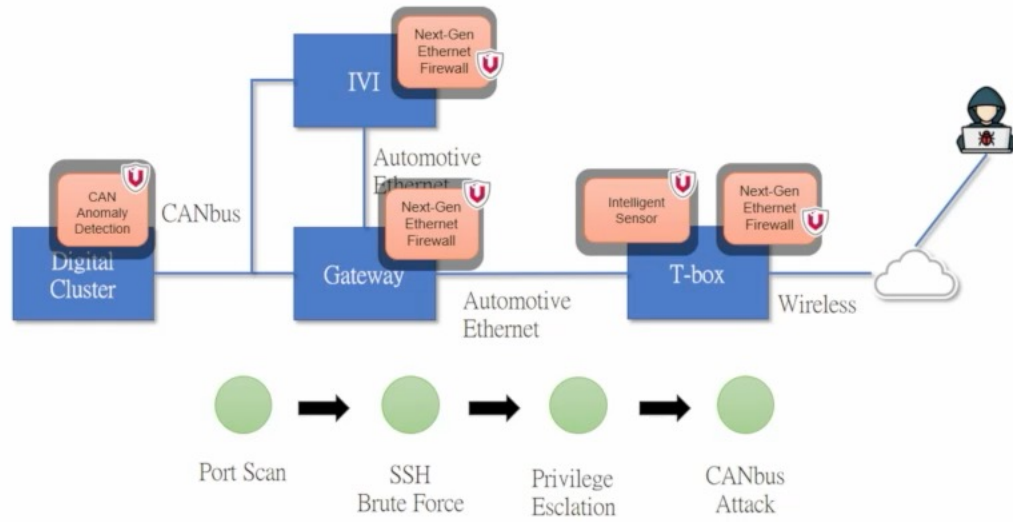
Extended Detection and Response



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Scenario



```
ben_lee@TW-BENLEE attacker % nmap -n -pT:21-25,80,139,8080 --packet-trace 192.168.100.5
```



```
Every 2.0s: /opt/soter/sbin/soter log_uploader 5 s32g274ardb2: Wed Sep 14 02:52:54 2022
```

```
[example]
elapse_meantime: 0 s (avg. 3s; smp. 0), 0 s (avg. 30s; smp. 0)
file_meansize: 0 bytes (avg. 3s; smp. 0), 0 bytes (avg. 30s; smp. 0)
overflowed: 0 (0 bytes)
expired: 0 (0 bytes)
received: 0 (0 bytes)
uploaded: 0 (0 bytes)

[can_detection]
elapse_meantime: 0 s (avg. 3s; smp. 3), 0 s (avg. 30s; smp. 30)
file_meansize: 944 bytes (avg. 3s; smp. 3), 931 bytes (avg. 30s; smp. 30)
overflowed: 0 (0 bytes)
expired: 0 (0 bytes)
received: 35 (31219 bytes)
uploaded: 37 (32291 bytes)
```

```
root@s32g274ardb2:~# /opt/atom/bin/atom security-events
```

Protection of the Vehicle Lifecycle

xNexus



xScope



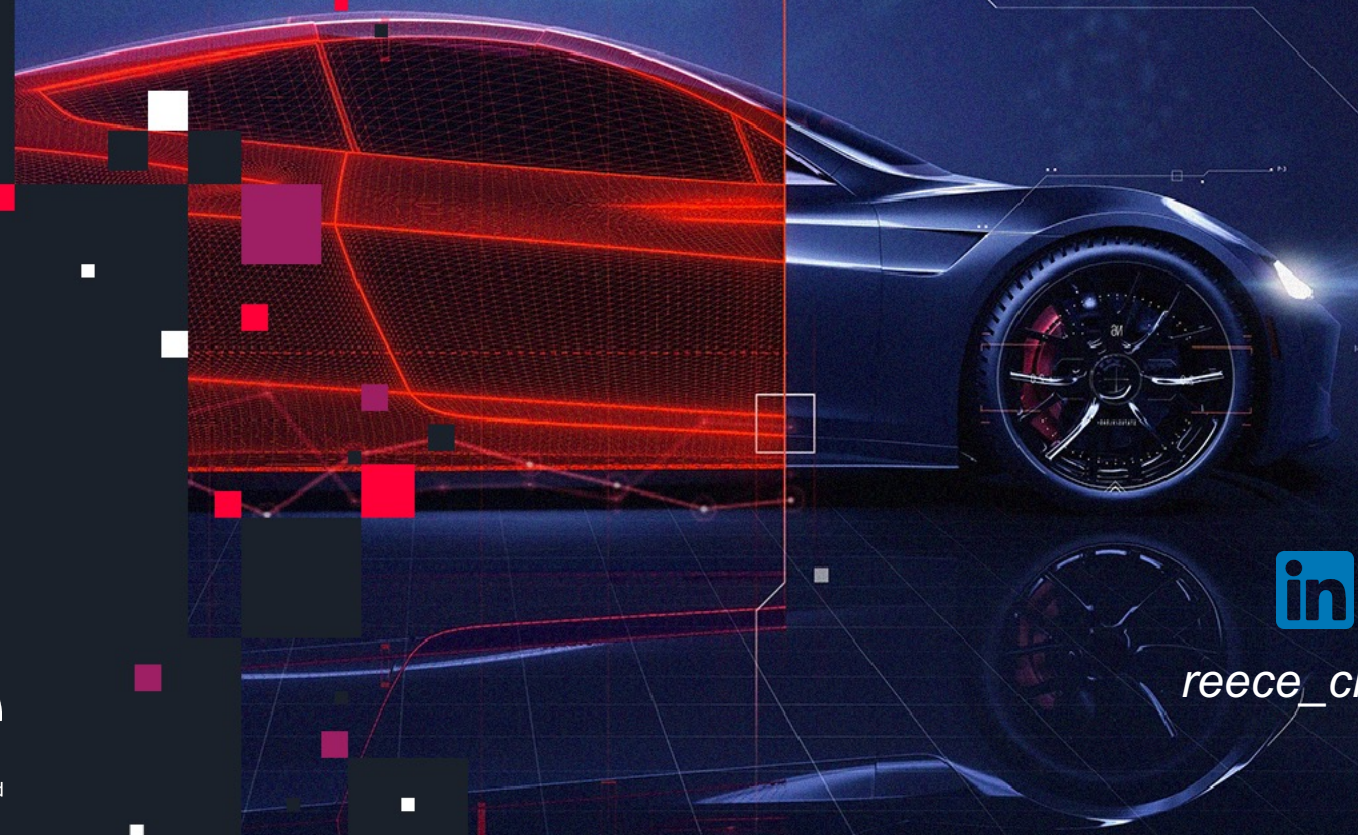
xZETA

xCarbon





THANK YOU!



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