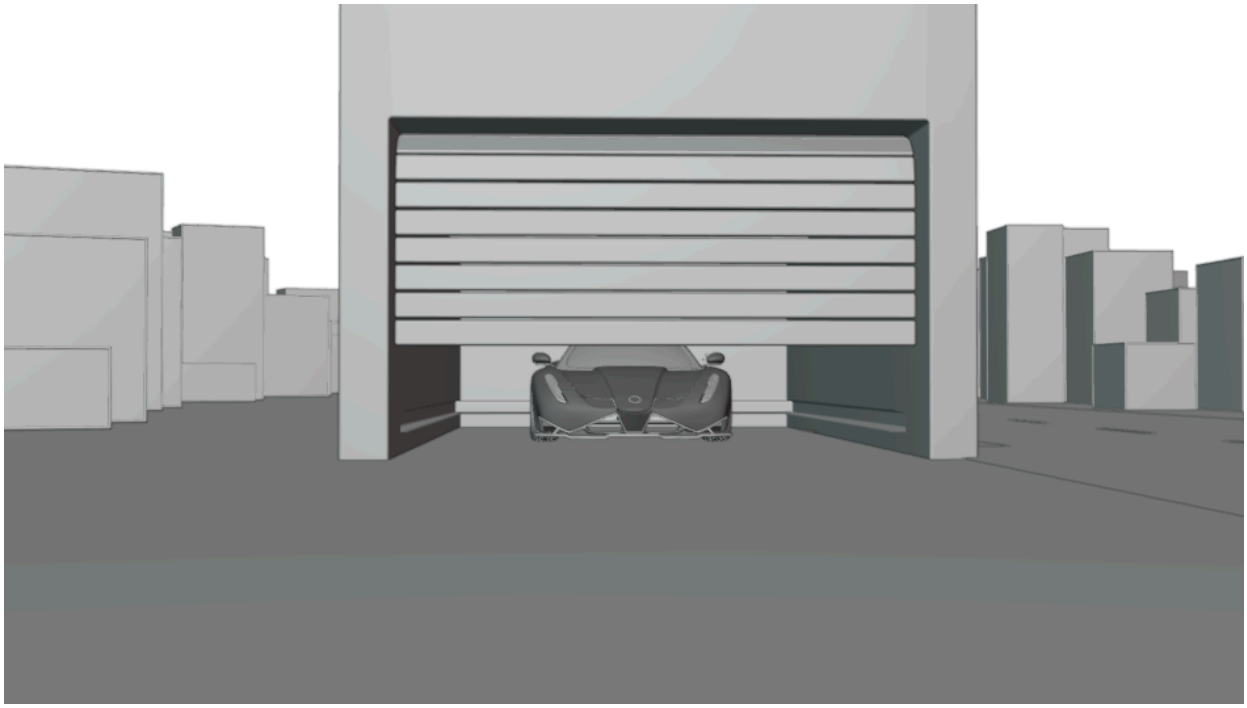
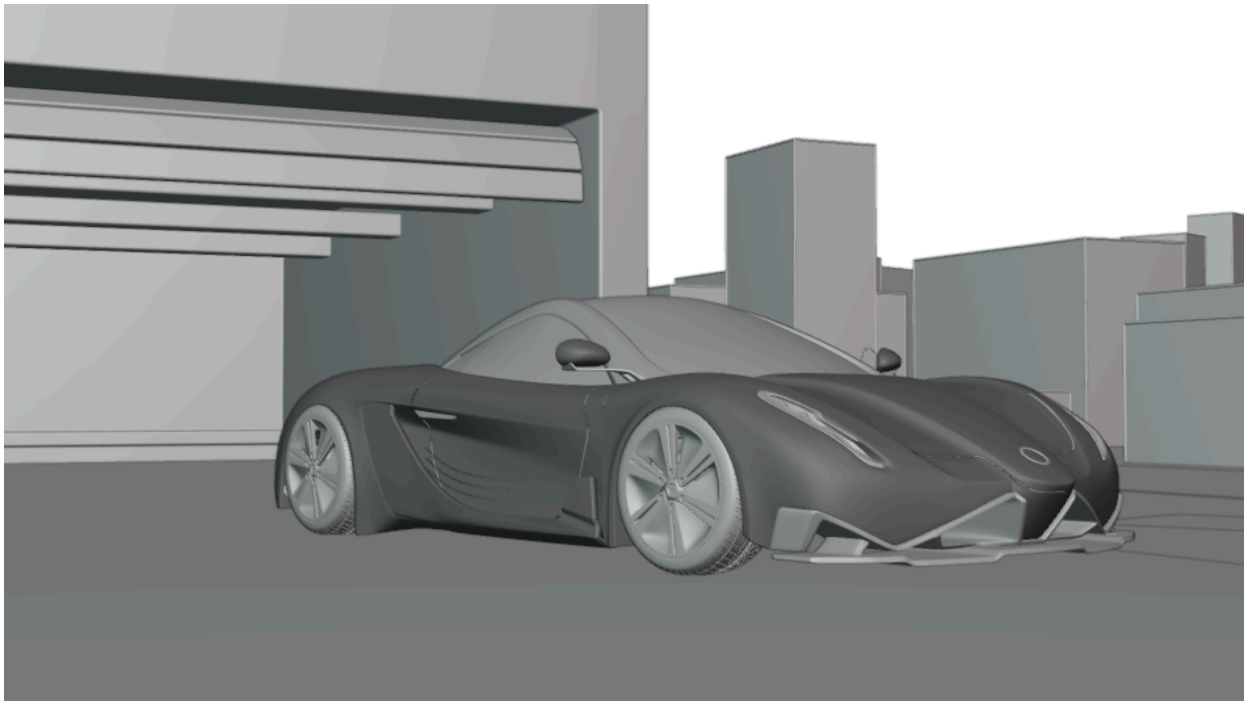
CARALERT storyboard

Introduction- Security

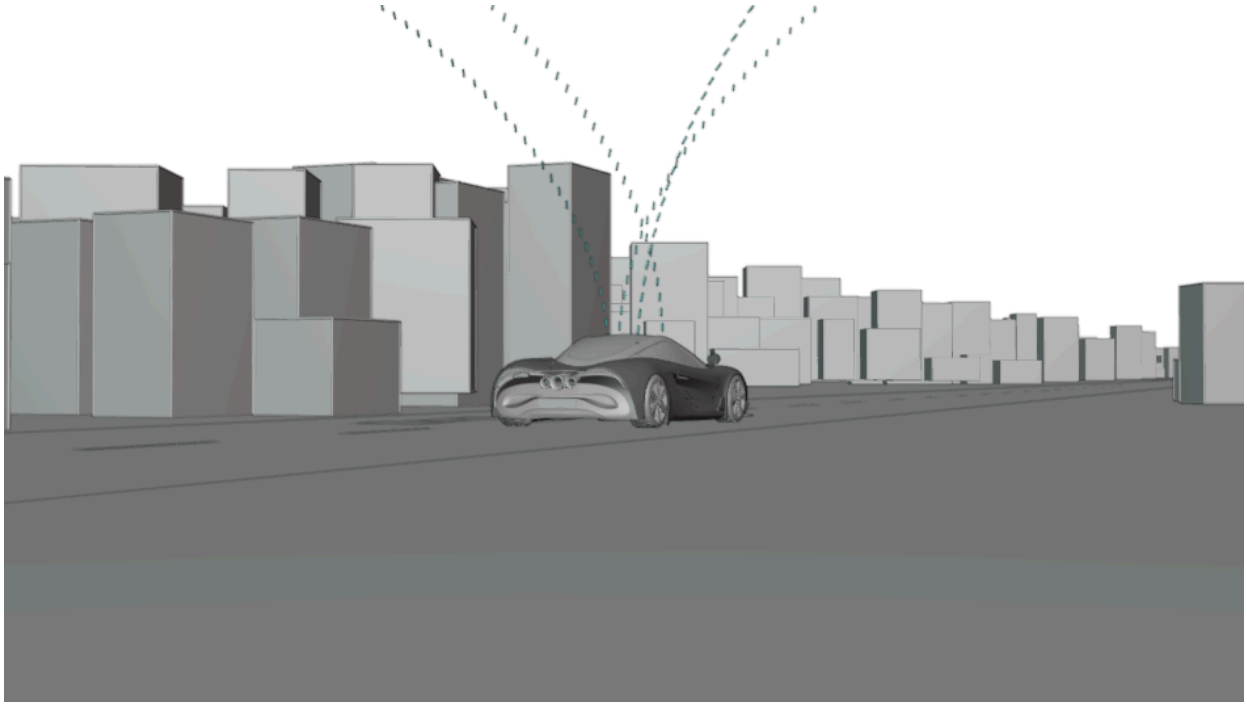
[Music starts playing, garage door opens, our car is revealed]



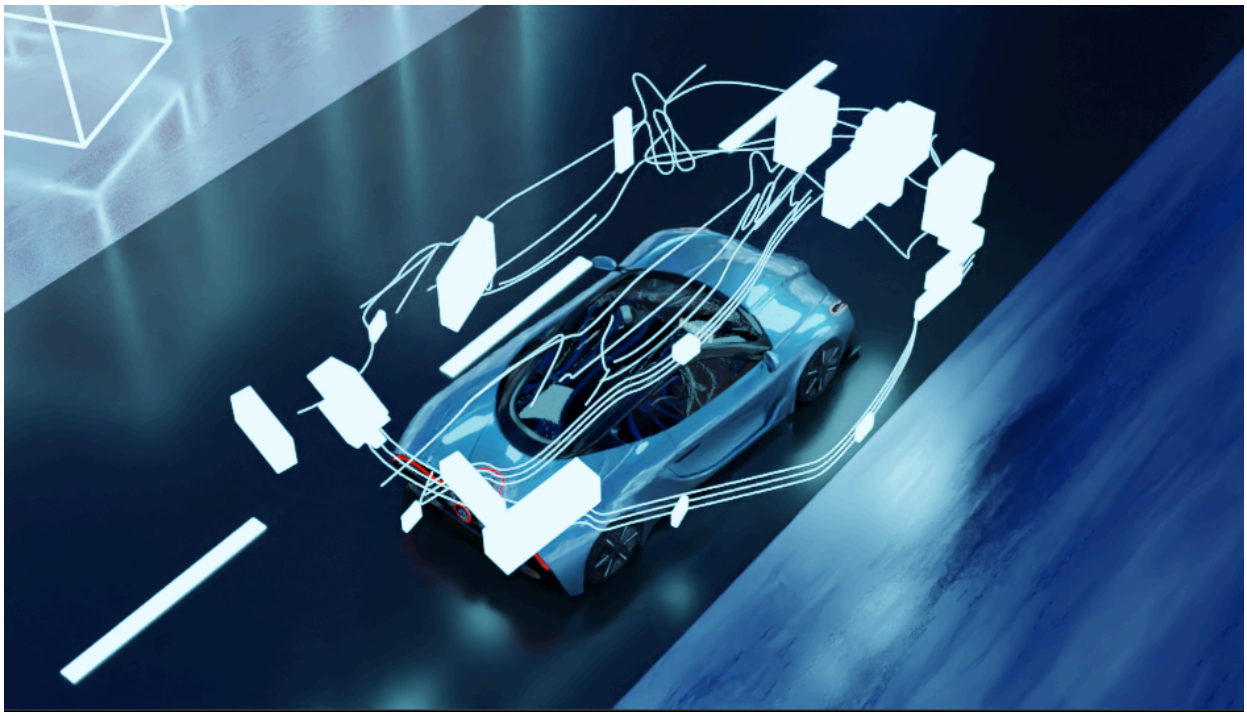
Narration: Today's cars are essentially computers on wheels



[As the car drives out of the garage in a futuristic city, communication signals of different sorts interact with the vehicle]



With up to 150 ECUs,



[a complex network of ECU’s is showen and they fly into the car]

hundreds of millions of lines of code,

[code is presented in several dynamic windows, different programming languages, one by one the flow into the car as well]

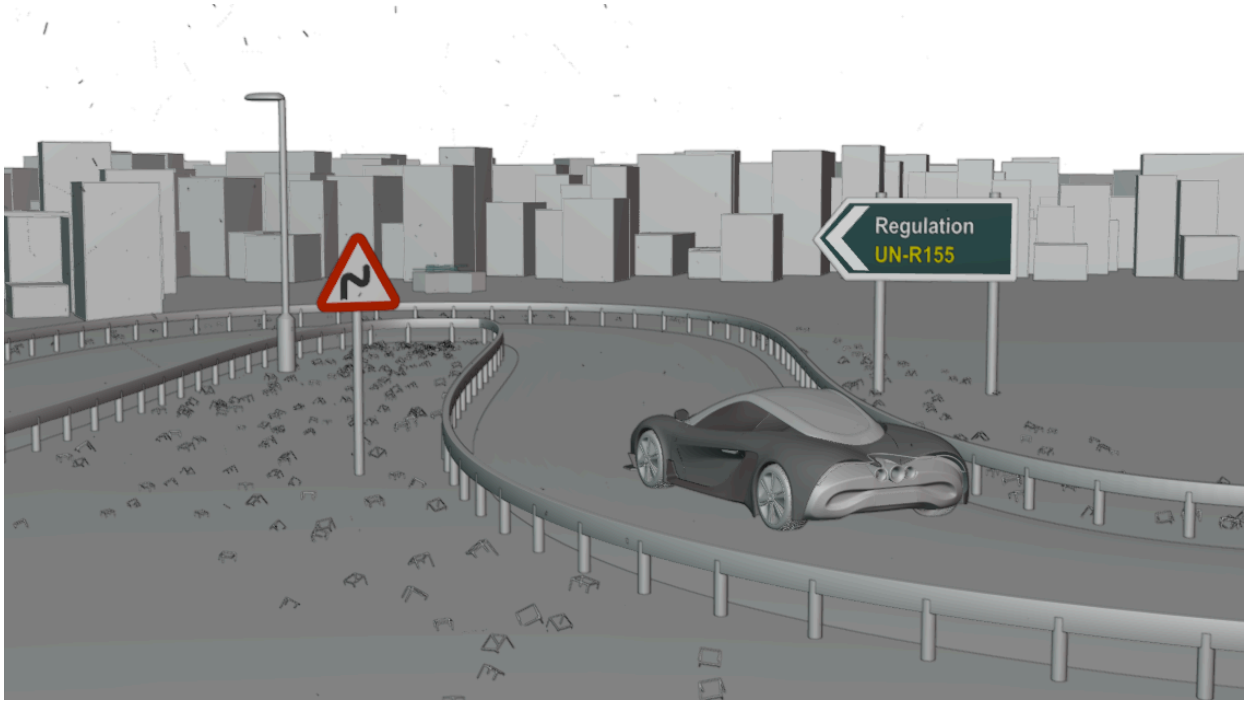
[Code is compiled and enters the car]

and many interfaces-

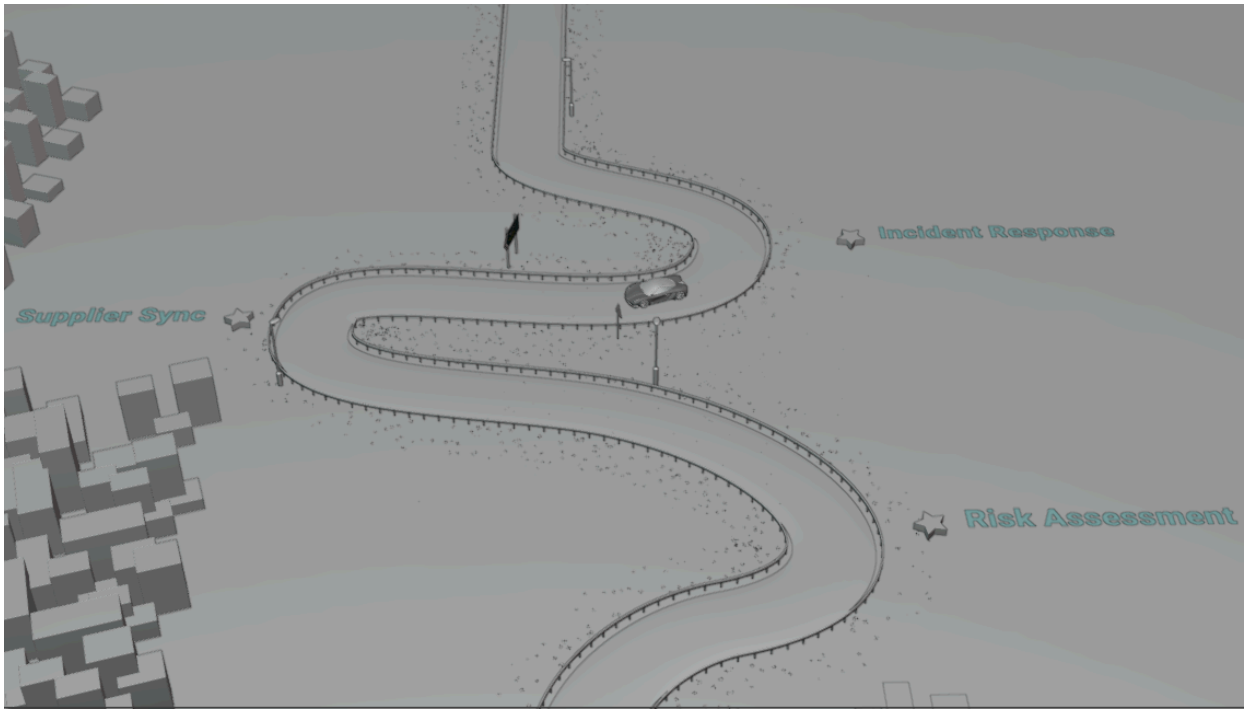
vehicles are becoming prime targets for cyberattacks.

Introduction- Regulation

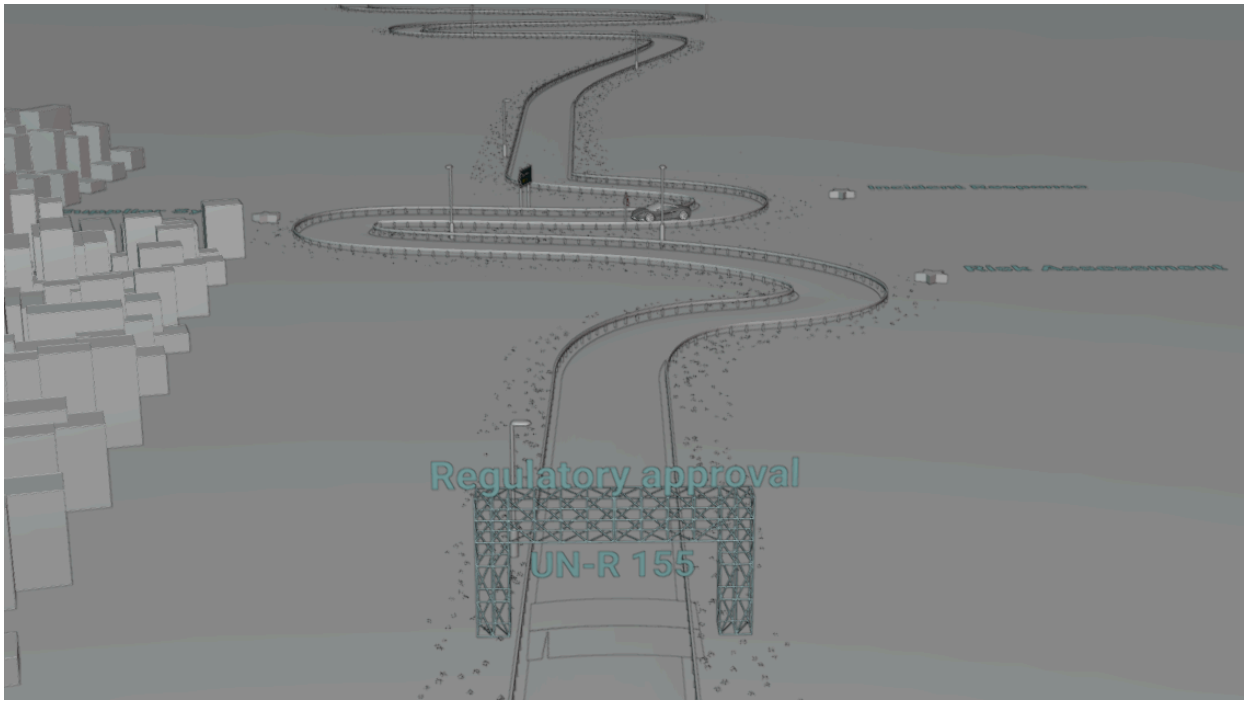
Navigating the regulatory challenge of UN-R155,



automotive manufacturers face the complex task of managing countless components



and software from diverse suppliers



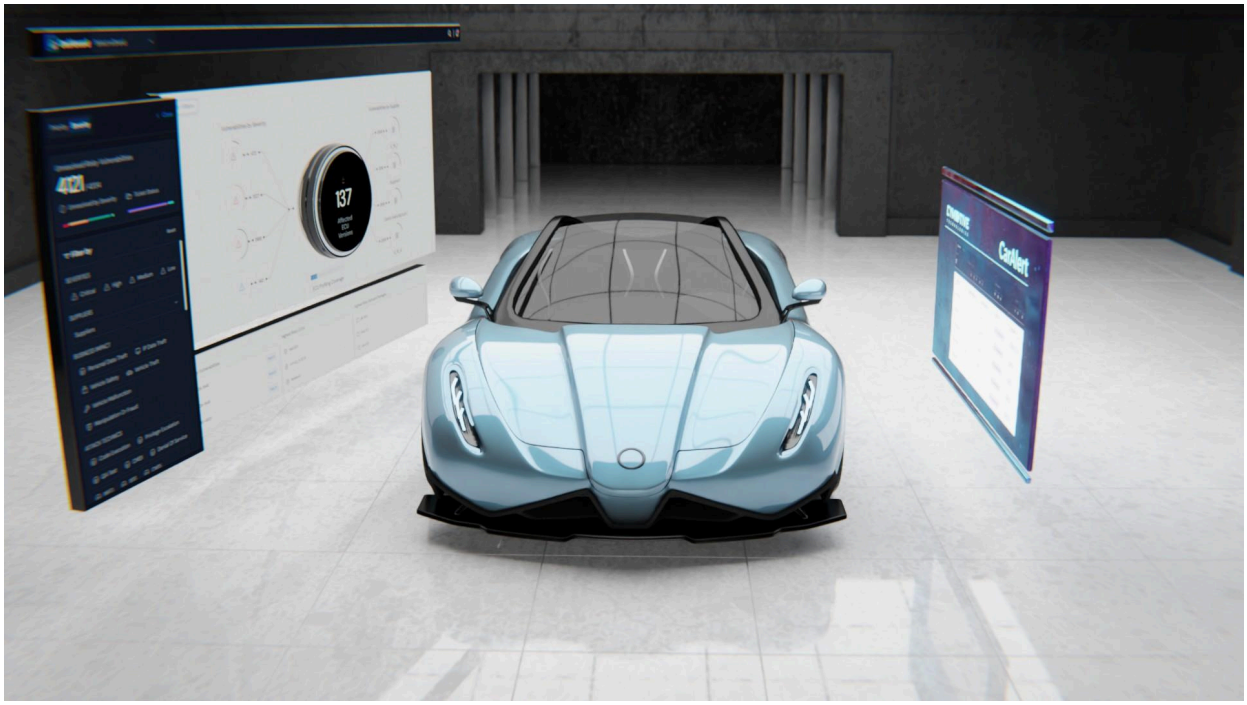
Note:Finish line should be clear that continues after the finish line, camera panning , sign says production

Solution- CarAlert

Car Alert by CYMOTIVE is engineered to help manufacturers and suppliers

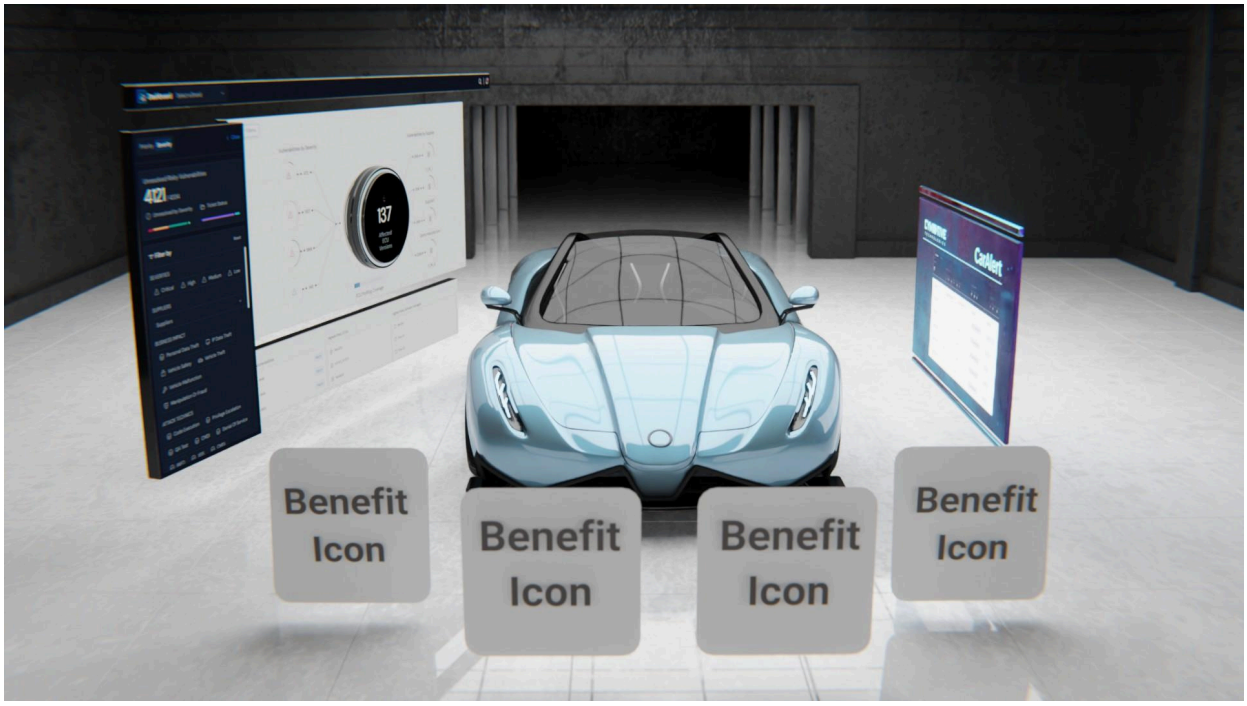
[Cloth reveal of the software] note- faster reveal needed

[the car enters the service zone]



[we can show multiple dashboards and informative screens]

enhance vehicle security at every level, reduce development time, gain trust with customers, and protect cars from digital threats.



[The icons appear one by one in sync with the narration]

Car Alert begins with Asset Identification including management of assets, bill of materials, vehicles, and ECUs.

[The software performs a ‘CT scan’ on the car, ECU’s are visually listed on the left with titles and visual representations]

Note: 1st line in the table, full names:

Initial Access Execution Persistence Privilege Escalation Defense Evasion Credential Access Discovery Lateral Movement Collection Command and Control Exfiltration Impact

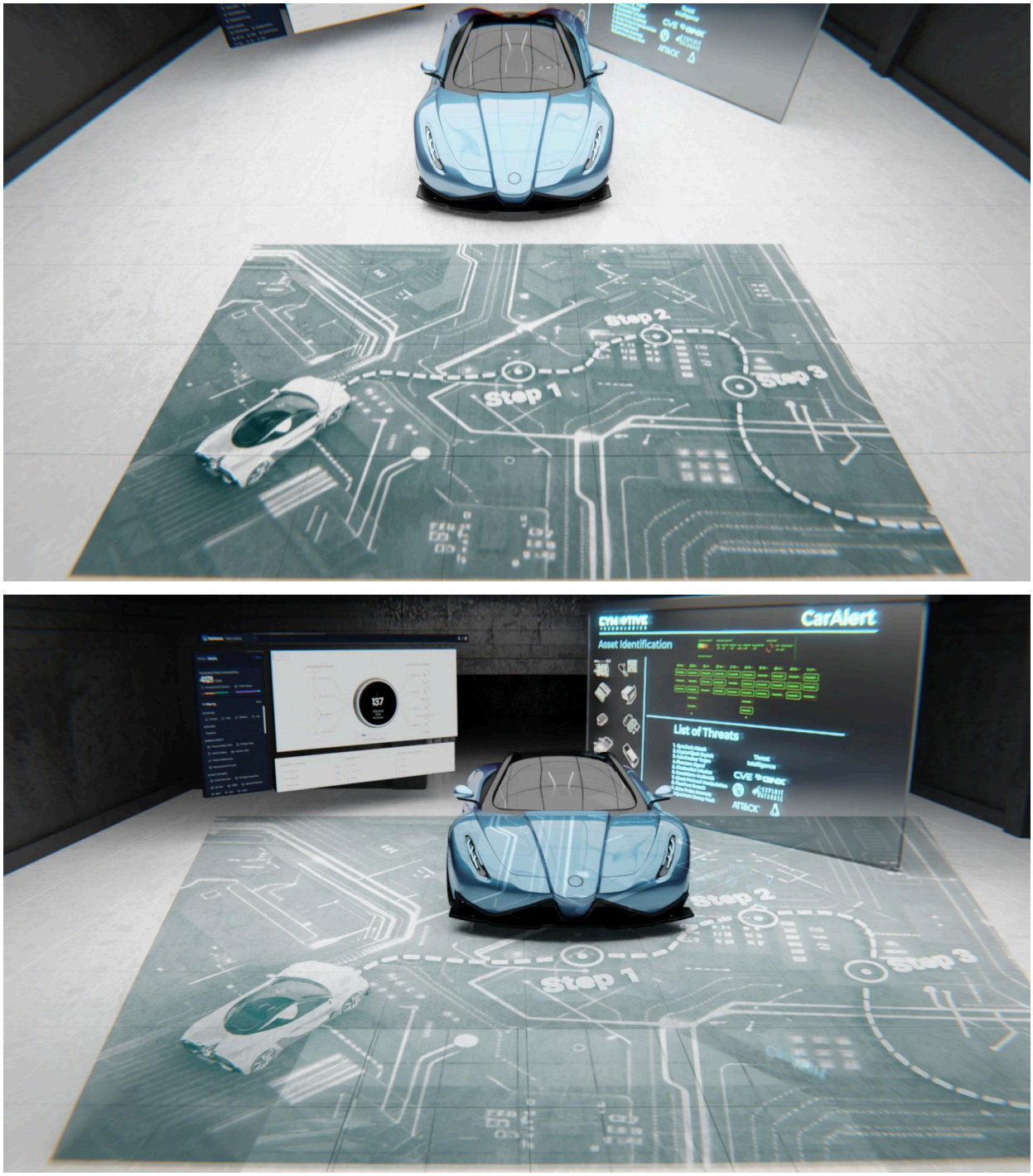
Proper content for the asset:

[As profiling takes place, assets are colored by their threat level- red/orange/green. Some of the issues are resolved and turn green, some of the red turns into orange]

Automatically mapping all the vulnerabilities, exploits and threats to the ECUs and vehicles CarAlert prioritizes them according to their potential impact and damage,

[Threat icons appear, and a list of threats is assembled] note-replace the icons (threat intelligence) with more threats (a long list is provided in the end of the document)

and recommends the best path for risk minimization.



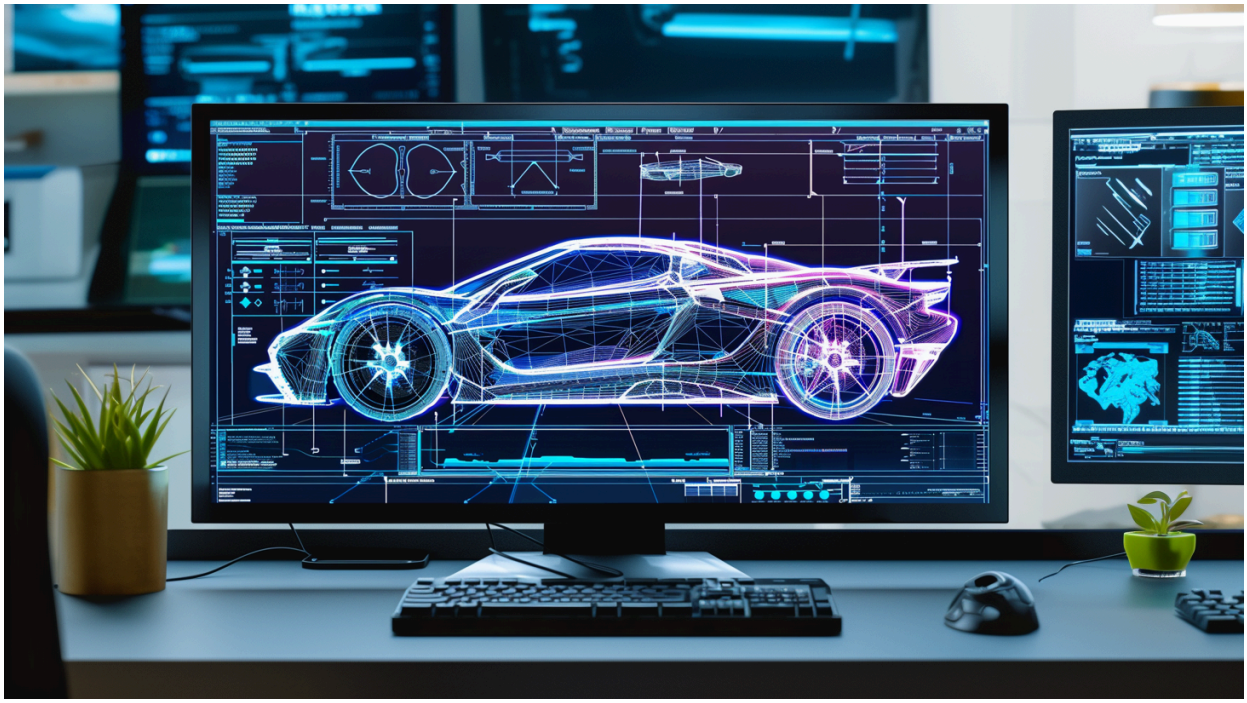
[Hologram screen shows a navigation-style interface with a clear path to fix vulnerabilities]

At any time, you can track the process and focus only on the critical risks,

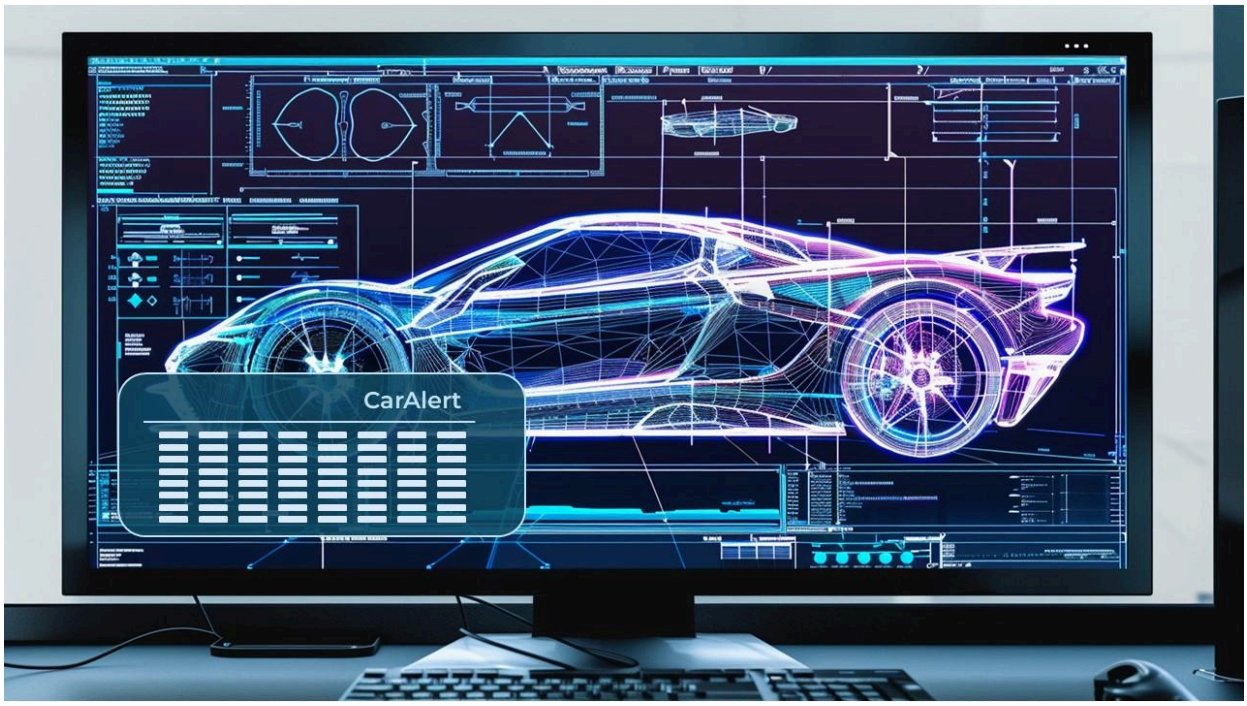
[a fresh angle and a new screen with the tickets interface, fully animated]

Closing Remarks

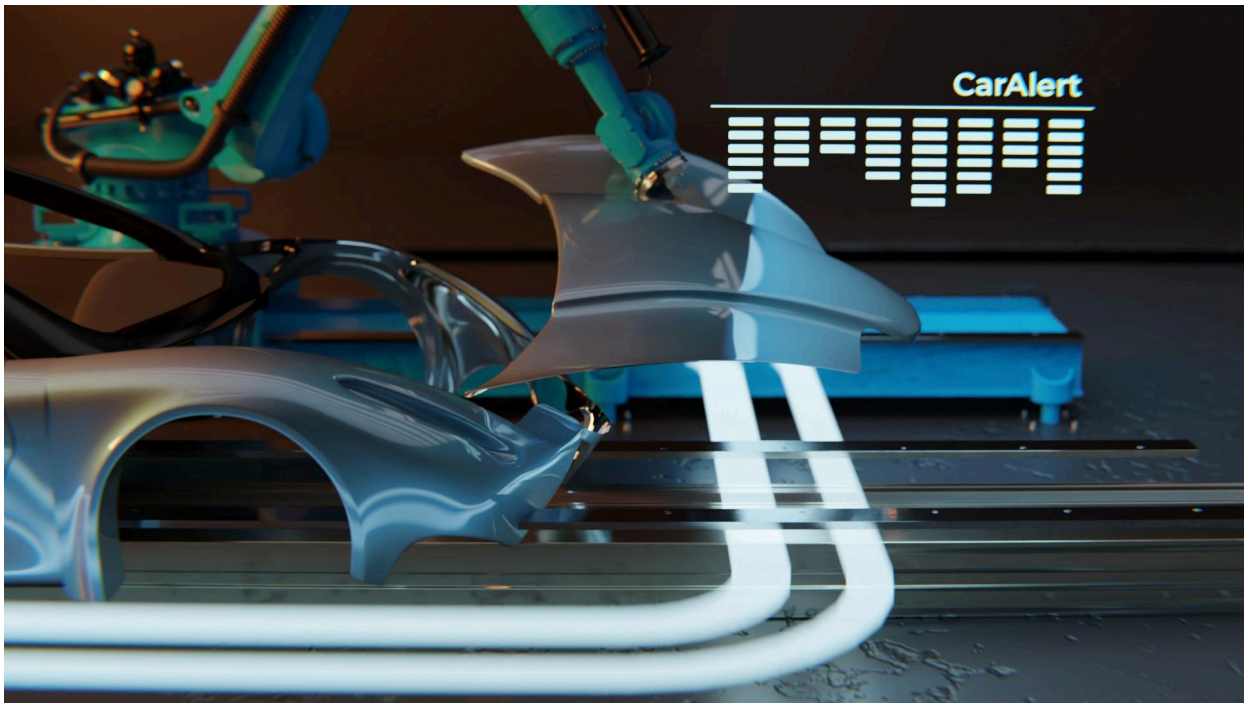
From design and development through post-production,



[Car schematics on a screen in contemporary office, CarAlert ‘CT Scan’ is performed on the schematics]

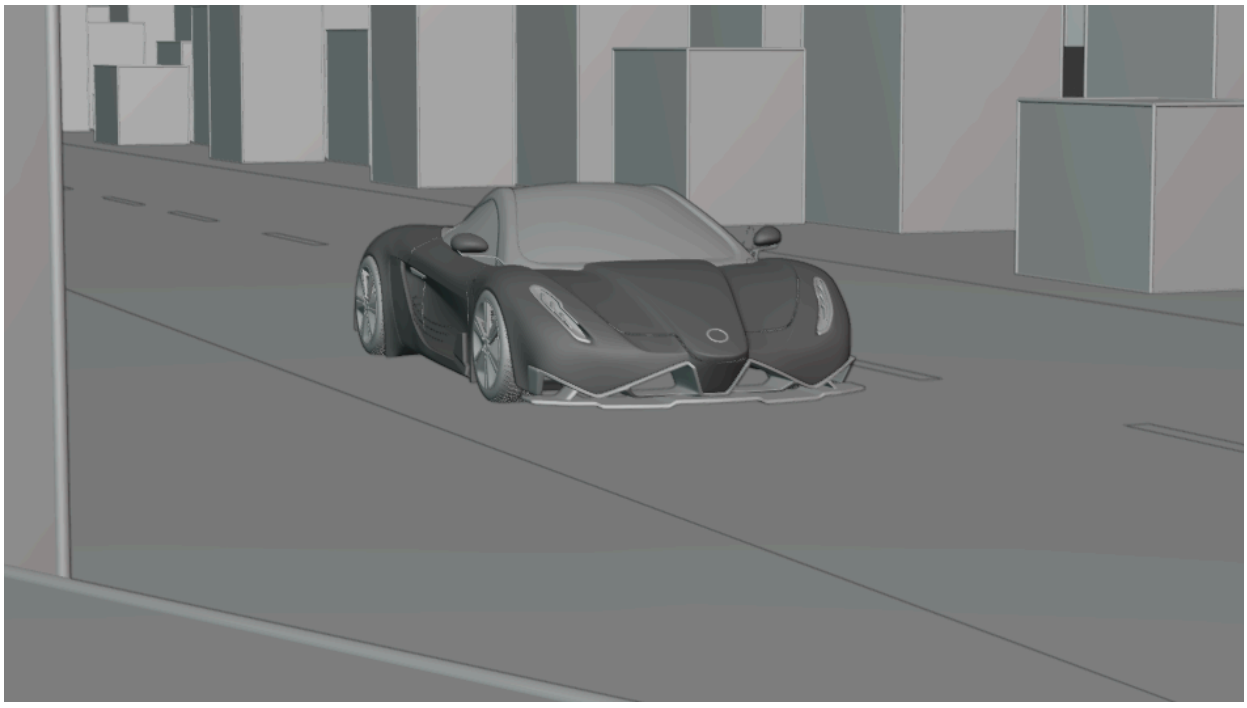


[The CarAlert visual cue provides a quick report screen]

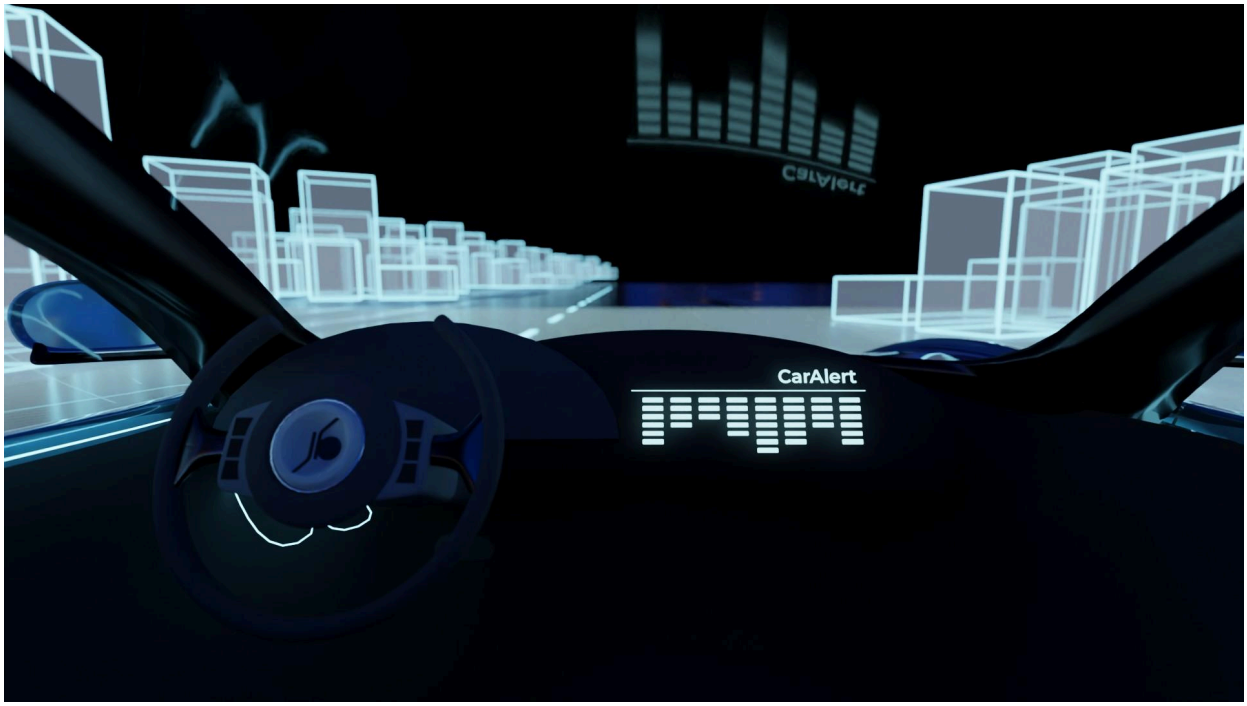


[The car is ‘scanned’ again by CarAlert while in production]

Car Alert's automated full lifecycle coverage continuously monitors and safeguards your vehicle long after it leaves the production line.



[The car is driving the same city as the introduction shot, visual representation of over the air scan and update]



CYMOTIVE TECHNOLOGIES

CYMOTIVE.COM

Full list of threats: (techniques)

Supply Chain Compromise
Valid Accounts
Software Deployment Tools
Boot or Logon Autostart Execution
Boot or Logon Initialization Scripts
Create or Modify System Process
Event Triggered Execution:.bash_profile and .bashrc
Hijack Execution Flow
Server Software Component
Valid Accounts
Abuse Elevation Control Mechanism
Access Token Manipulation
Boot or Logon Autostart Execution
Boot or Logon Initialization Scripts
Create or Modify System Process
Escape to Host
Event Triggered Execution:.bash_profile and .bashrc
Hijack Execution Flow
Process Injection
Valid Accounts
Abuse Elevation Control Mechanism
Access Token Manipulation
Hijack Execution Flow
Impair Defenses
Indicator Removal on Host
Masquerading
Modify Registry
Process Injection
Rootkit
Subvert Trust Controls
Use Alternate Authentication Material
Valid Accounts
Man-in-the-Middle
Brute Force
Credentials from Password Stores
Network Sniffing
Steal or Forge Kerberos Tickets
Unsecured Credentials
Account Discovery
Browser Bookmark Discovery
File and Directory Discovery
Network Service Scanning

Network Share Discovery
Network Sniffing
Peripheral Device Discovery
Permission Groups Discovery
Process Discovery
Remote System Discovery
System Information Discovery
System Network Configuration Discovery
System Owner/User Discovery
System Service Discovery
System Time Discovery
Remote Services
Software Deployment Tools
Taint shared content
Use Alternate Authentication Material
Man-in-the-Middle
Audio Capture
Automated Collection
Man in the Browser
Clipboard Data
Email Collection
Screen Capture
Ingress Tool Transfer
Account Access Removal
Endpoint Denial of Service
Firmware Corruption
Network Denial of Service