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DENSO Corporation
NTT Communications Corporation

DENSO and NTT Communications Starts Validating Jointly Developed Vehicle Security Operation Center Technology to Realize Resilient Security Solutions for Connected Cars

DENSO Corporation (DENSO) and NTT Communications Corporation (NTT Com) will begin validating their jointly developed Vehicle Security Operation Center (V-SOC) technology for monitoring and analyzing vehicle's security status from January 2020. The two companies are creating the technology to realize resilient security solutions for connected cars.

1. Background

Today, connected cars are becoming increasingly popular and sophisticated. In this evolution, novel automotive technologies and solutions continuously appear utilizing ICT technology. Concurrently, cyberattacks are growing more sophisticated and stealthy. Thus, cybersecurity in connected car is paramount. They need security technology that can swiftly detect and analyze cyberattacks and then seamlessly provide the appropriate support according to the situation.

2. Joint development efforts

Since 2017, DENSO and NTT Com have been developing V-SOC technology to detect cyberattacks and identify the affected area by the cyberattacks based on analysis of data, which are output from a vehicle's security systems. In this research, the two companies have studied how to improve the safety and availability of connected cars and enable quick security responses by using V-SOC technology that can provide appropriate support as the situation demands.

3. Details of the joint development

The two companies will start to validate V-SOC technology in a test environment to realize resilient security solution for connected cars. Different types of cyberattacks will be conducted on test vehicles to see how effectively the V-SOC detects these attacks and analyzes the affected area by the cyberattacks. V-SOC technology will be improved by repeatedly responding to various forms of cyberattacks.

4. Role of each company in development and the verification

- DENSO

DENSO will provide information security, vehicle communication, and data analysis technologies used in in-vehicle systems, connected cars, and MaaS development.

- NTT Com

NTT Com will use its technology related to networks, cloud computing, and managed security services (e.g., IT-SOC). Moreover, the latest security technology of the NTT Group will be fully leveraged, including analysis technology of NTT Security and research results of NTT Secure Platform Laboratories.

5. Future prospects

By accelerating the development of cybersecurity technology through this validation, the two companies will help build a safer and more secure automotive society.

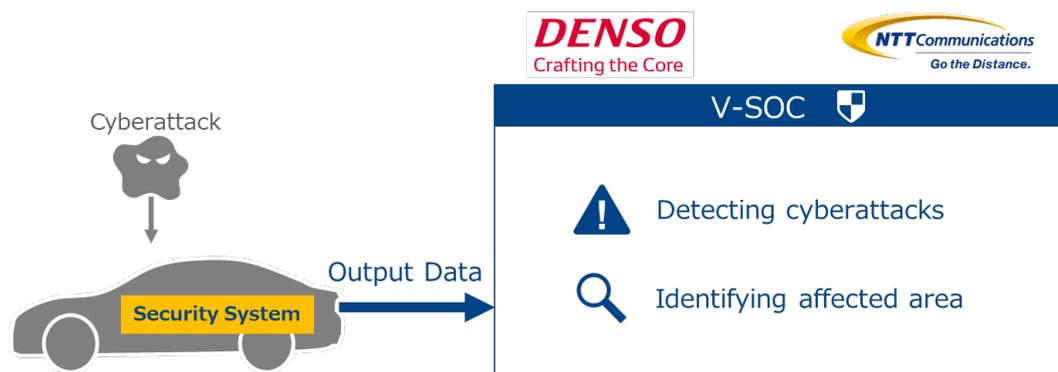


Image of V-SOC technology

About DENSO Corporation

DENSO is a \$49 billion global mobility supplier that develops advanced technology and components for nearly every vehicle make and model on the road today. With manufacturing at its core, DENSO invests in its 211 facilities in 35 countries to produce thermal, powertrain, mobility, electrification, & electronic systems, to create jobs that directly change how the world moves. The company's 170,000+ employees are paving the way to a mobility future that improves lives, eliminates traffic accidents, and preserves the environment. Globally headquartered in Kariya, Japan, DENSO spent 9.3 percent of its global consolidated sales on research and development in the fiscal year ending March 31, 2019. For more information about global DENSO, visit <https://www.denso.com/global>

About NTT Communications

NTT Communications solves the world's technology challenges by helping enterprises overcome complexity and risk in their ICT environments with managed IT infrastructure solutions. These solutions are backed by our worldwide infrastructure, including industry leading, global tier-1 public and private networks reaching over 190 countries/regions, and more than 450,000m2 of the world's most advanced data center facilities. Our global professional services teams provide consultation and architecture for the resiliency and security required for your business success, and our scale and global capabilities in technology world are unsurpassed. Combined with NTT Ltd., NTT Data, and NTT DOCOMO, we are NTT Group.

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